Transport and Logistics' Role in Achieving Sustainable Development

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Transport and logistics is essential for trade, industrialization, social-economic development and regional integration. Over the past 20 years the Government of Namibia has invested in transport infrastructure development (roads, rail, maritime and ports, and aviation) in order to both meet the national demand, as well as position Namibia as the gateway to the Southern Africa Development Community (SADC). Accordingly, a Logistic Master Plan was unveiled in 2015 to guide Namibia into becoming a Logistics Nation by 2025. In terms of importance, the transport and logistics sector employs 25,600 persons (2014), which is about 3.7% of the country's total employed persons, and contributes 2.7% to Gross Domestic Product (2015).

The Role of Transport and Logistics

The Fourth National Development Plan (NDP4) and the Harambee Prosperity Plan (HPP) identify transport and logistics as a strategic sector in achieving Namibia's social-economic transformation. The successor, NDP5, is likely to retain transport and logistics as a priority sector. Given its facilitation role in the economy, transport and logistics are strongly linked to achieving both Vision 2030 and the Sustainable Development Goals (SDGs) of the global 2030 Agenda for Sustainable Development. The transport and logistics sector can play an important role in achieving in particular the following SDGs.

SDG 3 (Good health and well-being) refers to ensuring healthy lives and promoting well-being of all at all ages. SDG 3 target 6 aims at halving the number of deaths and injuries from road traffic accidents. Namibia has one of the highest rates of fatal road traffic accidents in the world. The rate stood at 23.9 in 2013, but increased to 24.6 in 2015 based on accident statistics from the Motor Vehicle Accident Fund. In comparison, Germany had a rate of 4.3 in 2013. Trucks were involved in 6% of all road accidents in 2012, but in 7% in 2015 according to statistics from the Motor Vehicle Accident Fund. Trucks are also increasingly involved in accidents than other vehicles. 1.8% of all registered heavy load vehicles were involved in accidents in 2014 compared to 1.2% of other registered vehicles. The fact that the share of trucks involved in fatal accidents is higher than the share of trucks involved in total accidents indicates that accidents involving trucks are often more severe than other accidents.

Furthermore, target 3.9 aims at reducing the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution. Namibia's mining sector is heavily reliant on the transportation of chemicals to separate the minerals, such as uranium or gold, from their ores. Most of these chemicals are transported by road because of the dilapidated state of the railway infrastructure, including rolling stock. The railway accident near Walvis Bay end of 2015 involving hazardous chemicals illustrates the risks inherent in the transportation of these goods.

Therefore, the transport sector plays a crucial role in achieving various targets of SDG 3. The transport industry has taken already the first step and intends to establish a self-appraisal system. The system will certify members that adhere to industry standards such as driving and resting times, speed limits and maximum loads. Government has also pledged to ensure the safety of all road users as well as preventing traffic deaths and injuries in the Moscow

Declaration and the UN Decade of Action for Road Safety 2011-2020. In addition, the ministry of Works and Transport intends to finalise the development of a Plan of Action for the implementation of regulations regarding hazardous goods for the road and railway sector by the end of 2016.

The transport sector is globally the third largest contributor to Greenhouse Gas (GHG) emissions behind the energy sector and agriculture and forestry. The sector contributed about 14% to GHG emissions in 2010, to large extent through the road transport sector, and in particular the passenger transport sub-sector. Due to long transport distances and a lower degree of industrialisation, it is expected that the share in Namibia exceeds the global average. Therefore, the transport and logistics sector plays a role in achieving SDG 13 (*Climate action*), namely combating the impact of climate change. The use of fuel-efficient trucks and cleaner fuels and the switch to electric forklift trucks at warehouses and electric delivery vans in towns that are recharged using solar energy will contribute to achieving SDG 13. However, the efficiency of the transport system at large needs to be improved. It is estimated that about 45% of all roundtrips by trucks involve one empty trip. The establishment of load boards as well as sharing more information regarding available cargo and load capacity can increase the efficiency of the transport sector and reduce its impact on the environment.

Transport and logistics play a crucial role in the fight to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture (SDG 2). Official estimates for 2016 indicate a total of 595,839 people are food deficit in Namibia. It is also estimated that 48% of children aged 6-59 months are anaemic while 23.8% and 13.4% of Namibian children are estimated to be stunted and underweight respectively. Given this context, eliminating all transport barriers and bottlenecks will have direct effect on reducing hunger and ensuring access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year around by 2030 (Target 2.1). Equally, an integrated and efficient food logistics and supply chain management system is critical to "double the agricultural productivity and incomes of small-scale food producers, in particular women..." (Target 2.3), as well as to "ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality" (Target 2.4).

Increasing access to markets is one of the most compelling ways to promote sustainable agriculture, which would in turn open up significant value in the food supply chain for improved nutrition and food security. Food logistics management is relevant to the HPP agenda of "no one should feel left behind" and to the Namibia Agriculture Policy that provides a clear framework for all stakeholders to devise interventions that contribute to the sustainable development and growth of the agriculture sector.

Equally important is SDG 9 (*Industry, innovation and infrastructure*) that is in line with Namibia's Vision 2030 of becoming an industrialised and prosperous nation. For example, the success of Namibia's industrialisation strategy will require, in tandem with Target 9.1, that we develop quality, reliable, sustainable and resilient transport and logistics infrastructure, including regional and transboundary infrastructure (e.g., one-stop border posts, intermodal

facilities, an efficient railway system, etc.) to support economic development and human well-being, with a focus on affordable and equitable access for all. Efficient transport and smart logistics systems would also facilitate the meeting of Target 9.3, i.e., to integrate small-scale industry into global value chains and markets. Similarly, the ability of Namibia to become the preferred gateway and Logistics Hub for the SADC region as envisioned in the Logistics Hub Master Plan is hinged on developing a sustainable and resilient transport and logistics infrastructure (Target 9.a) that can in turn support and increase Namibia's capacity to enhance scientific research, upgrade the technological capabilities of industrial sectors by 2030.

With respect to SDG 12 (*Responsible consumption and production*), the role of well-functioning logistics and transport networks in facilitating sustainable management and efficient use of natural resources (Target 12.2), as well as reducing food losses along production and supply chains, including post-harvest losses (Target 12.3) cannot be overemphasised. Africa's poor rural (transport) infrastructure is one of the biggest impediments to increased productivity, because it makes investment in new agricultural technologies very risky for farmers and other agricultural entrepreneurs. Storage and transport costs are high, as are postharvest losses.

In conclusion, transport and logistics directly and indirectly influence national and regional growth, poverty reduction and improvements in health care, education, agricultural production and the wellbeing of vulnerable groups. Transport infrastructure and services facilitate the participation of rural and urban communities in economic opportunities and provide access to essential service such as education and health. Like most other sectors, when designed to be inclusive, transport and logistics is a strong driver of economic growth and poverty reduction.

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