

Can Namibia become a regional gateway by developing a logistics hub around Walvis Bay's port?

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Abstract

Many developing countries wish to become the "gateway" to a region or part of a continent. One strategy involves encouraging logistics cluster development. These support global supply chains and enable the growth of the host country through the resulting trade as well as providing direct and indirect employment opportunities during the build and subsequent operation of the hub. Namibia has a desire to become the gateway to southern Africa and the SADC region. Previous work, (Muñoz & River, 2010, Lambourdiere, Savage & Corbin, 2012) have established the criteria for successful clusters, whilst Savage (2013) looked at Namibia's potential for success using data from the NGCL's 2011 "State of logistics" research (Jenkins, Savage & Fransman, 2012). This article reviews those findings using current survey data to assess Namibia's logistics industry's readiness to take on this gateway role.

Key words: Namibian logistics, logistics clusters, emerging economies, global supply chains, gateways

Introduction

1. INTRODUCTION

Dispersion of production sites due to globalization, focussed factories and risk aversion has led to an increase in the flow of physical goods, financials and information across the world. Specialized globalized supply chains are needed to support these operations. Flow management within the logistics pipeline has become part of a company's strategic weaponry used to meet the differing, and often volatile, demands of customers. Customer freedom of choice and increased new product launches have intensified the competition between global corporations, so they insist on a very high level of service from their supply chains.

When a region espouses global supply chains, logistics activities can become a factor in its development strategy and thus influence public policy. Planners, especially those in developing countries with limited manufacturing, tend to rely on trade to enhance their economies. Logistics activities generate employment and facilitate trade, which can help bring greater human well-being to their region. Global supply chains offer countries and city-states with appropriate port facilities (e.g. Singapore, Rotterdam, and Panama) an opportunity to bring prosperity to their communities. Their port based hubs have become the cornerstone of their economic growth. This has inspired some regions to base their development strategy on logistics clusters. Namibia is already involved in marine transport especially through the port of Walvis-bay and so could play a strategic role in global supply chains by setting up such a cluster there. This article aims to understand Namibia's ability as well as her readiness to develop and operate such a facility as the basis for regional policy development and economic growth.

2. LITERATURE AND BACKGROUND

2.1 Global supply chain management (SCM) and competitive advantage.

Global supply chains enable companies to exploit the globalization of economic activities (Dornier et al., 1998), e.g. by accessing broader markets or developing lower cost sourcing (Ferdows, 1997). They have become strategic weapons for building competitive advantage, allowing companies to source materials and components from one place, manufacture them in another, assemble them in yet another and then to distribute them in a different territory all together. This has been made possible by trade barrier collapses, communication technology advances (Hülsmann, Grapp & Ying, 2008) and the combination of three interrelated processes: global sourcing, global manufacturing and global distribution (Bello, Lohtia & Sangtani, 2004). Companies trade in disparate geographical regions using "Glocalization" (think globally, but act locally) to tailor their services/products to meet local needs whilst ensuring overall international governance (Swyngedouw, 2004).

Supply chain integration has become a source of competitive advantage for both members and users by enabling goods to flow without restrictions. Supply chain management (SCM) or, "Managing relationships with upstream and downstream suppliers and customers to deliver superior customer value at less cost to the entire system" (Christopher, 2012), plays an important part in customer-oriented business strategies. When setting up any supply chain one must integrate all internal and external resources to meet customer demand (Rota-Franz, Thierry & Bel, 2001). On a global scale this becomes very difficult, especially as to achieve efficiency, logistics processes must be executed simultaneously rather than sequentially to ensure that, "the whole is greater than the sum of its parts" (Christopher, 2012). As these supply chains extend globally, there is a commensurate increase in the risk levels as the multiplier effect acts on the interrelation of global supply chains and their nodes.

The numerous flows in global supply networks harness logistics activities (e.g. consolidation, distribution, transportation, light assembly and postponement) to create value for customers. To achieve overall effectiveness, the individual activities must be effective, efficient and integrated. They also need support, which has the potential to create jobs, enhance skills and improve the population's wellbeing. Recognising the critical role played by logistics activities, some governments have built logistics clusters to develop their countries by encouraging global supply chains.

2.2 Clusters and network integration.

A cluster can be defined as "geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g. universities, agencies and trade associations) in particular fields that compete but also cooperate", (Porter, 2008). The interdependency of clusters strengthens the products and/or services provided (Ketels, 2003).

Clusters augment competitive advantage by enhancing productivity, driving innovation and contributing to the emergence of new business (Porter, 2008). They develop where geographical location gives a comparative advantage whether contained within a single city or sprawled across international borders. Literature recognizes three types: the techno cluster, the historic know-how based cluster and the factor endowment cluster. Logistics ones tend to be the factor endowment type; they are "regions with a very high concentration of logistics activities relative to local population or economy" and "an amorphous agglomeration of companies and facilities with logistics-intensive operations with fuzzy borders and no central management" (Sheffi, 2012). Basically, they are zones where operators and all activities relating to the transport, logistics and distribution of goods, are gathered together.

Known as “Logistics Villages” Germany, “Distribution Parks” in Japan or “Logistic Centres” in the Czech Republic and some European countries (Kampf, Průša & Savage, 2012); clusters play a strategic role in global supply chain management by synchronizing logistics flow activities. Clustering and developing network integration processes enable regions or countries to become strategic nodes in global supply chains (Bosona & Gebresenbet, 2011). This induces collaboration in logistics clusters built on, and motivated by, economic benefits, power, trust and information sharing (Groothedde, Ruijgrok & Tavasszy, 2005). Logistics clusters integrate three core components: compound logistics and transportation services, supported industries and, critically, the group of institutions responsible for fostering their arrangement and positive evolution.

2.3 Global supply chains and logistics clusters.

The emergence of logistics clusters has been partially driven by the need to manage supply chains during turbulent times. Successful management of these increasingly complex chains, crucial to multi-national businesses, calls for high levels of functional and organizational integration (Krajewski et al., 2003). Logistics employs powerful I.T. systems to manage global flows and reduce distance by saving time. Accelerating physical, informational and financial flows enables multinationals to satisfy their customers' need for time-based competition (Blackburn, 1991). Organizations that are unable to deliver their goods at the right time and at the right price are likely to lose out to global competition (Handfield & Nichols, 1999). So, today's global supply chains must be *hyperflexible* to face the increasing level of volatility (Christopher & Holweg, 2011). Their construction constitutes a major challenge for corporations. Their networks must be designed to shorten the time-to-market for their products and build risk avoidance (Handfield & Nichols, 2002). To make global supply chains more flexible, agile and resilient, corporations have begun to concentrate their logistics activities into a few strategic and innovative nodes (logistics clusters). In response, some governments give their strategic regional development programs a logistics and supply chain “bent”, making heavy investments and efforts to attract clusters to their territories. Thus, valuable collections of resources are set up by regional authorities that bring local benefits as well as supporting the world supply chain and logistics community.

Taking the above together with the work of Muñoz & River (2010), Lambourdiere, Savage & Corbin (2012) established requirements for the successful development / operation of clusters in developing countries. By applying Namibian data from NGCL's 2011 “State of logistics” research (Jenkins, Savage & Fransman, 2012), Savage (2013) was able to consider whether becoming a regional gateway by developing logistics hubs, would be a blessing or a curse for Namibia.

3. METHODOLOGY

This research adopted a critical realism approach to examine tendencies rather than laws, looking at entities, events and experiences, regarding perceptions and reality to assemble its data. The initial (2011) research used data from semi-structured interviews with key stakeholders to produce a complex matrix, analysing similarities or differences by row or column as proposed by Nadin & Cassell (2004). The initial research was disseminated in the form of academic papers (Jenkins, Savage & Fransman, 2012; Savage, Jenkins & Fransman, 2013) and practitioner workshops. The comments from these, together with further interviews and feedback from stakeholders, were then analysed to develop the primary input data used to consider whether developing logistics hubs, would be a realistic and beneficial aspiration (Savage, 2013).

The article uses updated survey data to review how the Namibian logistics industry, as perceived by stakeholders, has changed in the two years since 2011 and whether this enhances or detracts from her potential to achieve the goal of developing the Walvis-bay port as a successful logistics hub for Namibia and the SADC Region.

4. FINDINGS

4.1 Would becoming a regional gateway by developing logistics hubs be a blessing or a curse for Namibia (2013 view)?

4.1.1 The role of logistics clusters in global supply chains: What could it mean for Namibia?

Namibia's most recent government regional development plan (NDP_4) specifically cites logistics as one of the four "economic priorities" (National Planning Commission, 2012).

Southern Africa's logistics is dominated by South Africa (S.A.); because of its size, developed infrastructure and skills, it has long been accepted as the gateway for southern Africa (Cilliers & Nagel, 1994). Approximately 80% of Namibia's total imports come from or through S.A. (African Development Bank, 2007). Moreover, S.A. continues to exercise a great deal of pressure on Namibia through restrictive commercial practices (Clerck, 2008). Namibia would like to take over this role based on her geographical position, her ports, basic infrastructure, relative freedom from congestion and a belief that it is easier to do business through the port of Walvis-bay than other southern African ports (Savage, Jenkins & Fransman 2013). Namibia has established corridors that provide links to countries including: S.A., Botswana, Zambia, Angola, and the DRC. Trade via the corridors which is facilitated by the Walvis-bay Corridor Group grew by 33% between 2005 and 2009 (World Bank, 2012).

Developing an advanced logistics cluster around Walvis-bay could provide much needed services for corporations, thus encouraging investment for infrastructure improvement, enabling industrial skills capacity building and stimulating trade. By doing so, it could enhance the location's capabilities and potentially support Namibia's aspirations to make the gateway concept a reality.

4.1.2 Requirements for successful logistics cluster development in Namibia.

In order to evolve into successful entities, logistics clusters need to have a sound framework, built on solid foundations. Following research on Singapore, Dubai and Panama clusters, Muñoz & River (2010) have identified a number of critical factors needed for a successful logistics cluster strategy - see table 1. Like a building, the strategy has three layers

1. The foundation - strategic location, government commitment and stability.
2. The pillars - human resources, infrastructures, administrative processes and regulations.
3. The capstone - incoming overseas companies that have effective global supply chain management strategies.

Once in place, such logistics business conglomerates hold the pillars together and thus help to guarantee the success of the development.

Table 1 - Clusters key elements according to Muñoz and River (2012)

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	Singapore	Dubai	Panama	Panama planned
Strategic location	Strategic position in the Asian north-south corridor	Strategic position between Europe and Asia	Strategic position allowing transition from Pacific to Atlantic Oceans	Expansion of the Canal will ease current ship size restrictions providing more capacity for connectivity
Political stability	Committed and stable government. Unique party	Committed and stable government. Monarchy	Committed government. Multiple political parties, potential opposition	Long term policies and laws to protect investors
Human capital	Emphasis on logistics and technical education, world class labour force	Incentives to bring labour from other countries and provide world class labour force	Inadequate labour force, lack of technical knowledge	Investments in logistical education and technical training
Infrastructure	World class infrastructure and intermodality	World class infrastructure and intermodality	Good ports, lack of proper intermodality	Expanded canal and ports. Improvements in road connectivity
Administrative processes	World class customs, and other relevant business processes	Investor friendly legislature. "Freeport" availability	Denoted as corrupted, and not as efficient	One-stop-shop type of entity new business creation
Regulation for attracting FDI	Clear vision and incentives plan. Basic economic and labour incentives at the beginning, "Added value" proposition offered later	Clear vision and development plan. Economic and labour incentives. Some value offering	Lack of a long term plan (>10yrs). Rely on economic and labour incentives. No value proposition defined.	Creation of entities like AAEEPP ¹ and Laws to support them. Plan relies on economic and labour incentive. No value proposition clearly defined.
Anchor companies	Several logistics, manufacturing, transportation companies attracted	Several logistics, manufacturing, transportation companies attracted	Some logistics and transportation companies attracted.	In the future, AAEEPP ¹ will play a major role to attract new Anchor

¹ Agencia del Area Económica Especial Panamá Pacífico

4.1.3 Namibian compliance and risks that could frustrate a logistics cluster strategy.

Table 2 summarizes Namibian compliance showing that the spectrum of issues is broad and of varying seriousness / difficulty.

Table 2 – Namibia according to Muñoz and River's criteria for logistics cluster success.

Can Namibia become a regional gateway by developing a logistics hub around Walvis Bay's port?

Criteria	Namibia	Classification against criteria
Strategic location	Strategic position on the coast of south-west Africa with connections to global shipping routes giving access to the SADC countries.	Excellent – But, some risk as there are other competitors.
Political stability	Since independence from South Africa in 1990 the political situation has been stable with an elected government. The recently published National Development Plan 4 sets logistics and infrastructure as important priorities.	Good – provided intentions become actions.
Human capital	There is a perceived (& real) lack of logistics training, education and qualified staff. In addition there is a lack of understanding of the concepts of international service standards and a reluctance to conform to them.	Poor – education can be improved but time is needed. Further, the attitude issue may be a “deal-breaking” stumbling block.
Infrastructure	The port of Walvis-bay has a good strategic location, but the present container capacity (350,000 TEUs) is a limitation. This has been recognised and there are plans to enlarge to up to 1million TEUs, but recent (2011/12) congestion suggests that the supporting road infrastructure may become a limiting factor. There is a rail network, but it is narrow gauge, and is considered to be expensive and unreliable, so freight use tends to be very limited. The small size of the population together with the vast geography of the country makes the investment in and maintenance of transport infrastructure very difficult.	Fair – there is potential, but major investment and time will be required.
Admin. processes	This is a contentious area for, whilst the Walvis-bay Corridor Group state that “turnaround times for offloading vary from 12 to 15 hours for container vessels; 24 to 48 hours for bulk vessels, depending on tonnage and shipment; and between 18 and 20 hours for break-bulk vessels”, logistics stakeholders say that “There are Customs issues and delays”. Additionally operators and users claim that “Border control paperwork is cumbersome and it happens often that goods (including fresh foodstuffs) are held at the border too long because of the submission of paperwork” and “charges are applied at the borders (e.g. by Botswana & Zambia)”. In general Namibian administration is characterised by bureaucracy, duplication and siloism, where individuals operate in a vacuum and lack any awareness of the upstream or downstream processes that surround them.	Mixed (fair to poor) - the optimism of the corridor groups is commendable. But the general attitude, especially in the Parastatals will have to be addressed and changed.

Significant examples include:

Socio-economic dynamics (possibly resulting from decolonization and independence) may be considered to be constraints to development. For example, the poor relationship between public (including parastatal) and private sectors (Jenkins, Savage & Fransman, 2012) constrains the public-private dialogue needed to encourage clusters development. A regional development policy with logistics at its heart should neither inhibit original thinking and new-business creation nor restrict it to “approved sections of the community”. It should be underpinned by innovation, entrepreneurship and competitiveness, but must not encourage nepotism on a personal, family or tribal basis. Tribalism is acknowledged as frustrating and stunting democracy (Juma, 2013) but its impact on business development may be overlooked.

Governance, business attitudes and communication - Namibia has the advantage of being a self governing state but its businesses are fragmented and tend to work on a transactional or even adversarial, rather than collaborative / partnership basis. Further, both business and state still tend to be influenced or even dominated, by S.A. (Cilliers & Nagel, 1994). Therefore, the level of business or logistics collaboration strategy in Namibian supply chains is low. Her companies are more used to "rent seeking" / "win-lose" business relationships, which tends to increase the logistics and supply chain costs.

Technical, and financial supply chain management skills, essential to improving the level of supply chain integration, are not well represented in the Namibian education system. This is being addressed (e.g. by the Polytechnic of Namibia), but is a slow process. High volume trading links to companies in the other SADC states are not sufficiently established and many tend to be transactional rather than partnership based. International infrastructure such as: nodes, dry ports and, in particular, the links between them are still limited, e.g. the rail link between Walvis-bay and the north of Namibia is seen as inefficient, so stakeholders would rather use road even for low value, high volume goods. This is exacerbated by support services such as customs, which are still felt to be counterproductive and not to engender efficient supply chain transactions (World Bank, 2012). Difficulties with language as well as literacy cause communication issues as Namibia has some 14 tribal groups, speaking 26 languages (Namibian Tourist Board, 2013). Although Oshiwambo is the first language of about half of the 2.3 million population, Afrikaans is the lingua-franca, German is common in some areas and English is the official state language. English is often spoken (& read) poorly, which leads to inaccuracy, misunderstanding and delays.

Supply chain risk - Increasing the length of a supply chain implies adding nodes and links, which magnifies complexity and risk due to the mathematical multiplier effect. So, any new cluster must be able to guarantee that their operation will be free of disruption. Therefore, risk assessment and mitigation should be incorporated into hub design using kaizen type continuous improvement (Schlegel & Trent, 2012). Namibian policymakers should understand the issues fully as well as recognizing that they need guidelines and procedures to guarantee that disruption is avoided or swiftly rectified to ensure resilience.

Today's global village is a very competitive one and companies in existing supply chain structures will endeavour to preserve the status quo (Savage & Griffiths, 2007). Such econo-political risks must be assessed before the government commits itself to any new logistics cluster development.

Service - existing global players demand outstanding levels of service and efficiency that enhance rather than frustrate the high speed flow of goods. Such exacting standards appear completely alien to the Namibian psyche and may pose the ultimate stumbling block (Savage, Jenkins & Fransman 2013).

4.1.4 Some concepts for a southern African logistics cluster's blueprint.

The construction of a Namibian logistics cluster could mean opportunities for new social development based on improved physical goods flow in the SADC region. To succeed, this policy requires a radical change in Namibia's strategic planning approach and, perhaps more importantly, culture. Exploiting logistics flows can enhance the growth and development of a territory's regional economy, but to enable the rise of clusters and concomitant job creation, Namibia will need strong social cohesion (the *software* of social territorial structure). Therefore, Namibia's government needs an holistic approach because logistics clusters require trust between the public and private sectors, huge investment, a dramatic change

in culture and cooperation with neighbouring countries. Their policies should promote a healthy “what’s-in-it-for-we” approach rather than the “what’s-in-for-me” one (Vitasek, Ledyard & Manrodt, 2010). A Namibian cluster should provide logistics outsourcing services and symbiotic relationships that encourage collaborative strategies to build demand driven services for the SADC region.

Under pressure from fierce global competition, executives, entrepreneurs and investors, seek places where the location is “right” and logistics innovation is taking place. There are opportunities for Namibia to provide a logistics hub for her region, but to succeed, she must understand the issues and be willing to address them.

4.2 Current barriers to logistics development in Namibia showing changes within the industry between 2011 and 2013/4.

During the initial (2011/12) research, stakeholders identified some 43 separate barriers to logistics development in Namibia. For reporting purposes, these were grouped into 8 categories and the catchall, “other” (Savage, Jenkins & Fransman 2013), see table 3.

Table 3 – Stakeholder view of the barriers & issues affecting operations

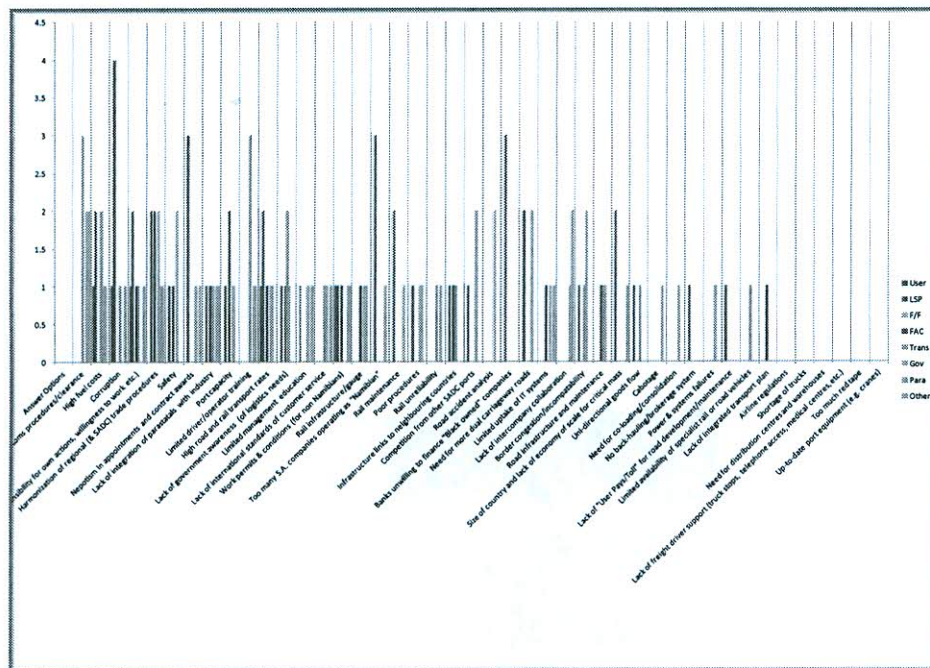
No.	Barrier	No. of Comments
1	Lack of qualified staff, education & training	16
2	The absence of an effective rail network.	12
3	Road capacity and conditions	10
4	Cross-border issues & Customs	9
5	Attitude, service and culture	8
6	Costs (e.g. transport rates)	8
7	Racial issues, legislation and corruption	7
8	Limited harbour capacity	5
9	Other	>20

This information, combined with additional data gleaned from interviews, focus groups and feedback following workshop presentations was used to assess Namibia’s potential for successfully developing / operating a logistics cluster according to the criteria suggested by Muñoz & River (2010). The conclusion from this work (Savage, 2013) was that although successful logistics hubs can form a gateway to a country or region, it is vital that the criteria are met or at least be addressed. Unfortunately, whilst Namibia has considerable advantages (e.g. from its geographical location and existing port), it falls short in a number of areas especially those associated with service, attitude and other facets affected by “human capital” as well as the more apparent ones connected with physical assets such as infrastructure.

Perhaps the key issue is not simply the existence of these shortfalls, but Namibia’s awareness of them and willingness to address them. Further, logistics is a dynamic and competitive world; if the Walvis-bay’s port is to become a reality, there is only a limited time frame in which, the situation can be rectified. With this in mind, the research was extended using an, e-mail administered, survey of some 130 stakeholders and other interested parties to determine whether there had been a change in the barriers, or the perception of them, by the end third quarter of 2013.

For this survey the participants were each given a randomized list of 43 potential barriers (as identified in the original work), asked to select 5 that they felt were most significant and rank them in order of their seriousness. The response rate of 41% may have been greater if respondents had fewer potential factors to rank. Nevertheless, the results do give a strong indication of both the current view of the barriers and the progress between 2011 and 2013. Although the respondents were given anonymity, to assist in further analysis, they were asked to categorise themselves into one of eight stakeholder groups. Table 4 shows the number of times each barrier was cited by stakeholder group.

Table 4 – Barriers to logistics by stakeholder group.



To obtain an aggregate overall picture, the responses were combined into a single set and analysed giving each response a weighting of between 1 and 5 to reflect their seriousness as nominated by the respondents. Table 5 shows the “Top 15” barriers according to this rating, whilst table 6 shows the “Top 15” as suggested by the frequency of citation ignoring the weighting.

Table 5 – “Top 15” logistics barriers (showing weighted values)

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1	Customs procedures/clearance	27
2	High fuel costs	25
3	Corruption	22
4	Attitude (Siloism, narrow mindedness, reluctance to take responsibility for own actions, willingness to work etc.)	21
5	Harmonization of regional (& SADC) trade procedures	20
6	Safety	17
7	Nepotism in appointments and contract awards	16
8	Lack of integration of parastatals with industry	15
9	Port capacity	15
10	Limited driver/operator training	15
11	High road and rail transport rates	14
12	Lack of government awareness (of logistics needs)	14
13	Limited management education	13
14	Lack of international standards of customer service	13
15	Work permits & conditions (for non Namibians)	12

Table 6 - "Top 15" logistics barriers (based on citation frequency)

1	Harmonization of regional (& SADC) trade procedures	8
2	Customs procedures/clearance	7
3	High fuel costs	7
4	Corruption	7
5	Attitude (Siloism, narrow mindedness, reluctance to take responsibility for own actions, willingness to work etc.)	6
6	High road and rail transport rates	6
7	Nepotism in appointments and contract awards	5
8	Limited driver/operator training	5
9	Lack of integration of parastatals with industry	5
10	Lack of government awareness (of logistics needs)	5
11	Work permits & conditions (for non Namibians)	5
12	Safety	4
13	Port capacity	4
14	Too many S.A. companies operating as "Namibian"	4
15	Need for more dual carriageway roads	4

In order to test whether the weighting has had any effect on the interpretation of the survey, table 7 shows the ranking of each factor weighted and unweighted as well as their relative movement if the weighting is ignored.

Table 7 – “Top 15” logistics barriers showing the impact of the chosen weighting

Factor	Ranking		Relative Movement
	Weighted	Simple	
Customs procedures/clearance	1	2	+1
High fuel costs	2	3	+1
Corruption	3	4	+1
Attitude (Siloism, narrow mindedness, reluctance to take responsibility for own actions, willingness to work etc.)	4	5	+1
Harmonization of regional (& SADC) trade procedures	5	1	-4
Safety	6	12	+6
Nepotism in appointments and contract awards	7	7	0
Lack of integration of parastatals with industry	8	9	+1
Port capacity	9	13	+4
Limited driver/operator training	10	8	-2
High road and rail transport rates	11	6	-5
Lack of government awareness (of logistics needs)	12	10	-2
Limited management education	13	18	+5
Lack of international standards of customer service	14	17	+3
Work permits & conditions (for non Namibians)	15	11	-4

It can be seen from this table that, if one considers the top 10 factors the amount of movement caused by the ranking is fairly limited with the majority of barriers being displaced only marginally. The exceptions being “safety” and “port capacity”, which drop out, if the ranking is ignored, to be replaced by “High transport rates” and “Lack of government awareness (of logistics)”. This suggests that, whilst “safety” and “port capacity” are significant to fewer people, those people regard them as very important. To fully understand the significance of the selection and their rankings it will be necessary a) to examine the responses by stakeholder group to see if they exhibit any bias or preference and b) to obtain a greater response rate, probably by simplifying the survey. This will be addressed as part of the ongoing research, but for the purposes of this article, it appears to be reasonably safe to construct a “2013 top 12 significant barriers” by taking the first ten from the weighted list and adding the two from the unweighted that come into “Top 10” contention if the weighting is ignored (NB these are ranked numbers 11 & 12 in the weighted list, so there is unlikely to be any significant distortion).

In order to make a comparison between 2011 and 2013, it will be necessary to assign the 2013 barriers to the appropriate 2011 category. It must be noted that the original (2011) listing is had only 8 categories (+ “other”). Therefore, where appropriate some 2013 categories will be combined. This will lose some of the finer detail, but is probably not significant in terms of the change between 2011 and 2013. The finer detail will be used for later analysis and on-going work. Table 7 shows the 2013 “Top 12” with their equivalent (2011) designations.

Table 8 – “Top 12” 2013 barriers to logistics development showing their 2011 equivalent classification.

Factor	2013 Ranking	2011 Category
Customs procedures/clearance	1	4
High fuel costs	2	6
Corruption	3	7
Attitude (Siloism, narrow mindedness, reluctance to take responsibility for own actions, willingness to work etc.)	4	5
Harmonization of regional (& SADC) trade procedures	5	4
Safety	6	-
Nepotism in appointments and contract awards	7	7
Lack of integration of parastatals with industry	8	-
Port capacity	9	8
Limited driver/operator training	10	1
High road and rail transport rates	11	6
Lack of government awareness (of logistics needs)	12	-

The significance of these findings is discussed in section 5 below.

5. DISCUSSION.

5.1 The global logistics industry.

The logistics industry throughout the world has to be extremely dynamic in order to respond to the volatile needs of shippers, retailers and other supply chain players. These demands, especially those relating to service, have become ever more difficult to meet as globalization “shrinks” the world increases the pressure on such players to perform. This same globalization provides the potential for developing countries to “join the party” and take advantage of the opportunities that it presents. Such golden possibilities can only be successfully taken up by countries whose logistics industry is ready and able to seize them. Savage (2013) showed that, although Namibia does have great potential, the country and her logistics industry had serious shortcomings that would need to be addressed before she could hope to develop a successful global logistics cluster.

Like its world-wide counterparts, the Namibian logistics industry is evolving. Whether it is evolving fast enough and / or addressing the correct issues will be a key factor in determining if Namibia can develop a cluster worthy to be the gateway to southern Africa. The research on which this article is based has sought to understand how the evolution is progressing by examining the perception of key logistics stakeholders.

5.2 Perceived changes

5.2.1 Overall

1. The sequence of the 2011 factors was derived by interpreting their frequency of occurrence during interviews. Therefore, their quantitative value may not be strictly comparable with their 2013 equivalent. Nevertheless, they are felt to be a useful starting point for comparative research.

2. Three of the 2013 factors: "*Safety*", "*Lack of integration of parastatals with industry*" and "*Lack of government awareness (of logistics needs)*", do not appear in the 2011 top 12 list.
3. Likewise two barriers from 2011: "*The absence of an effective rail network*" and "*Road capacity and conditions*" do not appear in the 2013 version. These were the most heavily cited factors in 2011 and are both infrastructure related.

5.2.2 Omissions (from the 2013 weighted "Top 12" barrier list)

1. *Rail network* – this may have several interpretations. For example, the network and services have been fully upgraded, it is no longer important or the stakeholders have simply "given up" on rail as a component of future supply chain.

The first is plainly not true, since service is of such poor standard that shippers will move even low value, bulky goods long distances by truck rather than "risk" relying on rail. This also suggests that users have accepted the state of the railways as a "given" and may have factored it out of their supply chain thinking.

There is a new management team in place at TransNamib (the parastatals rail carrier), which is aware of the company's poor service / image and intends to address the issues. This will be a slow and protracted process, made more difficult since the infrastructure (track, etc.) is owned and managed by the Namibian government, which does not appear to be able to allocate sufficient resources for its restitution. In fact, it currently seems to be more preoccupied in enlarging its national defence force and has allocated a large portion of the 2014 budget to it (Immanuel, 2014).

Namibia does not, at present, have a rail service capable of supporting its own internal needs and certainly not one that could support the Intermodal requirements that are essential for the successful operation of a port-centric logistics hub.

2. *Road capacity and conditions* – again there may be various reasons for this not appearing. There is a continuous programme of road "rehabilitation" and, although this struggles to keep pace with demand, between 2011 & 2013 a 110km stretch of refurbished road near Karibib was reopened. This work had long been frustrating traffic between Windhoek and Walvis-bay's port and so the reopening may have influenced people's views. It should be noted that this refurbishment did not extend to creating a continuous dual carriageway, which could have been advantageous for future port development.

Another factor that may have influenced the respondents was that 2012 was particularly dry, which meant that the roads were not affected significantly by flooding.

There has been an improvement, but one suspects that the above have combined to give respondents a "rosier view" than is perhaps justified. Nevertheless, the responses do represent considerable optimism compared to 2011. Whether this is justified and whether the government will allocate sufficient funds to prepare for the mooted logistics cluster remains to be seen.

5.2.3 Omissions (from the 2011 "Top 12" barrier list)

