REGIONAL TRANSPORTATION AND ECONOMIC DEVELOPMENT IN SOUTHEAST SULAWESI

Venny Veronica Natalia
Urban and Regional Development Study Program
Faculty of Engineering Hasanuddin University
Jalan Perintis Kemerdekaan 10
Telp: (0411) 589706
veronica_natalia@ymail.com

Shirly WUNAS
Urban and Regional Development Study Program
Faculty of Engineering Hasanuddin University
Jalan Perintis Kemerdekaan 10
Telp: (0411) 589706
shirly@indosat.net.id

Abstract
Poor population reached 14.8% (330,010 population) in the area of Southeast Sulawesi province, and according to the study of MP3EI (2011), the poverty rate is higher than the island of Sulawesi (13.64%) and Indonesia (12.49%). The problem is 90.95% of the number of poor live in rural areas, which is the production potential of various natural resources. But geographically, 74% of Southeast Sulawesi consist of waters with coastal region of Southeast peninsula, 4 large islands and ±55 small islands. The purpose of this discussion is to clarify 1) The condition of transportation hubs of the trading area of Southeast Sulawesi and 2) Regional transportation system needs. Data obtained from the natural resources production and the existing transportation system, spatial analysis and comparative analysis of the theory of regional development, to develop transportation system needs. The results show the entire Southeast region has the potential production of natural resources, both from agricultural sector, fisheries, mining and tourism. In other way, the entire archipelago linked to the transportation system, whether it’s sea transport, land transport, river and lake transport, also air transport, but the development of the trade system is limited, because 1) limited connectivity to the region around South Sulawesi, 2) low quality of human resources, which should be the main factor to drive economic growth.

Key word: Transport Connectivity, Potential production of Natural resources

INTRODUCTION
Poor population is reach 14.7% (330,010 Population) in Southeast Sulawesi, higher than Poor population in Sulawesi Island (13.64%) and Indonesia (12.49%). Whole population is 2,232,586 people with 2.25% of growth rate. GDP of the Province of Southeast Sulawesi is on the order 26 of the 33 Provinces of Indonesia, and including the order to 3 of 6 cities/regency of Sulawesi Island (MP3EI, 2011). Human Development Index (HDI) rank of Southeast Sulawesi is on 25 position of Indonesia (73.48). Production potential of natural resources evenly spread across the South East Sulawesi, but the regional economic development growing small and slow.

Geographical factor could give influence to regional growth (geoeconomic). Therefore economic development needs strength in connectivity system, particularly between intra and inter-island of Sulawesi. Province of Southeast Sulawesi consist of 3 big island (Main Island of Southeast Sulawesi, Muna Island and Buton Island). Each of the big islands consist of ±50 small island. Conditions of small islands are generally included in the remote island group that is only connected by a simple mode of transportation, such as timber ships, and motorized fishing boats.
According to Hirschman (1975), in the development process, each region (City/Regency) need to come up with node of growth. Because development will not be balanced for the entire region, and will not develop in a short time and at the same time (Perroux 1956).

This theory can be attributed to the problems of many poor people live in rural areas of Southeast Sulawesi island. Natural resources that people have from various sectors (fisheries, farming and mining), must be supported by node of economic activity that grow strong, and strong support from other regional with high growth of productivity, also integrated connectivity around island and internationally. This is in accordance with KM.15 in 2010 on the blue print explaining the development strategy in 2025 is an integrated logistics Indonesia's domestic, inter-island, and international connected to the world's major economies are effectively and efficiently. Based on these directives, then the objective of the discussion is to explain, 1) Trade condition of Southeast Sulawesi and 2) Regional transportation system needs.

LITERATURE REVIEW

Long-term development program of South East Sulawesi (2005-2025) is in accordance with the Regulation of the Minister of Transportation Number: KM.15 of 2010, as described in one of his goals is increasing the economic power of Southeast Sulawesi who rely on all the advantages of that can be utilized.

Figure 1. Intermodal Connectivity Levels (Jinca, 2011)

The advantages of each of activity node, whether in city or regional scale have economic power that should be lift himself to a higher increase revenue. According Levy (2000) and Jenssen (1992), in regional development should be able to develop local products. In addition with it, must be supported with integrated connectivity between islands and internationally (Regulation No. KM.15 in 2010).
Connectivity can be built in three levels of integrated namely: local connectivity (intra-island), national connectivity (inter-island) and global connectivity (international), see figure 1 (Jinca, 2011).

Economic center of a city/regency has a dependency with other regions, its growth depends on the location of production and activities. Conditions of dependence can be exported from the demand of local production (input), because there is expansion on demand (output).

Cities/Regency that have low production and isolated, requiring infrastructure development priorities, such as roads and bridges, land, lakes, rivers and crossings, sea transport, air and telecommunications (http://muislife.com/konsep-pembangunan- a-wilayah.html).

**METHOD**

The data used comes from field surveys and the data transportation, also natural resource potential data from a document in 2011 from BPS of Southeast Sulawesi. Comparative and quantitative ways use to do the analysis of the production nodes and connectivity conditions in the islands and between islands towards land transportation, ferry, sea and air. Spatial analysis using satellite maps for transportation needs.

**Figure 2.** Concept of Frame Work
Conceptual framework (Figure 2) explains the rules of MP3EI (Perpres No.32 in 2011) which shall Consider the acceleration and expansion of Indonesia's economic development until 2025, and MP3KI on Improving and expanding social welfare and increased employment opportunities for poverty reduction. City/Regency in Southeast Sulawesi region lies within the territorial waters of South East Sulawesi (73.48%), comprising three large islands and ± 50 medium and small islands, and the percentage of the largest number of poor people compared to the Sulawesi and Indonesia. Thus, we need to develop the concept of integration of the transportation system for the development of economic activities between the island and internationally.

**DISCUSSION**

1. **Geographic and demographic conditions of Sulawesi Tenggara**

Southeast Sulawesi Province located in Southeast peninsula of Sulawesi island. Geographically located in the south line of the Equator, stretching from north to south between 02°45'-06°15' South latitude and stretching from West to East between 120°45'-124°45' East Longitude. Most of the Southeast region consist of water/sea (74% or 110 000 km²), land area, including the peninsula of southeastern Sulawesi island and several small islands, is an area of 38 140 km² (25.75%).

![Map of Southeast Sulawesi Province and Territory Boundary](image)

**Gambar 3.** Map of Southeast Sulawesi Province and Territory Boundary

The population of Southeast Sulawesi province has increased 2.25% each year, in 2010 amounted to 2,232,586 population. Based on statistic data (2011), percentage of the working population to total labor force amounted to 95.39% and each year has increased.
Labor absorption (> 15 years) by major employment is quite significant: the agricultural sector absorb 49.72% of labor, service 17.62%, 15.88% of trade sector (BPS 2011), agricultural employment has decline in the last 3 years and accompanied by an increase in employment in trade and services sectors.

According MP3EI (2011), productive human resources is the driving economic growth. Indonesia requires labor that is able to apply science and technology that can increase the added value of sustainable economic activity. Opinion was reinforced by James, R (2012), that economic growth depends heavily on the quality of human resources, does not entirely depend only on the Natural Resources Indonesia (James R, 2012).

Currently (2012), quality of human resources which working in Southeast Sulawesi is relatively low, because there are 22.1% of the working population does not have basic education (graduate of elementary school). The literacy rate is 91.85% and an average length of school is 8.11 years. Both indicators showed a low level of formal education of Southeast Sulawesi.

2. Southeast Regional Economic Conditions

Based on Bank Indonesia Regional Economics study (2011), Southeast Sulawesi's economy in the third quarter of 2011 recorded growth of 8.17% and 3.85% of this growth slowed compared to growth in the same period the previous year and the previous quarter. Sectoral economic slowdown caused by the Southeast Agricultural sector growth slowing, and slowing growth in the manufacturing sector and the significant buildings of each of the 20.38% and 14.08% in the same period the previous year, to 7.92% and 11.26%. Despite the slowdown, but the rate of economic growth in Southeast Sulawesi is still quite high in this category.

In the third quarter of 2011 the economy of Southeast Sulawesi positive growth was primarily driven by growth in mining and quarrying, trade, hotels and restaurants (PHR) and the financial sector. These three sectors are experiencing high annual growth amounted to 34.59%, 13.14% and 16.12%.

Development of the Consumer Price Index (CPI) in Kendari in the third quarter of 2011 showed that inflation at 7.88%, based on the calculation of the current year, Kendari’s inflation recorded at 8.31%, is above the national inflation rate is 2.97%. Barriers in the transport sector for goods and services, is one of the factors driving the increase in inflation in Southeast Sulawesi province. Some ports are not functioning optimally goods cause the flow of goods is delayed, triggering an increase in the inflation rate. It is not in line with long-term development plan (until 2025) to equalize the Province of Southeast Sulawesi regional inflation rate with the national inflation rate.

Associated with the mission of accelerating the development, BPS data (2011) show GDP per capita in 2011 at current prices in Southeast Sulawesi province is on the order-25 of the 33 provinces in Indonesia. Further to the island of Sulawesi, Southeast Sulawesi Province then is on the order-4 with economic growth in 2009 was 7.57%. It indicates the economic conditions of Southeast Sulawesi province, quite far behind.
Table 1. Gross Regional Domestic Product at Constant Prices by Province

<table>
<thead>
<tr>
<th>Rank</th>
<th>Province</th>
<th>GDP Value (Million Rupiah)</th>
<th>Rank</th>
<th>Province</th>
<th>GDP Value (Million Rupiah)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DKI Jakarta</td>
<td>395,664,497.61</td>
<td>18</td>
<td>Papua</td>
<td>22,620,295.88</td>
</tr>
<tr>
<td>2</td>
<td>Jawa Timur</td>
<td>342,280,765.51</td>
<td>19</td>
<td>DI Yogyakarta</td>
<td>21,042,267.31</td>
</tr>
<tr>
<td>3</td>
<td>Jawa Barat</td>
<td>321,875,841.47</td>
<td>20</td>
<td>Nusa Tenggara Barat</td>
<td>20,056,796.12</td>
</tr>
<tr>
<td>4</td>
<td>Jawa Tengah</td>
<td>186,995,480.65</td>
<td>21</td>
<td>Kalimantan Tengah</td>
<td>18,788,977.84</td>
</tr>
<tr>
<td>5</td>
<td>Sumatera Utara</td>
<td>118,640,902.74</td>
<td>22</td>
<td>Sulawesi Utara</td>
<td>18,371,201.12</td>
</tr>
<tr>
<td>6</td>
<td>Kalimantan Tengah</td>
<td>110,579,888.26</td>
<td>23</td>
<td>Jambi</td>
<td>17,465,253.43</td>
</tr>
<tr>
<td>7</td>
<td>Riau</td>
<td>97,701,683.19</td>
<td>24</td>
<td>Sulawesi Tengah</td>
<td>17,437,129.13</td>
</tr>
<tr>
<td>8</td>
<td>Banten</td>
<td>88,393,769.65</td>
<td>25</td>
<td>Nusa Tenggara Timur</td>
<td>12,531,629.66</td>
</tr>
<tr>
<td>9</td>
<td>Sumatera Selatan</td>
<td>63,735,999.00</td>
<td>26</td>
<td>Sulawesi Tenggara</td>
<td>12,226,376.73</td>
</tr>
<tr>
<td>10</td>
<td>Sulawesi Selatan</td>
<td>51,197,034.67</td>
<td>27</td>
<td>Bangka Belitung</td>
<td>10,866,810.93</td>
</tr>
<tr>
<td>11</td>
<td>Kepulauan Riau</td>
<td>41,083,258.84</td>
<td>28</td>
<td>Papua Barat</td>
<td>8,685,647.99</td>
</tr>
<tr>
<td>12</td>
<td>Sumatera Barat</td>
<td>38,860,187.68</td>
<td>29</td>
<td>Bengkulu</td>
<td>8,330,345.23</td>
</tr>
<tr>
<td>13</td>
<td>Lampung</td>
<td>38,305,277.00</td>
<td>30</td>
<td>Sulawesi Barat</td>
<td>4,744,309.49</td>
</tr>
<tr>
<td>14</td>
<td>Nanggroe Aceh Darussalam</td>
<td>33,071,136.66</td>
<td>31</td>
<td>Maluku</td>
<td>4,251,356.30</td>
</tr>
<tr>
<td>15</td>
<td>Kalimantan Selatan</td>
<td>30,674,123.86</td>
<td>32</td>
<td>Maluku Utara</td>
<td>3,035,124.59</td>
</tr>
<tr>
<td>16</td>
<td>Kalimantan Barat</td>
<td>30,292,393.42</td>
<td>33</td>
<td>Gorontalo</td>
<td>2,917,412.57</td>
</tr>
<tr>
<td>17</td>
<td>Bali</td>
<td>28,880,686.20</td>
<td></td>
<td>Indonesia</td>
<td>2,221,603,860.72</td>
</tr>
</tbody>
</table>

Sulawesi economic corridor is expected to focus on food agriculture, cocoa plantations, fisheries and nickel. Southeast regions leading to potentially develop in 3 sectors: the fisheries, cocoa plantations and mining of nickel (MP3EI 2011-2025), see figure 4.

Gambar 4. Economic center of the island of Sulawesi and featured production potential of the Southeast Sulawesi (MP3EI, 2011)
The main contributing sectors in Southeast Sulawesi province's featured product is agriculture, plantation, fishery and mining (mining and quarrying sector is the main economic driving force since 2011). Each city/regency has excellent production of natural resources of its own. In addition, the tourism sector, service sector and trade provide advantages in some city/regency. The diversity of natural resources owned by the city/regency can encourage the development of production nodes that can promote the regional economic development.

Acceleration and expansion of economic development requires the development of activity centers to support the growth of production of natural resources located in the Southeast Sulawesi. Some of the city/regency that have the potential geographic and spatial sea has the power to attract the growth of the district/surrounding villages can be proposed to be the center of the region activity, which requires the development of infrastructure such as transportation, water, electricity and means of trade and other social facilities.

Villages that have the potential of natural resources is proposed as a center of local activity, in addition to the economic develop its own territory, can also attract economic development of the surrounding villages, with local economic development approach.

3. **Conditions of transport connectivity Southeast Region**

Throughout the Southeast region as a whole already has connectivity: between cities/regency or between villages. Peninsula region is served by land transportation network, with the status of national roads and provincial roads or road of city/regency.

a) Kendari-Unaaha-Kolaka with national road status
b) Kendari-Punggaluku (South Konawe) with the status of national roads and Punggaluku-Andolo (South Konawe) with the status of Provincial roads
c) Andolo-Tinanggea (South Konawe) - Kasipute-Boepinang (Bombana), the status of the road problematic because it consists of three state roads (national, provincial and district)
d) Kolaka-Pomalaa-Boepinang (Bombana) consists of the status of national roads and provincial roads
e) Kolaka-Lasusua (North Kolaka) Provincial road status (Figure 5).

Most connectivity between the island of Sulawesi Island in the Territory, through sea transportation. The main connectivity between neighboring provinces in the island of Sulawesi (Sulawesi and Central Sulawesi), as follows:

a) Kendari-Palu (Central Sulawesi), Makassar (South Sulawesi)
b) Molawe (North Konawe)-Morowali, Bungku (Central Sulawesi), Sinjai, Bone, Jeneponto, Pankep (South Sulawesi)
c) Lasusua (North Buton) -Siwa/Wajo (South Sulawesi),
d) Kolaka-Bajo/Bone (Sulawesi), Shiva / Wajo (Sulawesi), and Parepare Makassar (South Sulawesi)
(continued)

Connectivity between the island of Sulawesi province in the region via air transportation available in Kendari, Kolaka, Muna and Baubau generally to Makassar, Surabaya and Jakarta.

Blue Print of transportation describes the development strategy in 2025 is an integrated logistics Indonesia's domestic and international inter-island connected to the world's major economies are effectively and efficiently. As well as integrated connectivity between the island and internationally.

![Figure 6. Map of Network and classification of Road](image)

Domestic logistics transportation connectivity between islands is limited nationally, which is in the Eastern, Western and Southern Region Southeast Sulawesi Province (figure 7):

a) Molawe-(Kupang) NTT, (Lombok) NTB

b) Kolaka-Surabaya

c) Tanjung Paria (Kabupaten Bombana)-Surabaya

d) BauBau-Surabaya, Taliabo (Maluku), Bima (NTT)
CONCLUSION

The results show the entire Southeast Sulawesi region has the potential production of natural resources, both from the plantation sector, fisheries, mining and tourism. Transportation connectivity analysis showed regional domestic freight logistics is still limited in the region around South East Sulawesi Province (eg Surabaya). Freight Transportation have not been integrated between the island internationally. Low quality of human resources, which should be the main factor in driving economic growth.

Some of the city/regency that have the potential sea geographic and spatial has the power to attract the growth of the district/surrounding villages in spatial way can be proposed to be the center of the region activity, which requires the development of transportation in national and international connectivity.

Villages that have the potential of natural resources is proposed as a center of local activity, in addition to the economic develop its own territory, can also attract economic development of the surrounding villages, with local economic development approach.

REFERENCES


Peraturan Menteri Perhubungan No. KM 15 tahun 2010 tentang Cetak Biru Transportasi Antarmoda/Multi Moda Tahun 2010-2030

Peraturan Pemerintah No. 20 Tahun 2010 tentang Angkutan di Perairan
Peraturan Presiden No 88 Tahun 2011 tentang Rencana Tata Ruang Pulau Sulawesi
Undang-undang No. 1 tahun 2009 tentang Penerbangan
Undang-Undang No. 38 Tahun 2004 tentang Klasifikasi Jalan
Undang-Undang RI No.17 Tahun 2008 tentang Pelayaran
http://www.bi.go.id/web/id/Publikasi/Ekonomi_Regional/KER/Sultenggara/ker_sulteng_t_w311.htm