

The Role of Customs Procedures in Facilitating Efficient Logistics and Supply Chain Operations in Liberia

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Abstract - Customs operations is a combination of both facilitation of goods through difference means, and various borders as it hardly depends on the speed and quality that is used by customs administration. On the overall, the concepts involved the implementation of customs policies helps promote effectiveness of supply chain and logistics actives.

This call for a recognized and pragmatics system that suit everyone, which served as a pillar to strengthen trade facilitation and support supply chain coordination ((UNCTAD), Trade facilitation and Development, 2018)

The research helps shows the way customs practices affect logistics capability as relate to Liberia, focusing on documentations filling, verifications, compliance and regulatory function.

The study utilized numerical figures through which primary data was collected. A structured questionnaires were shared across various customs and brokers chartrooms with customs officer and licensed who currently assigned in head office, Freeport, LPRC, Robert international Airport etc.

Based on the responses gathered, approximately 176 valid contributors willingly took part in the survey. This study most especially captured practical difficulty faced by business people through their brokers or agents during the uploading of the container and field activities.

The assessment makes some important changes identifying layered endorsement, leaving manual documentation practices, and delay of inspection are major concerned identified which continues to affect shipment costs. These outcomes reflect global contributions that inefficient border procedures negatively which affect supply chain reliability and increase transaction costs (Bank W., 2018). (Bank W. , 2018).

Considering all these issues, the research provides a strong recommendation which endorsed stronger collaboration among customs officers and tax payer. it also adopts an active and strong internet that will support electronic platform to buttress ASAYCUSDA for all parties involved in the customs clearance for speed and accuracy.((UNCTAD), ASAYCUSDA Programme Annual Report, 2018).

Keywords: Procedures of Customs, Efficiency Distribution, Supply Chain Performance, Trade Facilitation

I. INTRODUCTION

In Liberia Customs processes determine how goods move across borders through the inspection processes, documentation, and approval. When the clearance of goods by customs is accurate it supports faster trade and local marketeer benefits, reduce uncertainty, and improve supply chain performance. However, there is complex or slow systems which can lead to delays, higher costs, and disruptions to trade (Wilson, 2003) In Liberia, where trade is a major source of government revenue, the effectiveness of customs processes directly affects business activity and reflect on the economics.

In an effort of address these issues, the Liberia Revenue Authority (LRA) has introduced reforms to modernize operations. The adoption of ASYCUDA, supported by the United Nations Conference on Trade and Development (UNCTAD), aims to simplify documentation and speed up clearance (Fugazza, 2011) This meaningful efforts link with global trade facilitation practices but due to poor network

Considering this improvement still there are challenges that remain ((WTO), 2015) Traders still face delays because of prolonged inspections, repeated documentation, and inconsistent application of procedures which create unnecessary bureaucracy at the end this affect both consumer or user and the seller.

RESEARCH PROBLEM

The issues of Weak coordination among border agencies cannot be overlook, as it continues to slow cargo clearance in Liberia. Delays are often caused by long inspection that is not timely, heavy documentation requirements, limited automation and poor network. Despite ongoing reforms, customs

clearance delays continue in Liberia. Prolonged inspections, documentation burdens, and incomplete automation slow down cargo processing. Although ASYCUDA was introduced to improve efficiency, its full implementation is uneven across ports and border points ((UNCTAD), ASAYCUDA programme Annual Report, 2021)

Furthermore, weak collaboration between customs officers and licensed brokers contributes to operational inefficiencies. While previous studies have focused mainly on compliance and revenue issues, but there is low contributions on how everyday customs practices affect logistics and supply chain performance in Liberia.

Research Objectives

The research carefully examines how the various steps of customs influence supply chain and logistics functions in Liberia.

1. To identify the impact inspections delay, have on business
2. To verify how the documentations processes can affect licensed brokers
3. To investigate and compare the relationship that is between customs officers and licensed during examination
4. To help identify the operational challenges that cause delays during examination

Research Hypotheses

H₁: Customs inspection practices affect cargo clearance time.

H₂: Documentation procedures influence logistics costs and goods movement.

H₃: The relationship between customs officers and licensed brokers affects clearance efficiency.

H₄: Operational challenges within customs administration contribute to logistics delays.

Research Significance:

The study investigates how customs operations in Liberia influence trade efficiency and logistics outcomes. Evidence shows how effective border management linked to lower trade-related costs and stronger engagement in international markets ((OECD), Trade Facilitation and the Global Economy, 2018) By examining inspection procedures, documentation requirements, and the level of coordination among customs stakeholders, the study highlights operational areas that shape cargo clearance speed and procedural reliability. At the broader perspective research shows indicate how

trade facilitation reforms can significantly promote export growth and national economic development, especially in developing countries (Moisé, 2013).

Furthermore, inefficient border processes tend to increase costs and uncertainty for customs brokers and logistics firms, thereby undermining supply chain efficiency and global competitiveness (Grainger, 2011).

II. LITERATURE REVIEW

Customs administration plays a central role in international trade because it regulates the movement of goods across national borders. When customs systems function effectively, clearance times are reduced, costs are controlled, and supply chains operate with greater stability. However, weak administrative systems often lead to delays that disrupt commercial activity. This situation is particularly common in developing countries where customs operations may still depend heavily on manual procedures and limited technological integration (Bank W. , 2019).

In the case of Liberia, customs procedures continue to face challenges related to staff capacity, coordination among stakeholders, and consistent application of regulations. Although modernization initiatives such as automation and digital upgrades have been introduced in various contexts, their success depends largely on institutional strength and governance quality ((WCO), Study Report on Customs Brokers, 2018). Reviewing relevant theoretical and operational frameworks therefore provides a solid foundation for understanding how customs procedures influence logistics efficiency.

Key Theories

The Leadership theory explains how leaders influence organizational decision making. Sometimes in customs operations, leadership affects supervision, communication, accountability, and overall performance. Meaning strong leadership improves coordination and supports quick decision-making, while weak leadership often leads to delays and inefficiencies (Northouse, 2016).

The Good Governance Theory directly focuses on transparency, accountability, and fairness in public institutions.

For customs activities, it influences the living conditions of ordinary people and these processes are applied at all time which state that traders have better understanding for the rules in order to make sound judgement. Weak governance is another serious

issue, which creates uncertainty and reduce trust in the system.

Conflict Transformation Theory mainly reflects on dialogue and constructive engagement in resolving disputes (Kaufmann, 2011). Since customs work has to do with frequent interaction between officers, brokers, and traders, this means is it possible for misunderstandings to occur. Poor communication may cause delays, while effective conflict management can improve workflow taken into consideration that the rule of law is respected accordingly.

Major Frameworks and Models Related to the Study
Modern customs framework use risk-based inspection technique. Instead of checking all shipments, they mainly focus on high-risk goods, which allowing low-risk cargo to move faster.

This approach helps reduces congestion and improves efficiency ((WCO), WCO Risk Management Compendium (Volume 1), 2017). Trade facilitation frameworks also support simpler procedures and the use of digital systems. Electronic documentation and automated clearance help reduce processing time and improve predictability (Jedidah, 2025).

From a supply chain view, customs clearance is a key stage in goods movement. Delays at this stage increase costs, disrupt delivery schedules, and weaken logistics performance at various entries. Efficient customs activities improve reliable and competitive trade (Christopher, 2016).

III. RESEARCH GAPS

While it is true customs modernization is widely discussed, but few gaps exist needs that should be address. Many of these studies focus on global and regional concerns with a very low focus on Liberia's local context.

The past research mainly provides more attention on technology, while giving less focus to governance, leadership, and coordination among stakeholders. In addition, some studies reflect the actual experiences of frontline which include customs officers and licensed brokers.

Some previous research work combines governance, logistics efficiency, inspection strategies, and leadership, but they do not jointly work together in practice. This reflects on the need for more local context-based research on Liberia.

Theoretical and Conceptual Framework

The study focuses on leadership and governance theories how they explain how they practicalized these theories into actuality, while it shows that accountability, and communication affect customs performance. In public institutions, leadership helps to shapes both operations and organizational culture, it also helps strengthens transparency and accountability.

Moreover, governance systems provide the structure that supports effective, reliable, and credible operations through accurate services deliverable (Denhardt, 2015).The study also suggests that result oriented leadership, governance, practices of inspection, smart documentation systems, and stakeholder coordination are closely linked and influence logistics performance. Whereas, these factors work together smoothly and effectively, customs clearance becomes faster and more accurate, which will help improve the overall flow of goods (Forum, 2016) .

Research Design and Methodology

The research carried out a descriptive and explanatory cross-sectional techniques, it also applied descriptive design which helped deliver as well as summarize participants comprehension, implementation and the awareness of sustainable supply chain operations. The study presents details facts on existing conditions; the study was cross - section due to the data that were gathered at on specific period of time instead several years but again the design was appropriate to assess the role of Customs Procedures in Facilitating Efficient Logistics and Supply Chain Operations and how it shapes business.

The explanatory design was used for examinations to improve the connection with supply chain management, competitiveness, cost management, environmental responsibility and the indicators that reflect on the performance of business.

Research Approach:

Quantitative techniques were carried out in this study which offers feedback and test as well provide recap that statistically examine the customs procedures and how it influences logistics output intend of delivery schedules, progress of trade in Liberia, and supply chain costs.

Population and Sampling

The study population comprised of Logistics, supply chain, business operations. However, interviewees like Customs Officers and Licensed Brokers voluntarily considered because of the relevant expertise and practical knowledge on the research topic. A legitimate structured survey was carried where 176 survey contributors participated through online survey, including 137 Customs Officers and 39 Licensed Brokers.

A non-probability sampling strategy, specifically a purposive and convenience sampling these two groups were randomly considered due to their involvement to the subject matter which directly link to customs procedures, facilitating efficient Logistics and supply chain and business operation it clearly ensured that the data were applicable and suit the study objectives.

The study focusses on primary techniques. A first hands information was straightly gathered from the survey through online google form/questionnaire

Data Collection Instrument

The major tool used to gather this data was organized questionnaire comprising of closed -ended questions. These involved multiple -choice questions and Likert scale claim to evaluate the participants level of acceptance efficient Logistics and supply chain and business performance to enhance sustainability.

Data Analysis Techniques

The study was carried on through quantitative data which were collected from the survey. These responses were coded and analysed where I used the Statistical Package for Social Sciences (SPSS).

As a way of proven the visibility of the data, basic descriptive statistics such as mean, frequency, percentage, and standard deviation were systematically applied in the process.

To better understand the relationships within the data, correlation and regression analyses were properly developed and used. All these techniques carefully helped verified how sustainable supply chain

practices relate to the overall business practices and how it brings result (Joseph F. Hair Jr., 2019)

Validity and Reliability

In order to ensure that the study measured what it was intended to measure, the questionnaire was carefully designed in line with the research objectives and it was guided by existing literature (Mark Saunders, 2019).This help me to arranged those questions in a clear and logical manner to capture the main variables of the study.

A process of validating the reliability, internal consistency was tested using SPSS. The results which confirmed that the data were stable and reliable for analysis (J.Cronbach, 1951).

Ethical Considerations

The ethical principles were observed throughout the research process. Participation was used in the entire steps showing voluntary posture, and respondents were respectfully told about the intend of the research work before they willingly provided their input.

In addition, confidentiality and privacy were respected at all stages of the survey. That information gathered from the sample members was used strictly for academic purposes, and no personal data were disclosed.

IV. RESEARCH ANALYSIS AND FINDINGS

The data were examined through the statistical Package for Social Science (SPSS). Descriptive statistic which focusses on percentage, and frequencies were applied to summarize and validate responses and evaluate the pattern related to the performance of business and sustainable supply chain and how it reflects on the progress of business in Liberia as it mainly reflects on the role customs procedures in facilitating Logistics and supply chain operations in Liberia.

Presentation of Data

Table 1: Understanding of Sustainable Supply Chain Management

Response Option	Frequency	Percentage (%)
Cost Reduction	26	14.8%
Environmental Protection	31	17.6%
Efficient Resource Use	22	12.5 %
All of the Above	97	55.1%
Total	176	100%

Interpretation:

This table illustrate that majority of participants (55%) “All of the Above,” indicating the comprehensiveness of the impact of sustainable supply chain management. This imply that greater

part of respondents has fully acknowledge sustainability being an integration of cost which reflect on an efficient environmental security and ensure a responsible resource utilization.

Table 2: Impact of Sustainable Practices on Business Performance (n=176)

Performance Indicator	Agree	Neutral	Disagree
Improves Efficiency	112	36	28
Reduces Cost	103	42	31
Increases Customer Trust	118	30	28
Enhances Competitiveness	109	39	28

Interpretation:

This table shows that majority of participants agreed that sustainable supply chain operations help to enhance efficiency, reduce pollution, reduce carbon emission, support cost reduction, promote customer

trust, and. The table shows consensus ratio are reliably higher than neutral and reflect on the disagreement from participants across all indicators which suggest a strong positive perfect viewpoint on the impact of sustainability.

Table 3: Challenges in Implementing Sustainable Practices

Challenge	Frequency	Percentage (%)
High Initial Cost	57	32.4 %
Lack of Awareness	48	27.3 %
Limited Technical Support	41	23.3 %
Resistance to Change	30	17.0 %
Total	176	100 %

Interpretation:

The table indicate the cost which was identified as initial cost, challenge is (32.4%), followed by lack of awareness (27.3%), while 23.3% shows the limited technical support, and additionally about 17.0% as

identified as resistance to change and focus on the progress. The also indicates financial risk and knowledge-related barriers limit that suffer the full implementation of sustainable supply chain practices.

Figure 1: Distribution of Respondents by Category

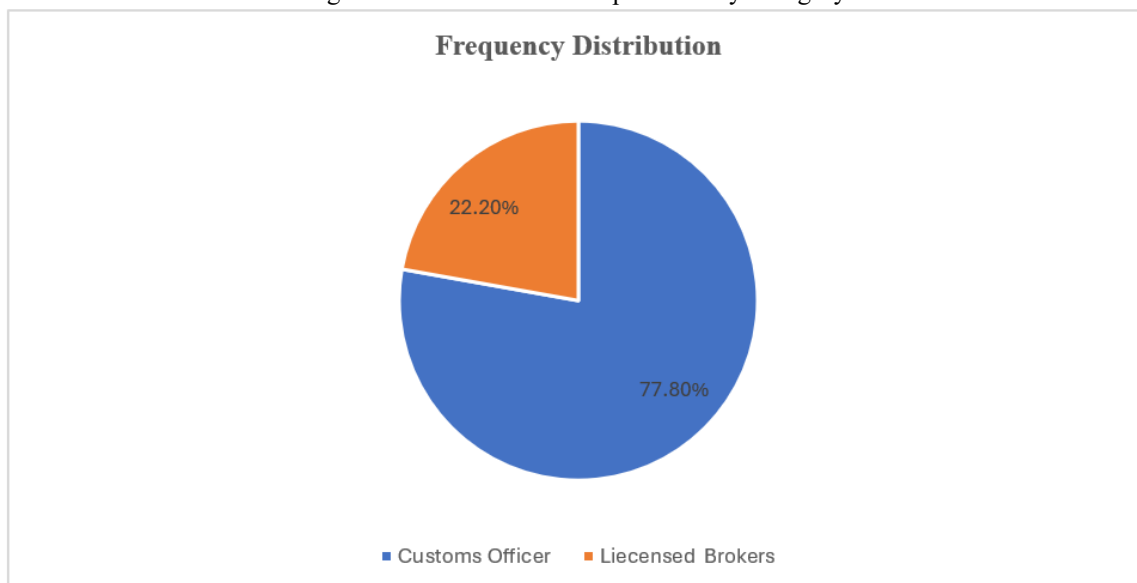


Figure 1: participation respondents' analysis (pie chart)

Interpretation

The chart indicates the composition and ratio of participants involvement in the survey, with 137 customs Officer which constitute (77.8%) while 39 Licensed Brokers representing (2.2%) that were

involved in the survey, this has clearly shown that majority came from customs Officers as they represent more than three quarters of the research sample.

Figure 2: Understanding of Sustainable Supply Chain Management

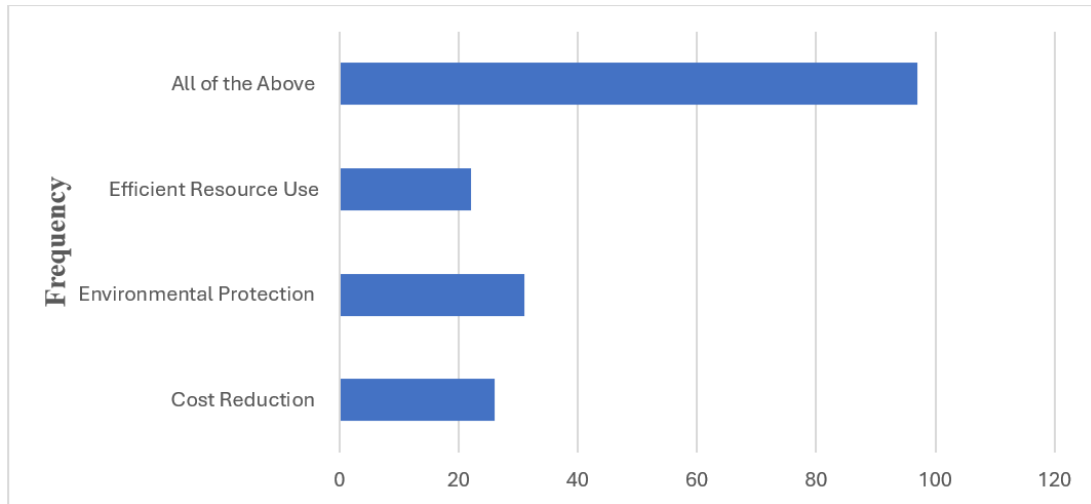


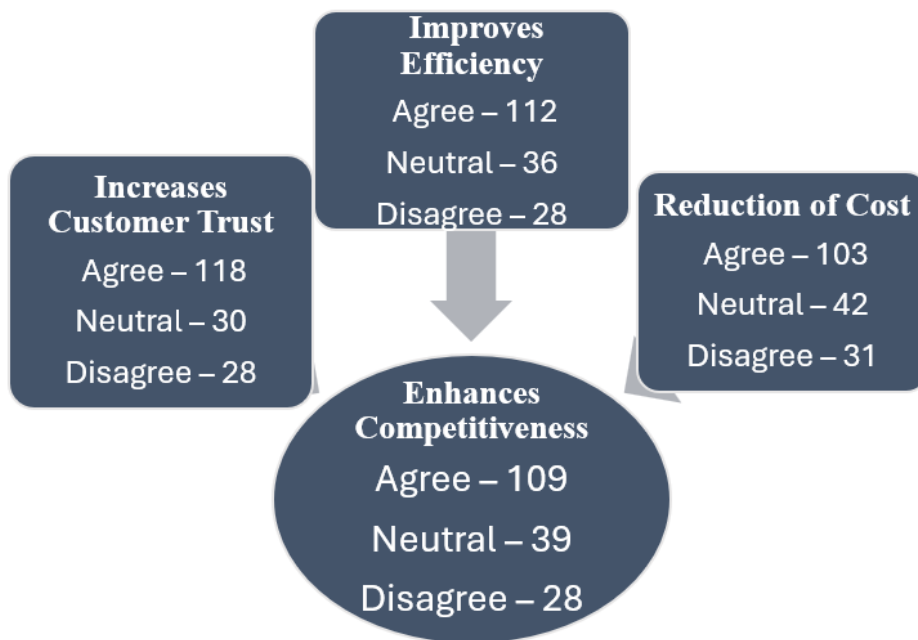
Figure 2: Participants knowledge on SSCM (Bar Chart)

Interpretation

This chart shows majority of participants about 97 choose “All of the Above,” which of course means that many have insight of the importance of long-term logistics activities instead of viewing it from single perspective as it focuses on how customs

procedures in facilitating efficient business and cost reduction. Jointly, (26 participants) focus on cost reduction, (31 of participants highlight environmental concerned, while (22 participants) focus on resource utilization.

Impact of Sustainable Practices on Business Performance



Frame of Business performance

Interpretation

This frame highlights the participants view through which it influences sustainable operations to supports the performance of business. A huge portion accept that sustainability helps improve efficiency and cut down cut, meanwhile some agreed that it help

increase customer loyalty, which endorsed the higher agreement. Meanwhile, few of the participants remain neutral or disagree. This means many participants embrace sustainability which support the growth of business.

Figure 3: Challenges in Implementing Sustainable Practices

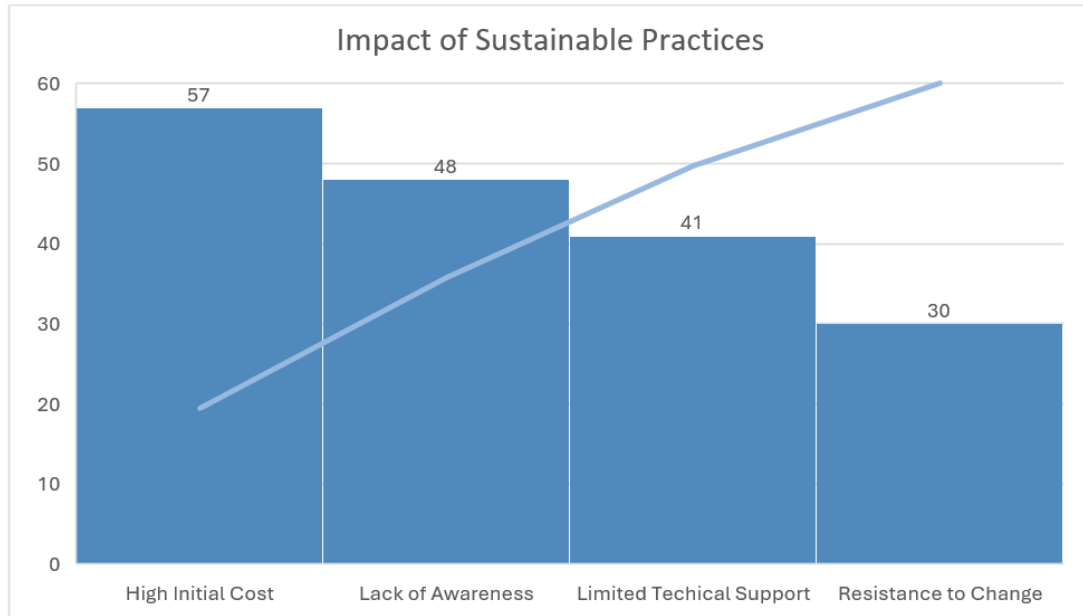


Figure 3: challenges faced during examination (Histogram)

Interpretation

This figure reflects on the challenges faced in implementing effective Logistics and Supply Chain task by identifying how the role of customs procedures affects the system. The figure show about 57 participants sees the efficiency of customs procedures and implementing sustainability being a challenge, while 48 participants consider lack of awareness and limited technical support, at the same time 41 participants, finally about 30 participants was reported financial cost, and low awareness as main obstacles.

As it is mentioned in Table 2, that majority of participants acknowledge the effectiveness of customs procedures and how it supports the progress of supply chain managements through the reduction of resources, enhancing competitiveness and increasing customer loyalty and trust. The results clearly advise for transparent and well -directed customs activities in a positive manner that affect the delivery and accuracy of speed including the performance of trade and supply chain in Liberia.

Findings

As results from the survey shows and mentioned in Table 1 that about 55.1% of the participants willingly choose “All of the Above” as relates to defining the progress of customs operations which indicates how they describe efficiency as part of combination of reduction of cost, environmental responsibility, and an accurate utilization the resource.

It illustrated in Table 3 and Figure 4 as majority of participants show a clear illustration of the participants identified key challenges that are influencing customs and logistics progress including the initial cost about, while others participants identified lack of awareness, meanwhile another small of participants shows the limitations of technical and financial support, while a very little of respondents talked about the guidance to make change including institutional issues which are major barriers that slow down the improvement in customs and logistics operation.

This reflect how more participants considered customs efficiency being a full integrated concept which assist logistics and supply chain performance.

In Figure 1, the outcomes show that based on the survey participation ratio about 77.8% of participants were customs officers, while 22.2% were Licensed Brokers. with this report reflects how majority of these contributions were gathered from customs professionals who are strictly engaged with operational activities.

Evidence indicated in Figure 2, that 31% of the sample members highlights the environmental concerns, while 26% of interviewees said there exist a reduction of cost, and 22% of contributors acknowledged that there are some progresses on how resources being utilized.

Based on the outcome it has proven that SSCM is a multidimensional concept that enhance environmental operations, and promote awareness of sustainability.

As it is reflected in frame 3, which state that participants have acknowledged how the effectiveness of customs activities can help improve efficiency, support customers satisfaction and promote efficiency in order to enhance competitive advantage, strengthen smooth customs operations.

This approved based on the findings, that the procedures of customs play a paramount role in the function of Logistics and supply chain operations. Contributors recognize the important of constructive impact of customs activities combined with revenue generation, finance, global trade and institutional benefits.

Conclusion:

For this section it highlights the entire paper through a summarizes main findings from the survey and provides practical recommendations and suggestions for future research.

The study used responses from 176 contributors who willingly took part in the survey, including Customs Officers and Licensed Brokers.

It also focused on how customs activities and procedures support efficiency and sustainability in supply chain management, especially in the clearance processes at customs entry points.

The findings provide an overview and show that most participants have the understanding of SSCM and they also see it as a way to reduce costs, protect the environment, and improve the utilization of resource. It also helps improve efficiency, reduce waste, pollution, strengthen trust and increase competitiveness in business performance.

However, there are many challenges faced such as low awareness and high initial costs, poor internet,

slow digital service, still limit full implementation. The study also confirms that customs procedures directly affect how quickly goods are cleared.

Many interviewees reported delays, according to them they are caused by inspections, repeated document checks, and administrative steps. Poor digital systems and unstable internet also slow the process, while manual paperwork remains a major issue.

In an effort to improve this, the study suggests greater investment in modern technology to make customs operations faster and more efficient as will enhance productivity, improve market expansion, reduce hardship, support government revenues, facilitate trade properly through an accurate export and import operations.

Recommendations

- This research recommends incentives for officers pursuing advanced studies and certifications as a mean of encouragement
- Government should Increase Liberia Revenue Authority budget specifically for investment in modern customs technology and automation to enhance speed and accuracy
- The research encourages public-private partnerships to improve logistics services
- Strengthen digital systems to reduce manual paperwork and processing time
- The study recommends an electronic performance monitoring systems to track delays and efficiency
- The study considered expansion of training workshops at major entry points such as ports and airports as one of the best solutions.
- Liberia Revenue Authority (LRA) should improve internet infrastructure to support electronic customs platforms at major customs points namely RIA, Freeport, Port Buchanan, Harper Port, Sinoe Port, and Nimba customs Business Office.

Future Research

Based on the scope and limited time of paper, Future studies should cover more sectors beyond customs and include a larger sample size like the petty sellers, whole sale sellers, and etc. The upcoming research should include a Comparative study between public and private institutions which are significant to this topic.

Future Researchers should do more examinations on the long-term financial impact of sustainability and explore the role of digital systems, smart logistics, and automation in improving customs operations and environmental protection.

Meanwhile, prospective analyses should also investigate the role of digital integration, smart supply chain and logistics and how it helps strengthen sustainable practices to provide protection for the environment and the unborn generation.

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