The Proposed Walvis-Bay Port-Centric Hub Development: A Blessing or a Curse?

Christopher J. Savage
The Polytechnic of Namibia, Email: csavage@polytechnic.edu.na

ABSTRACT

Many developing countries wish to become the "gateway" to a region or part of a continent. One strategy involves encouraging logistics cluster development. Such clusters 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. This article builds on research on Caribbean cluster potential (Lambourdiere et al., 2012), and Namibian logistics (Jenkins et al., 2012) to identify the potential benefits, drawbacks and risks of such a strategy. It was explorative and adopted a critical realism approach to examine tendencies, experiences, and perceptions of reality to form a comprehensive picture. It was found that, although there are great potential opportunities, there are also serious attendant risks. Therefore, to become a successful gateway, Namibia and its logistics industry will need to adopt a long-term approach that covers human capital as well as the more obvious infrastructure developments and is accompanied by a significant change in attitude to service provision.

Keywords: Namibian logistics, logistics clusters, emerging economies, global supply chains, gateways.

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, ever shortening product life cycles and more frequent 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 a limited manufacturing capacity, 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 a 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. Port-centric hubs have become the cornerstone of their economic growth and this has inspired some regions to base their development strategy on logistics clusters. Namibia is already involved in marine transport and so could play a strategic role in global supply chains by setting up such a cluster as a main entry point to southern Africa. This research aims to understand the potential for Namibia to use this cluster as the basis for regional policy development and economic growth.

METHODOLOGY

As published information on the state of the logistics industry in Namibia was limited, 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. Critical realism was chosen because of its ability to address the problem of combining the fallibility of human knowledge with the "getting things right" attitude based on correspondence-like concepts of truth (Käpylä. J. and Mikkola. H., 2010). This is particularly apposite in this case as the research seeks to combine the opinions and perceptions of stakeholders and compare them with established criteria to investigate the potential for success or failure of a proposed strategic project. The initial explorative research was carried out based on 25 semi-structured interviews with key stakeholders to produce a complex matrix, analysing similarities or differences by row or column as proposed by Nadin and Cassell (2004). This opening research was disseminated in the form of academic papers (Jenkins et al., 2012) and journal articles (Savage et al., 2013) as well as, importantly, practitioner / stakeholder workshops. The comments from the workshops, together with further interviews, surveys and feedback, have been analysed and used to modify and develop the primary Namibian input data for this article. In terms of the reliability of that data, stakeholders at the workshops confirmed that the findings gave a realistic and valid picture of the state of logistics in Namibia. Further, even the local logistics practitioners, who might have been expected to have been unenthusiastic about any negative aspects of the findings, were sanguine about them.

The research uses international case study examples to examine the potential benefits, drawbacks and risks of a logistics hub strategy. Applying Namibian data, it compares her opportunity with those of states that have successfully adopted logistics cluster development as a regional policy.

LITERATURE AND BACKGROUND

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 et al., 2008) and the combination of three interrelated processes: global sourcing, global manufacturing and global distribution (Bello et al., 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, 2011: 3), 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 et al., 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, 2011:3). 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 or late-stage customization) 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 participation in global supply chains.

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, 1998). 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: 79-81). Essentially they are zones where operators and all activities relating to the transport, logistics and distribution of goods, are gathered together.

Known as "Logistics Villages" in Germany, "Distribution Parks" in Japan or "Logistic Centres" in the Czech Republic and some European countries (Kampf et al., 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 and Gebresenbet, 2011). This induces collaboration in logistics clusters built on, and motivated by, economic benefits, power, trust and information sharing (Groothedde et al., 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.

Global Supply Chains and Logistics Clusters

The emergence of logistics clusters has been partially driven by the need to manage lengthy and complicated 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 the impact of 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 suffer at the hands of global competitors (Handfield and Nichols, 1999). So, today's global supply chains must be hyperflexible to face the increasing level of volatility (Christopher and 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 and 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 build clusters that can attract globalized trade 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.

FINDINGS

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" (Namibian National Planning Commission, 2012). This also aligns with the proposed SADC Transport Sector Plan, part of the regional infrastructure development master plan, which focuses on four areas: improving access to the transport corridors value chain; reducing transportation costs; improving competitiveness and providing secure and safe transport services (AllAfrica.com, 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 and 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). Many Namibian logistics stakeholders want to change this situation and feel that Namibia has an opportunity to take over the gateway role. This is based on the country's 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 et al., 2012). Namibia has established corridors [Trans-Kunene, Trans-Kalahari, Trans-Oranje, and the Walvis-Bay-Ndola-Lubumbashi (Trans-Caprivi)] that provide links to countries including: S.A., Botswana, Zambia, Angola, and the Democratic Republic of Congo (DRC). The Walvis-bay Corridor Group's key function is to facilitate trade via the

corridors; their success is indicated by the volume of goods moving along the corridors, which grew by 33% between 2005 and 2009 (World Bank, 2012).

Successful global supply chains require value added supply chain management activities as well as physical movement of goods. As logistics clusters can meet both requirements, they can create jobs at all levels for themselves as well as secondary and supporting industries. Thus multi-national corporations use clusters to manage their supply chains through functions such as: supply chain or global networks design (from 3rd/4th party logistics service providers), logistics information technology, kitting, postponement, etc. Because they bring resources, people, skills and investment into close proximity, clusters can also promote the development of new, advanced logistics services.

Developing an advanced logistics cluster in Namibia 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

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 and Rivera (2010) have identified a number of critical factors needed for a successful logistics cluster strategy:1) a strategic location, 2) government commitment and stability, 3) human resources, 4) infrastructure, 5) administrative processes, 6) regulation and 7) anchor companies and FDI (Foreign Direct Investment) attraction (see Table 1). NB Some factors (e.g. geography) are pre-existing and so are beyond the control of planners.

Like a building, the strategy has three parts: 1) foundation; 2) pillars and 3) capstone. Figure 1 gives a diagrammatic representation of this.

The foundation - strategic location, government commitment and stability

To work, logistics clusters must have an appropriate location and the support of a policymaker (i.e. the foundation should be built using the location's benefits with staunch government support). Both of these factors are needed; good strategic location alone will not guarantee success because neither supply chain professionals nor investors will commit themselves to cluster development unless they believe that the project has a long-term future. This requires commitment to the location from the government, planners, logistics service providers, financiers as well as local businesses and international traders. Significant social buy-in to win "hearts and minds" in order to encourage public and private institutions to support the development is also critical.

The pillars - human resources, infrastructures, administrative processes and regulations:

Pillars are essential for support; they include: human resources, infrastructure, regulation and administrative processes. *Human resources* play a strategic role in cluster sustainability. Research has shown that one of the barriers to logistics development in Namibia is the shortage of skilled labour and well educated logistics management(Savage et al., 2014, Fransman. L et al., 2014). With this in mind, it will be imperative for Namibia to attract

skilled labour and management from outside of the country, which is one of the strengths of the Dubai model. Unfortunately, conditions in Namibia do not currently appear to favour this. In fact, "work permits and conditions (for non-Namibians)" is consistently cited as a barrier to logistics development in surveys carried out between 2011 & 2014 (Savage et al., 2014), which does not auger well for such a tactic.

Even if overseas recruitment were to be successful in the short / medium term to "kick-start" the project, Namibia must ensure that quality logistics and supply chain management education is available to train "home grown" staff to fill crucial positions in due course. This aims to improve the workers cognitive capabilities as well as their technical knowledge so that they can be integrated into professional supply chain networks. Clearly it is essential that key staff, whether they be local or overseas must be retained for an extended period to enhance the chances of success.

Table 1 – Key Elements of Clusters According to Muñoz and Rivera (2012)

	Singapore	Dubaï	Panama (old)	Panama planned
Strategic location	Strategic position in the north south corridor in Asia	Strategic position between Europe and Asia	Strategic position in the Asia-Us East Coast corridor	Expansion of the Canal will provide access to larger volumes and 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 labor force	Incentives to bring labor from other countries and provide world class labor force	Inadequate labor 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	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. Economic and labor incentives at the beginning, later value proposition	Clear vision and development plan. Economic and labor incentives. Some value proposition	Lack of a long term plan (10yrs>). Rely on economic and labour incentives. No value proposition defined.	Creation of entities like AAEEPP and Laws to support them. Plan relies on economic and labor 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 will play a major role to attract new Anchor companies.

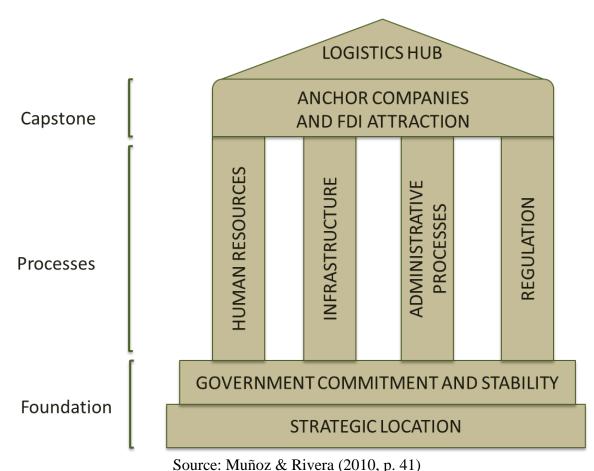


Figure 1: Making Logistics Clusters Happen

Physical (logistics) infrastructure is the clusters' "hardware", needed to move goods, from town to town and county to county. Efficient logistics infrastructure enables rapid flow but, any deficiency in it can ruin service quality. International infrastructure has improved significantly and, combined with innovation, has enabled logistics service providers to operate extended global supply chains successfully. Namibia has some good basic infrastructure, but it will require major development supported by cultural change to meet international requirements. A key issue is that of the lack of effective Intermodal transport because of the poor railway service. This will need to be rectified to be able to move the expected container volumes to and from the port quickly.

Administration is another important pillar. Effective flows are based on "just-in-time" principles, so any process delay or error could inhibit the movement of goods and thus compromise global supply chains. Namibian regional authorities should support initiatives such as: electronic customs' clearance systems, harmonization (and simplification) of administration requirements and improved application of internationally agreed standards; essentially anything that enhances service.

Although there are "good pockets", administration is an area of general, and quite severe, weakness in Namibia, where siloism and inflexibility abound. It is crucial to avoid gaining entry to global supply chains but not being able to maintain or consolidate ones position.

This can be fatal as, rather than developing and moving up the service hierarchy, one may easily lose existing customers. A regional development policy with logistics clusters at its heart, cannot afford to underestimate this risk because global supply chain managers require very high standards of service and flexibility.

Regulation sets the climate for business operation and development. Logistics clusters must attract business, so a friendly and efficient regulation atmosphere is essential. In terms of its Global Competitive Index, Namibia is ranked 90th by the World Economic Forum (2013-14) with a score of 3.9 (out of a possible 7), somewhat worryingly, the country has "slipped" from 83rd position in 2011/12 (World Economic Forum, 2013), despite enjoying over 20 years of stable government.

A long view of jurisprudence is required so laws remain stable over a sustained period and are applied equally to every agent or corporation without discrimination. Poor regulations can have a insidious impact on competition and discourage inward investment or cluster participation. Namibia must avoid deterrent regulatory approaches, but espouse those that address anticompetitive behaviour. The business climate should be "free of burdens" and enable opportunities for new logistics firms as well as providing incentives for existing organizations to innovate and improve their productivity. "Tax" is another difficult regulatory area, as high or inequitable taxes or difficult compliance will reduce profits thus discouraging entry.

Poor regulatory climates are bad for potential logistics clusters because they deter entry as well as having a severe impact on productivity and growth. Namibia must identify and address any underlying problems if she wishes to use logistics clusters to improve her investment climate and encourage FDI rather than corruption.

The capstone – incoming companies

The capstone of a logistics cluster is built by overseas companies that have effective global supply chain management strategies. Often "bench mark innovators" in marketing or logistics, these companies have a proven ability to attract others to a cluster's facilities; encouraging them is vital for cluster development and growth. The influx of companies will be affected by Namibia's ability to attract Foreign Direct Investment (FDI) as well as the ease of doing business. Her ability to attract FDI was also ranked at 90th place in the world in 2010/11 (Mundi, 2014), which does not inspire confidence. In terms of the successful port-centric economies, this is well below the ranking of Singapore (5) or Panama (45), nevertheless, this does place her above Botswana (113), South Africa (120) and Mozambique (122), all of which could be competitors for funding to provide the gateway to southern Africa.

As noted above under regulation, the ease of doing business will be influenced by the country's Global Competitive Index, which in not very inspiring and it is worth noting that the World Economic Forum (2013) found that the problematic factors for doing business with Namibia included: Inadequately educated workforce, Corruption, Poor work ethic and Bureaucracy in their "top five" factors for 2103 -14.

These factors are of considerable concern because, once in place, it is the role of such logistics business conglomerates to hold the pillars together and thus help to guarantee the

success of the development. It suggests that whilst Namibia has aspirations to be a "Global Player", at the present time, they still have "a long way to go".

Namibian Compliance and Risks that could inhibit a Logistics Cluster Strategy

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

Socio-economic dynamics (possibly resulting from decolonization and independence) may be considered to be constraints to development. For example, because atavisms are retained in supply chains, social cohesion and trust are low. This is illustrated by the poor relationship between public (including parastatal) and private sectors (Jenkins et al., 2012). This constrains the public-private dialogue needed to encourage the development of logistics clusters. Government policy as enacted has often protected certain groups' or organizations' power to the disadvantage of others. 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". Government logistics clusters' strategy should be underpinned by innovation, entrepreneurship and competitiveness; it should not encourage nepotism on a personal, family or tribal basis. Tribalism is acknowledged as frustrating and stunting (Juma, 2013) but its impact on business development may be overlooked. democracy Namibian recruitment advertisements often state that "Preference will be given to a Namibian candidate". Done in the name of capacity building and theoretically laudable, this is thinly disguised nepotism where the ability to do the job may be of relatively low importance. similar principle is often applied to the awarding of business where, despite "competitive tendering", preference will usually be given to a proposal that will benefit the service buyer. Rather than being seen as corrupt, this is simply regarded as normal business practice.

Governance, business attitudes and communication - Namibia has the advantage of being a self-governing single state but its businesses, influenced by tribalism, 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 and 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" / "winlose" 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 provided by customs, which is still felt to be counterproductive and not to engender efficient supply chain transactions (World Bank, 2012). Difficulties with language as well as literacy, prevent the use of uniform goods labels across the region and cause communication issues. 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.

Table 2 – Namibia according to Muñoz and Rivera's Criteria for Logistics Cluster success.

	success.	_
Criteria	Namibia	Classification against criteria
Strategic location	Strategic position on the coast of south-west Africa, with connections to global shipping routes giving	Excellent – but, some risk as there are other competitors.
D 11:1 1 : 1 11:	access to the SADC countries.	C 1 '11' '
Political stability	Since independence from the RSA 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 (and 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 1 million TEUs, but (2011–2012) 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 its use for freight 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.
Administrative 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 goods (including fresh foodstuffs) are often 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.
Regulations for attracting foreign direct investment	There is a history of attracting inward investment from countries such as China, the USA and Germany, but results have not always lived up to expectations.	Average – the scope is there, but whether it can be capitalised on fully remains to be seen.
Anchor companies	Several logistics service providers, such as Transworld Cargo and DHL, are established locally.	Average – there is scope, but it will only be developed if the companies feel that the other criteria are met.

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. Therefore, because any new logistics cluster or other form of node must be able to guarantee that their operation will be free of disruption, risk assessment and mitigation should be incorporated into their design. They should foster feedback and iteration giving Kaizen type continuous improvement (Schlegel and Trent, 2012). Consequently, Namibian policymakers should fully understand the issues and recognize that they, and any cluster members, need guidelines and procedures to ensure that disruption is avoided or swiftly rectified so that supply chains are resilient. It is also important that any localised risks are addressed; a key candidate here is the apparently "simple" one of road safety. Despite the sparse population, Namibia is currently (2014) ranked No. 1 in the world for death by road traffic accidents with a figure of 53.4 / 100,000 of the population (World Life Expectancy, 2014). Apart from the tragic loss of life, a road traffic accident has the potential to cause major disruptions that may ripple through a supply chain affecting players both upstream and downstream of the incident. When, as in the case of Namibia, such accidents occur frequently, they can quickly build a poor reputation for the country that may discourage global players from selecting it as a destination.

Today's global village is a very competitive one and companies forming existing supply chain structures will endeavour to preserve the status quo. It is not unheard of for powerful governments to impose trade restrictions or tariffs if they feel that their business interests are under threat (Savage and Griffiths, 2007). Such econo-political risks must also be assessed before the Namibian government commits itself to any new logistics cluster development. Service - existing global players demand 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 (Fransman. L et al., 2014, Savage et al., 2012).

Some Concepts for a Southern African Logistics Cluster's Blueprint

The construction of a Namibian logistics cluster could mean opportunities for new social development and 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. Global supply chains, the raison d'être for nodes, need smooth logistics flows. To achieve this, clusters (the nodes) integrate strategically important, value adding logistics functions that can service global supply chains at local, national, regional or global level and adapt their functions to suit, frequently changing, requirements. 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). Achieving positive outcomes from a logistics based regional planning policy will require the development of a serious network culture. 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. They will need to use logistics professionals to play advisory and facilitation roles, and heed their advice. Their policies should promote a healthy "what's-in-it-for-we" approach rather than the "what's-infor-me" one (Vitasek et al., 2010). Clusters should be places where companies will find logistics outsourcing services and symbiotic relationships that encourage collaborative strategies. Namibia needs a culture where local, regional and global supply chains work together using clusters to build demand driven services for the SADC region.

Detailed market research will be needed to identify and develop the concept of logistics clusters for Namibia based on integration, collaboration, agility and suppleness. As a starting point, the following rules adapted from those proposed by Wilson and Doz (2012) for an innovative logistics cluster based strategy can be applied: 1) Understand the cultural, financial, technical and other requirements, 2) start small, 3) use rigorous project management with seasoned logistics project leaders, 4) invest time defining the innovation needed to offer an unique selling point for Namibia as the gateway to the region, 5) build enough knowledge overlap to enable collaboration and 6) avoid relying solely on technology for communication.

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.

CONCLUSIONS

Global supply chain management facilitates the movement of goods, information and financials through space and time. Nodes should be "switching points" that enable goods to be directed via the most effective and efficient route available. Successful logistics hubs can form a gateway to a country or region. The services, they and their "clustered" companies provide, facilitate the movement of goods and add value through technical activities that benefit both producers and consumers in a cost effective way.

Where the necessary criteria are satisfied, hubs / clusters are able to form a plank of a region's strategic development policy by providing high value-added logistics services to multi-nationals. International companies seek competitive places to install logistics facilities where they can be sure that functional and geographical integration of their global supply chains can be accomplished. As well as serving the supply chain, such facilities can improve national competitiveness, e.g. Singapore's sustainable economic growth was underpinned by logistics clusters. Efficient logistics clusters can enhance a territory's economic growth and be a geopolitical weapon that improves their strategic competitiveness by offering positional benefits for global supply chains. Compared to the port clusters tabulated by Muñoz & Rivera, Namibia's Walvis-bay is perhaps most like Panama (old) with its good location, stable government but poor labour force and lack of technical capacity as well as corruption and inefficient administration processes. Namibia would like to develop Walvis-bay into a port-centric cluster in order to attract corporate logistics functions to benefit itself and service the SADC Region. The comparison with successful port cities suggests that, like Panama, Namibia needs a well thought out long-term plan to move towards the services and facilities offered by Singapore or Dubai.

This article suggests that, whilst the port-centric cluster vision is appealing, there are some pitfalls and as Craig (2013) states: "many locations have invested in infrastructure but have failed at being the logistics hub". The case of the Jade Wesser port in Germany (Weber. J., 2003) is a pertinent reminder that such projects can fail to attract significant cargo volumes. Whilst the German economy can perhaps afford a failed logistics hub, the adverse impact of

such a fiasco on the financial and social facets of a much smaller economy, such as Namibia's, is significantly greater. The article suggests that identifying and implementing "remedies" for shortcomings must be part of Namibia's logistics clusters development or the whole concept could implode, fail and have an overall negative impact on the country (& the region). Logistics clusters are places where innovation and learning are vital components that, together with the close proximity of suitable commercial, physical and academic institutions, can form a virtuous spiral. If developed and run successfully, a Namibian logistics cluster project could prove to be the catalyst for the country's economic and social advancement.

It is said that, Namibians always "make a plan", albeit often at the last minute, and make things work. To become a successful gateway, they will need to adopt a detailed long-term approach that builds on her strengths but addresses the weaknesses identified in this by research as well as bringing about a significant change in attitude. If successful, this could lead to higher rates of growth and prosperity for the populace; but anything less than a controlled and wholehearted approach may fail. The use of logistics hubs or clusters to develop Namibia as a regional gateway has the potential to be a blessing. But, if not approached in a realistic and comprehensive manner, it could turn out to be a curse. This article has outlined some of the arguments; but only time can provide an incontrovertible answer to the question.

ACKNOWLEDGEMENTS

The author would like to acknowledge the valuable input and help received from the following people:

- Drs. Eric Lambourdier and Elsa Corbin for their long-term collaboration and the specific ideas on assessing the possible impact of logistics clusters on developing territories.
- Mr. Logan Fransman and Dr. Andrew Jenkins for their help with gathering and analysing the Namibian logistics data.
- The anonymous reviewer for his / her constructive comments and suggestions based on the conference paper version.

REFERENCES

- African Development Bank. 2007. *African Economic Outlook: Namibia*, African Development Bank, AIBD
- AllAfrica.Com. 2012. *SADC Infrastructure Plan Ready for Approval* [Online]. AllAfrica.com Available: http://search.proquest.com.libaccess.hud.ac.uk/docview/1023839563 [Accessed 15 August2012 2012].
- Bello, D. C., Lohtia, R. & Sangtani, V. 2004. An Institutional Analysis of Supply Chain Innovations in Global Marketing Channels. *Industrial Marketing Management*, 33, 57-64.
- Blackburn, J. 1991. *Time-Based Competition: The Next Battleground in American Manufacturing*, Homewood, IL., Business One Irwin.
- Bosona, T. G. & Gebresenbet, G. 2011. Cluster Building and Logistics Network Integration of Local Food Supply Chain. *Biosystems Engineering*, 108, 293-302.
- Christopher, M. & Holweg, M. 2011. Supply Chain 2.0: Managing Supply Chains in the Era of Turbulence. *International Journal of Physical Distribution & Logistics Management*, 41, 63-82
- Cilliers, W. & Nagel, P. 1994. Logistics Trends in South Africa. *International Journal of Physical Distribution & Logistics Management*, 24, 4-14.

- Clerck, G. 2008. Industrial relation in Namibia since independence: Between neo-liberalism and neo-corporatism? *Employee Relations*, 30, 355-371.
- Craig, T. 2013. Why does Qatar not want to be the logistics hub of the GCC and of MENA? [Online]. Available: www.qbusnet.com [Accessed 21, March 2013].
- Dornier, P., Ricardo, E., Fender, M. & Kouvelis, P. 1998. 'Global Operations and Logistics. Texts and Cases, New York, John Wiley & Sons.
- Ferdows, K. 1997. Making the Most of Foreign Factories. *Harvard Business Review*, 75, 73-91.
- Fransman. L, Heyns. G.J., Luke. R. & Savage, C. J. 2014. The impact of the logistics skills gap on customer service in southern Africa: Evidence from Namibia and the Republic of South Africa. *1st Namibia Customer Service Management Conference* Windhoek, Namibia.
- Groothedde, B., Ruijgrok, C. & Tavasszy, L. 2005. Towards Collaborative, Intermodal Hub Networks: A Case Study in the Fast Moving Consumer Goods Market. *Transportation Research: Part E* 41, 567-83.
- Handfield, R. & Nichols, E. J. 1999. *Introduction to Supply Chain Management*, New Jersey, Prentice Hall.
- Handfield, R. & Nichols, E. J. 2002. Supply Chain Redesign. Transforming Supply Chains into Integrated Value Systems, New Jersey, Financial Times/Prentice Hall.
- Hülsmann, M., Grapp, J. & Ying, L. 2008. Strategic Adaptivity in Global Supply Chains Competitive Advantage by Autonomous Cooperation. *International Journal of Production Economics*, 114, 14-26.
- Jenkins, A. K., Fransman, L. & Savage, C. J. 2012. Logistics in Namibia: Issues and challenges. *2nd Carpathian Logistics Congress*. Czech Republic.
- Juma, C. 2013. *How tribalism stunts African democracy* [Online]. Available: http://www.bbc.co.uk/news/world-africa-20465752> [Accessed 21 January 2013].
- Kampf, R., Průša, P. & Savage, C. J. 2012. Systematic location of the public logistic centres in Czech Republic. *Transport:Taylor & Francis*, 26, 425-432.
- Käpylä. J. & Mikkola. H. 2010. A Critical Look at Critical Realism: Some Observations on the Problems of the Metatheory. *World Political Science Review*, 6.
- Ketels, C. H. M. 2003. The Development of the Cluster Concept Present Experiences and Further Developments. *NRW Conference on Clusters*.
- Krajewski, L., Ritman, I., Mitchell, J. & Townley, C. 2003. *Management des Opérations*, Paris, Perason.
- Lambourdiere, E., Savage, C. & Corbin, E. 2012. Global supply chains, logistics clusters and economic growth: What it could mean to Caribbean territories?'. *C.O.T.E.*, *Conference on the Economy*, . Trinidada & Tobago.
- Muñoz, D. & Rivera, M. L. 2010. Development of Panama as a Logistics Hub and the Impact on Latin America. MEng, M.I.T.
- Nadin, S. & Cassell, C. 2004. Using Data Matrices. *In:* CASSELL, C. & SYMON, G. (eds.) *Essential guide to qualitative methods in organizational research.* London: Sage Publications.
- Namibian National Planning Commission 2012. NDP_4: Changing gear towards vision 2030. Windhoek: Republic of Namibia.
- Namibian Tourist Board. 2013. *Namibia's People'* [Online]. Windhoek, Namibia: Namibian Tourist Board. Available: http://stories.namibiatourism.com.na/Portals/165392/docs/namibia's%20people.pdf [Accessed 18th November 2014].
- Porter, M. 1998. On competition, New York.
- Rota-Franz, K., Thierry, C. & Bel, G. 2001. Gestion des Flux dans les Chaines Logistiques. Performance Industrielle et Gestion Des Flux., 153-86.
- Savage, C. J., Bamford, C. G., Fransman, L. & Jenkins, A. K. 2014. The response of key stakeholders to the proposed Walvis-bay port-centric hub development. *Logistics Research Network*. Huddersfield, UK.: CILT / LRN.
- Savage, C. J., Fransman, L. & Jenkins, A. K. 2012. *Logistics in Namibia: Issues and challenges'*, Windhoek, Namibia, Polytechnic of Namibia.
- Savage, C. J., Fransman, L. & Jenkins, A. K. 2013. Logistics in Namibia: Issues and challenges *Journal of Transport and Supply Chain Management*, 7, 8 pages.

- Savage, C. J. & Griffiths, J. 2007. Global supply chains: saints or sinners. *In:* Hull, T. U. O. (ed.) *LRN 2007 Conference*. The University of Hull, U.K. .
- Schlegel, G. L. & Trent, R. J. 2012. Risk Management: Welcome to the New Normal. . *Supply Chain Management Review*, January/February, 12-21.
- Swyngedouw, E. 2004. Globalisation or 'glocalisation'? Networks, territories and rescaling. *Cambridge Review of International Affairs*, 1, 25-48.
- Vitasek, K., Ledyard, M. & Manrodt, K. 2010. Vested outsourcing: five rules that will transform outsourcing, New York, NY., Palgrave Macmillan.
- Weber. J. 2003. The project of the new Jade-Wesser port. Traffic Policy Review 15, 271-275.
- Wilson, K. & Doz, Y. L. 2012. 10 Rules for Managing Global Innovation.
- World Bank 2012. Regional transport & trade logistics in Namibia: World Bank policy note. Windhoek, Namibia.
- World Economic Forum 2013. Global competitiveness report 2013-2014.
- World Life Expectancy. 2014. World Health Rankings: Road Traffic Accidents: Death rate per 100,000 [Online]. Available: http://www.worldlifeexpectancy.com/cause-of-death/road-traffic-accidents/by-country/ [Accessed 18th November, 2014].