Railway's Impacts on Modal Shift Potential towards Intermodal Transportation: A Case Study in Lao PDR.

Klairung Ponanan a, Wachira Wichitphongsa b

a Naresuan University, Thailand
b Pibulsongkram Rajabhat University, Thailand

https://doi.org/10.35609/gcbssproceeding.2020.11(123)

ABSTRACT

Chinese government has developed transport infrastructure rapidly under Belt and Road Initiative (BRI) strategy. The BRI strategy is China’s economic development strategies for expanding trade and cultural influence towards countries in western and eastern regions, including ASEAN. The development of BRI strategy is consists of two main components i.e., (i) the Silk Road Economic Belt, follows the historical overland Silk Road through Central Asia, Iran, Turkey and eventually to Europe, and (ii) the Maritime Silk Road, originates in the South China Sea, passing through the Malacca Strait, the Indian Ocean, and the Red Sea and extending into the Mediterranean Sea (Chris & Elizabeth, 2015). Due to the BRI strategy, more than 6000 trains made the journey from China to Europe in 2018, which is an increase of 72% compared to 2017. China has sent more than 11,000 freight trains to Europe and back since the BRI strategy was announced in 2013. Railway networks have been constructed under the BRI strategy for connecting 48 Chinese cities with 42 cities in Europe through Asia. There are many railway infrastructures under the BRI strategy. The China – Laos railway (Vientiane–Boten railway) is one of project under the Silk Road Economic Belt that has been developed for serving as a key infrastructure for the economic corridor between the two countries. In nearly future, this railway will be helped to boost trade, investment and tourism for Lao PDR. and south China’s Guangxi Zhuang Autonomous Region. The Vientiane–Boten railway, especially transportation time will attract both travelers and Logistics Service Providers (LSP), which can be reduced time of journey compared with road mode. In this paper, modal shift potential of travelers and freight on Kunming-Bangkok Highway (R3A), AH2, AH8, AH9, AH10, AH12, AH13, and AH18 have been investigated by considering behavioral aspects of long distance travel.

Keywords: Mode Split Model, Modal Shift, Vientiane–Boten railway, Travel Behaviour