

# **THE ECONOMIC IMPACT OF PORT OPERATION AT PORT OF HAMBANTOTA ON REGIONAL DEVELOPMENT & INDUSTRIES (HINTERLAND)**

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**ABSTRACT** - Port of Hambantota is the second largest port in Sri Lanka, which is located 10 nautical miles away from the international east-west maritime route at a key advantage. One of the main objectives of port of Hambantota is to develop as a transshipment hub in the South-Asia region. Ro-Ro operation, bulk operation, and bunkering operation are currently handled at port of Hambantota. This research study aims to identify the economic impacts of the port of Hambantota on regional development and dispersion or location of industries of its Hambantota port hinterland.

The objectives are, calculate the number of job opportunities and expenditure who are involving direct and indirect employees at port of Hambantota, study what industries are developing in the future, and forecast the future ro-ro operation. Survey-based method and secondary data are collecting and used the descriptive analysis as the methodology of research. The research findings are, under the direct, indirect, and induced impacts, found the number of job opportunities and expenditure for them. According to past data analysis, future vessel arrivals and cargo handling capacity can be increased with expanding future hinterland operation around the port of Hambantota.

**Keywords:** Economic Impacts; Industry Development; Forecasting future operation; Job Opportunities; Ro-Ro operation; Outsourcing services.

## **1. INTRODUCTION**

Port of Hambantota started operations on November 2010, and it is planned to be constructed under three phases. The operations are handling by HIPG and HIPS currently. [1] all port inside driving, lashing, unlashsing signal operations are outsourced to private companies. Mainly Ro-Ro operations, Bulk operations, and Bunkering operations are happening at the port of Hambantota. In Ro-Ro operation, the capacity of the yard is about 18000 vehicle handling.

When considering connectivity of the hinterland and Port of Hambantota, it can be supported to handling operations smoothly. Port hinterland impact can be measured by the quality of the port facilities, the quality of the port services for vessels and cargo, the inland transport system, and the economy of scale. [2] This research focuses more on the economy of the scale factor. Through the literature review, study shows how to handle port operations and its hinterland operation activities. the following studies were important to understand for this research. The Integration of Ro-Ro Shipping in Sustainable Intermodal Transport Chains is done by Zeeshan Raza and Johan Woxenius in 2019[3], The impact of hinterland transport on port operational performance is done by Anas Saleh Mohammad Alamoush in 2016 [4], Economic impact of port activity a disaggregated analysis is done by F. Coppens F. Langneaux in 2007[5].

## 2. MATERIALS AND METHODS

### 2.1. Data Collection

In the data collection, both primary and secondary data are collected with identifying populations (Hambantota Divisorial Secretary Office area) and sampling method (Non-probability snowball sampling method) [6]. The primary data is collected through the conduct online questionnaires, and interviews. The secondary data is collected from HIPG, Divisorial Secretary Office in Hambantota, GN office of Mirijjawila and Hambantota.

### 2.2. Data Analysis and Method

Data analysis is done for two main categories such as Forecast Future vessel arrival and Local Vehicle Handling, and economic impact analysis, which is divided to four sub-categories as direct, indirect, induced, and catalyst impacts. [7] Under the four impacts are measured number of jobs opportunities, expenditure, self-employment, regional development (land price change). Descriptive analysis method is used in this research, and data analysis is done through Microsoft Excel tool.

## 3. RESULTS AND DISCUSSION

### 3.1. Discussion about Economic Impacts

The economic impacts are circulated in the large number of areas that are studying especially about port sectors [8]. The hinterland operations are contributing originate the economic impact of the port of Hambantota. When measuring the economy of the port of Hambantota, it should be considered under the four impacts.

The direct impact of Port of Hambantota on workers who are inside the port. Five companies which are doing the different tasks as supporting whole port operation at the port of Hambantota. The indirect impacts are created when handling cargo from the yard to outside the port. The main operation is Ro-Ro operation and it is created indirect job opportunities. Such as, vehicle insurance company, vehicle importers, land transportation providers, security service providers etc. Induced impacts are depending on direct impact and indirect impact, and its any supports to continue the port operations and hinterland operations. Such as boarding houses, hotel & restaurant, land & vehicle renting, and etc. under the catalyst impact, have been considered changing the value of the land around the port.

**Table 8.** Summary of overall Economic Impact

Type of Impacts	Expenditure per month (Rs.)	No. of Employees
Direct impact	21876000	480
Indirect impact	18041000	415
Induced impact	6110800	148
<b>Total value</b>	<b>46027800</b>	<b>1043</b>

### 3.2. Discussion about Forecasted Vessel Arrival/ Vehicle Handling

According to forecasted results, vessel arrival of Port of Hambantota in the future will be expected between 18 to 25 vessel arrival per monthly. But it can be changed with future demand, it can be varied due to facing the Covid-19 pandemic situation in the world. When considering vehicles handling, more than 80% is handling transshipment and further imported vehicle percentage will be reduced with the

new policy

#### **4. CONCLUSION**

According to outcomes of the research, can be concluded to will develop the port inside operations as well as related industry (warehouse facilitate, ship repairing, private yard facilitates) sectors further. As recommendations for future research, the possibility to start container operation and expanding bunkering operation, the further requirements for performing as transshipment hub, and connecting port of Hambantota and Mattala International Airport for cargo operation, should be studied.

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