

Plagiarism Checker X Originality Report



Plagiarism Quantity: 57% Duplicate

Date	Thursday, February 07, 2019
Words	1867 Plagiarized Words / Total 3277 Words
Sources	More than 41 Sources Identified.
Remarks	High Plagiarism Detected - Your Document needs Critical Improvement.

Proceedings of MICoMS 2017 Effect of Freight Transportation for Regional Development in the North Zone of Aceh Herman Fithra, Sirojuzilam, Sofyan M. Saleh, Erlina, Article information: To cite this document: Herman Fithra, Sirojuzilam, Sofyan M. Saleh, Erlina, "Effect of Freight Transportation for Regional Development in the North Zone of Aceh" In Proceedings of MICoMS 2017. Published online: 11 Jul 2018; 35-42. Permanent link to this document: <https://doi.org/10.1108/978-1-78756-793-1-00092> Downloaded on: 06 February 2019, At: 08:39 (PT) References: this document contains references to 0 other documents.

The fulltext of this document has been downloaded 747 times since 2018* Users who downloaded this article also downloaded: (2016), "Foresight for regional policy: technological and regional fit", foresight, Vol. 18 Iss 2 pp. 93-116 <https://doi.org/10.1108/FS-09-2014-0058> (2015), "Animosity within borders: The mediating roles of regional identification and perceived discrimination on regional media preference", Asia Pacific Journal of Marketing and Logistics, Vol. 27 Iss 5 pp. 692-716 <https://doi.org/10.1108/APJML-01-2015-0010> Access to this document was granted through an Emerald subscription provided by All users group For Authors If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information. About Emerald www.emeraldinsight.com Emerald is a global publisher linking research and practice to the benefit of society.

The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services. Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation. *Related content and download information correct at time of download.

E?ect of Freight Transportation for Regional Development in the North Zone of Aceh Herman Fithra Doctoral Program of Regional Planning, University of Sumatera Utara, Medan, Indonesia, and Department of Civil Engineering, Universitas Malikussaleh, Aceh, Indonesia Sirojuzilam Doctoral Program of Regional Planning,

Sources found:

Click on the highlighted sentence to see sources.

Internet Pages

- 36% <https://www.emeraldinsight.com/doi/full/>
- <1% <https://www.researchgate.net/publication>
- 1% <https://www.emeraldinsight.com/doi/full/>
- 1% <http://www.emeraldgroupublishing.com/se>
- 1% <https://trp.utoronto.ca/students2016/wp->
- <1% <http://www.academia.edu/24096848/Evidenc>
- 1% <https://www.researchgate.net/publication>
- 1% <https://www.coursehero.com/file/p2pirb6/>
- 1% <https://www.researchgate.net/profile/Nor>
- 1% <http://rafikulislam.com/uploads/myworks/>
- 1% <http://iranarze.ir/wp-content/uploads/20>
- <1% https://www.researchgate.net/profile/M_J
- <1% <https://www.researchgate.net/publication>
- <1% <https://www.bmj.com/about-bmj/resources->
- 1% <https://core.ac.uk/display/79493444>
- <1% <http://eprints.whiterose.ac.uk/130541/>
- 6% <https://www.emeraldinsight.com/doi/pdfpl>
- <1% <https://www.researchgate.net/publication>
- <1% <https://www.researchgate.net/publication>
- <1% <http://www.indonesia-ottawa.org/2017/07/>
- 1% <https://www.emeraldinsight.com/doi/full/>
- 1% <https://www.smb-international.de/en/prod>
- <1% <https://en.wikibooks.org/wiki/Transporta>
- <1% <https://en.wikipedia.org/wiki/Internatio>
- <1% <https://journals.plos.org/plosone/articl>

University of Sumatera Utara, Medan, Indonesia Sofyan M. Saleh Department of Civil Engineering, University of Malikussaleh, Aceh, Indonesia Erlina Doctoral Program of Regional Planning, University of Sumatera Utara, Medan, Indonesia Abstract Purpose ♦ This study aims to analyze and assess the relationship of freight transportation for regional development in the north zone of Aceh.

The impact of freight transportation to accelerate the delivery of goods as observed through several indicators including regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading and unloading systems on regional planning supporting has been focus of this study. Design/Methodology/Approach ♦ The freight transportation in north zone of Aceh, covering Lhokseumawe, Aceh Utara, Bireuen, BenerMeriah and Aceh Tengah regencies will be examined.

In several indicators including regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading and unloading systems the freight transportation will be surveyed for the analysis. The factors which contribute in the development of the area through freight transportation are the economic growth, human resources improvement, management of land use and environmental harmonization. This regional development approach aims to determine a connection between the two variables.

Findings ♦ The results of the study show that variables of freight transportation in several indicators including regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading and unloading systems have a significant impact on regional development. It is indicated by the value of 0.214 in the regression weight result. Research Limitations/Implications ♦ This research has implications on the relationship of freight transportation with regard to several indicators including regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading and unloading systems on the regional development based on the aspect of economic growth, human resources improvement, management of land use and environmental harmonization.

♦ Herman Fithra, Sirojuzilam, Sofyan M. Saleh, Erlina. Published in the Emerald Reach Proceedings Series. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode> Effect of Freight Transportation for Regional Development 35 Emerald Reach Proceedings Series Vol. 1 pp.

35 ♦ Emerald Publishing Limited 2516-2853 DOI 10.1108/978-1-78756-793-1-00092 Practical Implications ♦ The result of this study will be an important input to the Aceh government, county and city governments in the north zone in Aceh to encourage the establishment of a road network to accelerate freight transportation in that region for the development of new economic zones. Originality/Value ♦ This study suggests that freight transportation has the strongest links to significantly influence the activities of regional development, so it can be recommended for the Aceh government, county and city governments in the north zone of Aceh to orient road network policy towards the development of the new economic area and support the implementation of the special economic zones of Arun, Lhokseumawe.

<1% <http://www.let.rug.nl/nerbonne/teach/rem>
 <1% <https://www.sciencedirect.com/science/ar>
 <1% <https://wenku.baidu.com/view/b514c072f78>
 <1% <http://www.climateprediction.net/wp-cont>
 <1% <https://link.springer.com/article/10.118>
 <1% <https://www-users.cs.umn.edu/~kumar/dmbo>
 <1% <https://www.researchgate.net/publication>
 <1% <http://journals.tubitak.gov.tr/chem/issu>
 <1% <http://www.academia.edu/10068745/Identif>
 <1% <https://www.researchgate.net/publication>
 <1% <https://link.springer.com/article/10.102>
 1% <https://www.sciencedirect.com/science/ar>
 <1% <http://www.asia-pacific-solidarity.net/s>
 <1% https://everipedia.org/wiki/lang_en/Aceh
 <1% <http://repository.usu.ac.id/bitstream/ha>

Keywords Freight transportation, regional development, north zone of Aceh All papers within this proceedings volume have been peer reviewed by the scientific committee of the Malikussaleh International Conference on Multidisciplinary Studies (MICoMS 2017). 1. Introduction Aceh is one of the provinces in Indonesia which has the status of special autonomy in 2001 according to regulation No. 18 on Special Autonomy for the Province of Nanggroe Aceh Darussalam (Indonesia Government Regulation No. 18 of 2001).

Currently, Aceh is highly dependent on the province of North Sumatra, not only in the aspects of road transportation through the highway network, but also in almost of all aspects of Aceh's economy. The central government and the government of Aceh have made an effort to improve the road network linking the northern coast corridor which includes the city of Lhokseumawe, Aceh Utara and Bireuen regencies with central corridor consists of four districts in the highlands ♦ the Central Aceh, Bener Meriah, Gayo Lues, and Southeast Aceh. Construction of this road network is to facilitate transport in the central part of the corridor North Aceh and open inland.

Lhokseumawe is a National Centre of Activities (NCA) in the Aceh region that provides the flow of people, goods and services from exterior region into the city of Lhokseumawe or vice versa, domestically and internationally (Fithra et al.). NCA is centered in Lhokseumawe City and part of Aceh Utara Regency which serves as a national, regional and international service center supported by Lhokseumawe Industrial Estate, Lhokseumawe Port and Malikussaleh Airport (located in Aceh Utara District area which is a support area of Lhokseumawe NCA) (Department of Transportation, Communications, Information and Telemanika GoA, 2011; Fithra, Sirojuzilam, and Erlina, 2017).

In order to accelerate economic growth in Lhokseumawe and Aceh Utara District areas as well as supporting the acceleration and expansion of national economic development, it is necessary to develop Lhokseumawe City and Aceh Utara District as a Special Economic Zone of Arun, Lhokseumawe (KEKAL). Decision of KEKAL Lhokseumawe is in accordance with Government Regulation No. 5 Year 2017, where the area of Arun Lhokseumawe has geoeconomic and geostrategic potential and advantages (Indonesian Government Regulation No.5 of 2017). 2.

Method This study will analyze the existing freight transportation connectivity in North Zone of Aceh, covering Lhokseumawe, Aceh Utara, Bireuen, Bener Meriah and Aceh Tengah regencies. The freight transportation will be examined in several aspects including regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading and unloading systems.

The factors which affect the development of the area with existing freight transportation connectivity are based on the economic growth, human resources improvement, Proceedings of MICoMS 2017 36 management of land use and environmental harmonization. This regional development approach aims at determining a connection between the two variables. Figure 1 is a conceptual framework of the research (Bagozzi, 1994). 2.1.

Research design This study is an explanatory research, which is conducted by explaining the symptoms caused by an object of the researcher that aims to explain the causality connection to seek a relationship between freight transportation and regional development in the north zone of Aceh (Chourmain, 2008). The

population of the north zone of Aceh was considered for the study which is as many as 1,547,832 inhabitants (2015). Table 1 shows the samples selected from each city and regency in the North Zone of Aceh (The Central Statistics Agency (BPS) of Aceh province, 2016; The Central Statistics Agency (BPS) Lhokseumawe, 2016; The Central Statistics Agency (BPS) Central Aceh District, 2016; The Central Statistics Agency (BPS) North Aceh district, 2016; The Central Statistics Agency (BPS) BenerMeriah, 2016; The Central Statistics Agency (BPS) Bireuen, 2016). Figure 1.

Conceptual Framework of Research Table 1. Population and Sample from Each Regency No. Regency
 Population Sample 1 Lhokseumawe 191,407 37 2 Aceh Utara 583,892 113 3 Bireuen 435,300 89 4 Bener Meriah 136,821 27 5 Aceh Tengah 200,412 39 Total 1,547,832 300

E? ect of Freight Transportation for Regional Development 37 2.2. Freight transportation variable (X 1) In a regional development process, the transportation system is one of the most important factors.

A well-managed transportation system allows for smooth flow of goods and services that are mandatory for the regional growth and development (Mishra and Welch, 2012). Moreover, transportation development will act as a catalyst in expanding the marketing and services to support the growth of various sectors of socio-economic activities, in every zone. In other words, the transportation system (infrastructure) plays a crucial role as an element that connects separate points in space with different mechanisms of activities which might be interdependent on one another (Behdani et al., 2016; Fithra, Saleh, and Erlina 2017). 2.3.

Regional development variables (Y 1) Regional development is defined operatively as an effort to spur socioeconomic development in association with spatial and regional arrangements to reduce inter-regional disparities and to preserve the environment of a region that emphasizes on strengthening endogenous factors (economic growth, human resources improvement, management of land use and environmental harmonization) as a drive of the region's competitiveness. 3. Results and discussion 3.1. Reliability test A reliability test is used to determine the consistency of measurement tools in order to gain confidence.

Reliability means the consistency of the results when tested against different samples of the population. A common method used for reliability testing is the Cronbach alpha method which is available in the SPSS program. The questioner is considered reliable if the Cronbach alpha values are greater than 0.6. The reliability test results for the freight transportation variable (X) and the regional development variable (Y 1) are shown in Tables 2 and 3.

The data in the Tables 2 and 3 show that all indicators measuring or forming the freight transportation variable (X) and the regional development variable (Y 1) are reliable or trusted in measuring each representative indicator. Table 2. Reliability of Test Results of Freight Transportation (Y 1) Variables No. Indicator a (alpha) Requirement Information Freight Transportation (X 1) 1 Regulation 0.714 > 0.60 Valid 2 Retribution 0.725 > 0.60 Valid 3 Freight Entrepreneur 0.699 > 0.60 Valid 4 Trucker 0.720 > 0.60 Valid 5 Size of Truck Bin 0.711 > 0.60 Valid 6 Punctuality 0.722 > 0.60

Valid 7 Loading and Unloading Systems 0.720 > 0.60 Valid Table 3. Reliability of the Test Results Freight Transportation (Y 1) Variables No. Indicator a (alpha) Requirement Information Regional Development (Y 1) 1 Economic Growth 0.701 > 0.60 Valid 2 Human Resources Improvement 0.720 > 0.60 Valid 3 Management

of Land Use 0.728 > 0.60 Valid 4 Environmental Harmonization 0.713 > 0.60 Valid Proceedings of MICoMS 2017 38 3.2. Confirmatory Factor Analysis (CFA) of freight transportation variables The confirmatory factor analysis of the latent variables of freight transportation was done to confirm all the indicators forming the latent constructs.

The data processing for CFA of freight transportation is shown in Figure 2 (Anderson and Gerbing, 1988; Bagozzi, and Yi, 1989). Result analysis of CFA also confirms that the CFA models for freight transportation fit well. All the indicators are confirmed valid and reliable to measure freight transportation variables. The trucker indicator has the highest loading factor while the freight transportation entrepreneur has the second highest loading factor.

The CFA results of the freight transportation variables are shown in Table 4. 3.3. CFA of regional development variables The analysis of the confirmatory factor in the latent variables of area development is carried out to confirm all the indicators that constitute the latent construction of regional development. The results of CFA can determine whether the CFA model for regional development is fit or not. Figure 3 shows the results of data processing and the confirmatory analysis of regional development.

From the results of CFA known, the CFA model is considered fit for the development of the region. All indicators are declared valid and are believed to measure the variables of regional development. The economic growth indicator is the greatest factor loading factor Figure 2. Confirmatory Analysis of Freight Transportation Table 4. Variable Output Analysis CFA for Freight Transportation Standardized Regression Weights: (Group number 1 ♦ Default model) Estimate Y 1 = 1 Freight Transportation 0.809 Y 1 = 2 Freight Transportation 0.494 Y 1 = 3 Freight Transportation 0.851 Y 1 = 4 Freight Transportation 0.858 Y 1 = 5 Freight Transportation 0.418 Y 1 = 6 Freight Transportation 0.385 Y 1 = 7 Freight Transportation 0.341 Source : Results of analysis.

Effect of Freight Transportation for Regional Development 39 and subsequent environmental protection. The output results of the CFA for the region development variables is shown in Table 5. All indicators suggested to form freight transportation variables are declared valid and trusted because their loading factors are greater than 0.60. The influence coefficient is calculated using regression weight and will be used as a baseline to answer the research hypothesis.

The results of the data processing are shown in Table 6. The regression weight result indicates the significant influence of each variable that impacts the freight transportation in the north zone of Aceh. Freight transportation also significantly affected the smooth flow of the regional planning in the north zone of Aceh. Table 6 indicates that the obtained significant value is $p(0.008)$, which is within the standard $p < 0.05$.

It denotes that freight transportation has a strong relationship and significantly affects the regional planning activities and successfulness in the north zone of Aceh. Freight transportation has a significant contribution on the successfulness of regional planning activities and amounts to a value of 0.214. It can be concluded that freight transportation has significant impacts on regional planning based on economic growth, human resources improvement, management of land use and environmental harmonization. Figure 3. Confirmatory Analysis Regional Development Table 5.

Variable Output Analysis of CFA of Regional Development Standardized Regression Weights : (Group number 1 - Default model) Estimate Y 1 =1 Regional Planning 0.882 Y 1 =2 Regional Planning 0.695 Y 1 =3 Regional Planning 0.712 Y 1 =4 Regional Planning 0.835 Source : Results of analysis. Table 6. Regression Weight Relationships between variables Estimate p Result Freight Transportation Regional Development 0.214 0.008 Signi ? cant Source : Data Processing. Proceedings of MCoMS 2017 40 4. Conclusion The effect of freight transportation for regional development in the north zone of Aceh was presented.

Freight transportation variable (X) is constructed from seven different indicators such as regulation, retribution, freight entrepreneur, trucker, size of truck bin, punctuality, loading, and unloading systems. The result analysis proved that these indicators are valid and reliable to measure the effect of freight transportation. The regional development variable (Y 1) is determined from the regulation of economic growth, human resources improvement, management of land use and environmental harmonization indicators. These indicators are also valid and reliable to measure the effect of regional development.

Therefore, freight transportation has a signi?cant impact on regional development. References Anderson, J.C. and Gerbing, D.W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-step Approach. Psychological Bulletin. Bagozzi, R.P. (1994). ♦Structural Equation Models in Marketing Research: Basic Principles♦. In Principles of Marketing Research. Blackwell Publishers, Oxford. Bagozzi, R.P. and Youjae, Y. (1989). ♦On the Use of Structural Equation Models in Experimental Designs♦. Journal of Marketing Research, Vol. 26, No. 3, pp. 271♦284. Behdani, B.,

Fan, Y., Wiegman, B. and Zuidwijk, R. (2016). ♦Multimodal Schedule Design for Synchromodal Freight Transport Systems♦. European Journal of Transport and Infrastructure Research, Vol. 16, No. 3, pp. 424♦444. Chourmain, I. (2008). Normative Research For Writing Theses and Dissertations. Al-Haramain Publishing House, Jakarta. Department of Transportation, Communications, Information and Telemanika GoA. (2011). Re-Review Study Tetrawll Aceh in Supporting Acceleration and Expansion of Economic Development. Corridor I Sumatra, Banda Aceh. Fithra, S.H.,

Sirojuzilam, Saleh, B.C. and Erlina. (2017a). ♦Konektivias Road Network to Support Transport of Goods♦. In Proceedings of the 6th Aceh Development International Conference, IIUM Gombak Campus, Kuala Lumpur, Malaysia. Fithra, H., Sirojuzilam, Saleh and Erlina. (2017b). ♦Readiness of Freight Transportation System at Special Economic Zone of Lhokseumawe♦. In AIP Conference Proceedings, American Institute of Physics, College Park, MD, USA. Indonesian Government Regulation No. 5. (2017).

On Special Economic Zones Arun Lhokseumawe, Jakarta Indonesia Government Regulation No.18 of 2001 on Special Autonomy for the Province of Nanggroe Aceh Darussalam. Mishra, S., Welch, T.F. and Jha, M.K. (2012). ♦Performance Indicators for Public Transit Connectivity in Multi-modal Transportation Networks♦. Transportation Research Part A: Policy and Practice, Vol. 46, No. 7, pp. 1066♦1085. Richard P.B., 1994, Structural Equation Models in Marketing Research: Basic Principles. In Principles of Marketing Research, Oxford, Blackwell Publishers. Sabyasachee Mishra dan Timothy F. Welch.

2012, Performance indicators for public transit connectivity in multi-modal transportation networks.

Transportation Research Part A: Policy and Practice, 2012, Vol. 46, No. 7, 1066-1085 The Central Statistics Agency (BPS) of Aceh Province. (2016). Aceh Province in Figures. The Central Statistics Agency (BPS), Banda Aceh. The Central Statistics Agency (BPS) of Lhokseumawe. (2016). The Town of Lhokseumawe in Figures. The Central Statistics Agency (BPS), Lhokseumawe. Effect of Freight Transportation for Regional Development 41 The Central Statistics Agency (BPS), Central Aceh District. (2016). Central Aceh Regency in Figures.

The Central Statistics Agency (BPS), Takengon. The Central Statistics Agency (BPS), North Aceh District, North Aceh District. (2016). The Figure. The Central Statistics Agency (BPS), Lhoksukon. The Central Statistics Agency (BPS), Bener Meriah. (2016). Bener Meriah in Figures. The Central Statistics Agency (BPS), Redelong. The Central Statistics Agency (BPS), Bireuen. (2016). Bireuen Regency in Figures. The Central Statistics Agency (BPS), Bireuen. Corresponding author Herman Fithra can be contacted at h?thra@unimal.ac.id

Proceedings of MICoMS 2017 42