
BITUNG SPECIAL ECONOMIC ZONE (SEZ): A DYNAMICS STUDY OF ESTABLISHMENT AND DEVELOPMENT PROCESSES

Edi Setiawan^{1,*}, Endriana Prasetyawati¹, Wilmar A. Salim¹

¹School of Architecture, Planning and Policy Development; Institut Teknologi Bandung

*Email: 25421058@mahasiswa.itb.ac.id

ABSTRACT

In the context of regional development in Indonesia, Special Economic Zones (SEZs) are designated to accommodate industrial and economic activities for regional acceleration. To date, Indonesia has 19 Special Economic Zones that have been designated, one of which is the Bitung SEZ. In its designation, the Bitung SEZ focused on the fishery and coconut processing industry, as well as its derivative products. The development of the Bitung SEZ as a government product in the plan is expected to give trickling down effects to the surrounding, but in the practice, it does not escape problems (in the spatial, institutional, and socio-economic aspects). Thus, this paper aims to explain how the establishment and operational dynamics of the Bitung SEZ are based on the physical, policy, and social dimensions as dualism in development. This research used mixed methods, with data sources and materials obtained from the research, news, and planning documents. The findings of this study, the dualism of development occurs in both theoretical and practical settings, instead of creating a new growth center, development can also cause some problems.

Keywords: *Special Economic Zone, Bitung, Regional Development, and Planning Process.*

A. INTRODUCTION

The history of special economic zone (SEZ) is inseparable from the emergence of industrial areas that existed in the 19th century. In 1876 an industrial area was developed in England, namely Trafford Park estate with an area of about 500 ha which was the largest industrial area until the 1950s (Kumar, 2008). Furthermore, in the early 20th century, in the United States, industrial areas were developed in the city of Chicago, including the central manufacturing district which was built in 1909 with an area of 215 ha and the Pershing Road district which was built in 1910 with an area of 40 ha (Kumar, 2008).

Furthermore, in the 1960s in the United States, an industrial area known as a science park or technology park was developed, namely an industrial area for research and development purposes. In the 1970s, the concept of a business park was developed where in an area there are various activities such as offices and industry supported by trade and recreational activities. Then in the 1980s, the residential area was also included in the business park area (Maramis, 2013). However, the use of the term SEZ was only born in the middle of the 20th century.

The term SEZ as an industrial park was introduced in Puerto Rico in 1947. At that time, SEZ aimed to capture investment opportunities from the United States mainland (Kumar, 2008). This concept was later adopted by Ireland and Taiwan in the 1960s. However, China made SEZ famous worldwide, which started in the city of Shenzhen. Many terms are used to describe SEZ as an area. Those make a lot of sense because SEZ is not a new concept. SEZ developed from an industrial area that existed long before the SEZ concept was known. This is evidenced by the number of countries that initially had industrial estates and then turned them into SEZs. According to Knowledge Innovation Zone Research Report (2006), the concept of Special economic zones (SEZ), has many synonyms (alternative concepts), including: Free Economic Zones, Free Trade Zones, Enterprise Free Zones, Enterprise Trade Zones, Export Processing Zones, Free Ports, Foreign Trade Zones, New Export Distribution Centers and Regional Foreign Trade Zones. As an example, in India, initially the existing industrial zones were called Export Processing Zones (EPZ), which have existed since 1965. However, eight EPZs were converted into SEZs, in 2000 (Kumar, 2008). In Indonesia, SEZs are

based on the development of industrial estates that existed in the era of the 1970s. However, formally, it has only been born since the issuance of Law Number 39 of 2009 on Special Economic Zones (SEZ). Historically, SEZs have actually been rolled out long before Law Number 39 of 2009 was issued. The development of SEZs cannot be separated from Decree of The President of The Republic of Indonesia Number 150 of 2000 on Integrated Economic Development Area, President Megawati Era. And then, on June 25, 2006 (Susilo Bambang Yudhoyono Era), the president signed a cooperation agreement to establish a Special Economic Zone (SEZ) with Singapore's Prime Minister Lee Hsien Loong at Turi Beach Resort. Lastly, SEZs are mentioned on Law Number 25 of 2007 on Investment, which is in Chapter XIV in Article 31. Therefore, Law 25 of 2007 is only one of the justifications or legalities.

In accelerating the expansion of national economic development, especially economic growth in North Sulawesi Province, the government established the Bitung Special Economic Zone (Bitung SEZ). Bitung SEZ is legitimized through Government Regulation Number 32 of 2014 concerning the Bitung Special Economic

Zone. According to that law, as one of the regional development policies, Bitung SEZ is formed because it has geoeconomics potential, namely a strategic location as a growth center, distribution center, and logistics to support Eastern Indonesia which that location also has international access. Also based on that law, the Bitung Economic Zone consists of an industrial zone, a logistics zone, and an export processing zone. The main activities of the Bitung SEZ are the coconut processing industry, fisheries management industry, and logistics. Bitung SEZ is expected to attract an investment of Rp. 32.89 T and absorb as many as 34,710 workers until 2025 (Government Regulation Number 32 of 2014; and KEK Bitung, 2021).

The development of the Bitung SEZ as a government product policy does not escape obstacles, some of which are land acquisition, the function of the Bitung port is not optimal, as well as several other problems in the field of other supporting infrastructure around the area (Elena, 2021). In addition, Deputy III Presidential Staff Office, Panutan S Sulendrakusuma, stated that the problem in developing the Bitung SEZ was the cessation of construction due to COVID-19, not many investors

were able to return as a result and the need to send catches to Jakarta before being exported to destination countries. Meanwhile, based on information from representatives of PT Membangun Sulut Hebat as the Business Entity for the Management and Development of the Bitung SEZ, James Sela, there are many industries starting to operate in the Bitung SEZ (CNN Indonesia, 2020).

SEZ has been observed in several countries, and with different perspectives. According to Wahyuni et al. (2013) which their study is to look by critical views of the SEZ in Asia, especially with the comparative of Indonesia, Malaysia, Thailand, and China, Indonesia still needs to solve the strong message that the Indonesian government still has a daunting amount of work to do to improve its capacity, performance, and competitiveness. In different publications such as Aggarwal (2019), Farole & Akinci (2011), Hidayat & Negara (2020), SEZ around the world still have challenges in the establishment and development process.

The conditions described above raise a question regarding the dynamics of the establishment and development of SEZ in Indonesia, especially the Bitung SEZ. Thus, this article aims to identify the establishment and development of the

Bitung SEZ through the operational readiness of the Bitung SEZ based on the physical, policy, and socio-economic dimensions. Aspects of the study discussed in scope, aspects of policy preparation and policy readiness, and social aspects related to local community life.

B. MATERIALS AND METHODS

This research used mix research approach, where the phenomena of Bitung SEZ was observed with multi-approach, which was qualitative and quantitative methods. The qualitative analysis was used to describe the dynamic processes of designation and development of Bitung SEZ. The designation processes were analyzed through the narration of designation (historical process analysis). While the development processes used both methods. The physical and institutional dimensions used qualitative analysis, through shifting those phenomena. Then the socio-economic dimension was analyzed with LQ (Purwanti, 2009) and Shift-Share analysis (Soepono, 1993). LQ analysis was used to identify base and non-base commodities (Astarsari et al., 2018; Hendayana, 2003; Tiebout, 1965), and Shift-Share analysis was used to

identify changes in employment opportunities by sector (Soepono, 1993). LQ Formula (Purwanti, 2009):

$$LQ=(E_{i1}/E_l)/(E_{ir}/E_r)$$

E_{i1} : economy activity sector 1 in the local area

E_l : all sectors of economic activity in the local area

E_{ir} : economy activity sector 1 in a regional area

E_r : all sectors of economic activity in a regional area

The shift-Share analysis is used to see local employment opportunities caused by the rate of growth of employment opportunities in the region.

Shift-Share formula (Soepono, 1993):

$$r_n=(E_n^*-E_n)/ E_n$$

$$r_{in}=(E_{in}^*-E_{in})/ E_{in}$$

$$r_{ij}=(E_{ij}^*-E_{ij})/ E_{ij}$$

E_{ij}^* : employment opportunity of local sector I end of year

E_n : employment opportunity of regional sector I regional early year

E_{in}^* : employment opportunity of regional sector I end of year

E_n : total employment opportunities of regional early year

E_n^* : total employment opportunities of regional end of year

r_n : total rate of change in employment opportunities of regional

r_{in} : rate of change in employment opportunities sector I of regional

r_{ij} : rate of change in employment opportunities sector I of local

This research used secondary data, which collects from several documents

such as laws, reports, news, and articles. Then, the data from those sources are tabulated in several parts based on the objective to make an analysis and find the research result.

C. RESULTS AND DISCUSSION

The Establishment of Bitung SEZ

Similar to conditions abroad, SEZs in Indonesia are based on the development of industrial estates that existed in the 1970s. However, formally, it has only been born since the issuance of Law No. 39 of 2009 on Special Economic Zones (SEZ). But if looking back, industrial estates in Indonesia existed since the 1970s is preceded by the birth of PT Jakarta Industrial Estate Pulogadung (PT. JIEP). That has an area of 570 ha in DKI Jakarta in 1973, which was an effort from the government to control industrial growth which was increasing at that time (Maramis, 2013).

In the North Sulawesi, Bitung SEZ was born from the policy that was made by the government, in the province and national level. That zone started with the

Integrated Economic Development Zone (IEDZ or KAPET “*Kawasan Pengembangan Ekonomi Terpadu*” in Bahasa Indonesia) in Manado-Bitung. However, because the achievements of the Manado-Bitung IEDZ was very small, the government made this area as a Special Economic Zone (SEZ), specifically the Bitung SEZ. Bitung SEZ was established through Government Regulation Number 32 of 2014 which was signed on May 12, 2014, by President Susilo Bambang Yudhoyono. The establishment of the Bitung SEZ is based on the advantages of its strategic location and is an economic gateway to countries in the Asia Pacific. This accessibility is supported by the existence of the Bitung International Hub Port as a trading hub for Eastern Indonesia. Located 44 km from the capital city of Manado, Bitung SEZ is expected to become a center for growth and distribution of goods as well as logistics support in eastern part of Indonesia (see **Figure 1**).

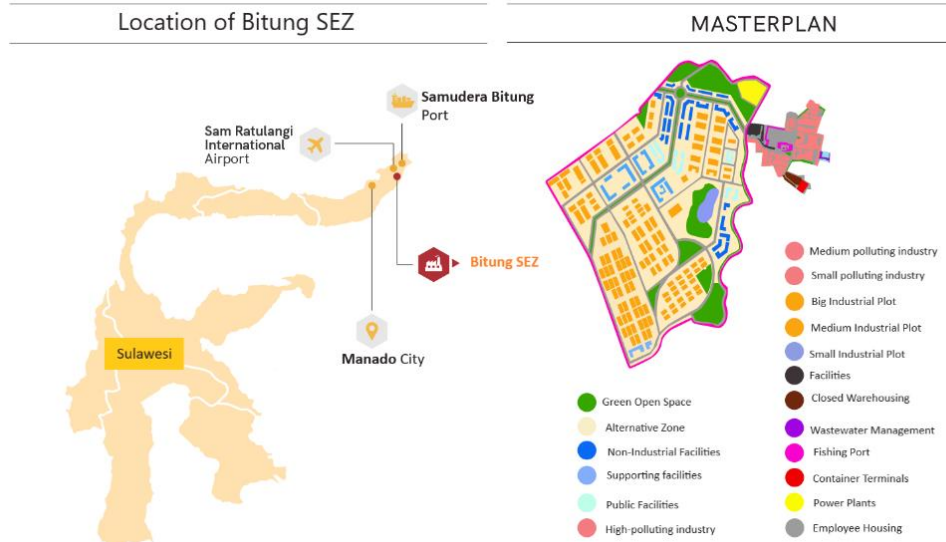


Figure 1. Location and Masterplan of Bitung SEZ

Source: kek.go.id, 2021 (edited)

Geoeconomics advantages include its strategic location as a growth center as well as a distribution center for goods and logistics support in Eastern Indonesia as well as having international access, especially to Brunei-Indonesia-Malaysia-Philippines - East ASEAN Growth Area (BIMP-EAGA), Australia-Indonesia Development Area (AIDA), East Asia, and the Pacific. In addition, the location is adjacent to the Bitung International Hub Port (IHP) which has a deep natural harbor. The location is also very strategic for the fishery processing industry where Sulawesi is one of the largest fish producers in Indonesia which is able to make a significant contribution to Gross Regional Domestic Product (GRDP) and is one of the largest fish exporters in Indonesia. The location is also supported

by the availability of adequate potential water resources.

With a total area of 534 ha, the Bitung SEZ is based on the superiority of regional commodities in North Sulawesi Province. As one of the largest fish producers in Indonesia, Bitung SEZ focuses on the fishery processing industry to produce international quality export commodities. In addition to fisheries, Bitung SEZ also focuses on the coconut industry and its derivative products which have a very wide market and are in demand both nationally and internationally.

Based on regional potentials and geostrategic advantages, Bitung SEZ is expected to encourage down streaming and boost the competitiveness of the fisheries, agro-industry, and

pharmaceutical sectors. That is projected to capture an investment of 32.89T rupiahs and is projected to absorb 34,710 workers by 2025. Geostrategic advantages include: the concept of developing the Bitung SEZ has been integrated with the concept of developing the Manado-Bitung IEDZ, the development of the Manado-Bitung toll road network, and the development of the Bitung International Hub Port. The North Sulawesi Provincial Government and Bitung City Government are committed to developing the investment climate in the region through the establishment of One-Stop Services (OSS).

Based on the existing potential and advantages, the Provincial Government of North Sulawesi proposed the establishment of the Bitung Special Economic Zone. The establishment of the Bitung SEZ has met the criteria as stipulated in Article 4 of Law Number 39 of 2009 on Special Economic Zones, and in Article 7 of Government Regulation Number 2 of 2011 on the Implementation of Special Economic Zones as amended by Government Regulation Number 100 of 2012 on Amendment to Government Regulation Number 2 of 2011 on the Implementation of Special Economic Zones. It had completed the requirements for proposing Special Economic Zones as

regulated in Article 6 of Law Number 39 of 2009 on Special Economic Zones and Article 22 of Government Regulation Number 2 of 2011 on Management of Zones Special Economics as amended by Government Regulation Number 100 of 2012 concerning Amendments to Government Regulation Number 2 of 2011 on The Implementation of Special Economic Zones.

With that argument, the proposal for the establishment of the Bitung SEZ by the Provincial Government of North Sulawesi was submitted to the National Council for Special Economic Zones. And the end, after assessing the proposal, The National Council for Special Economic Zones approved the establishment of the Bitung Special Economic Zone and submitted the recommendations for its establishment to the President.

Bitung SEZ Development Dynamics

Physical Dimensions

Land Dynamics

In Government Regulation Number 32 of 2014, the Bitung Special Economic Zone is proposed to have an area of 534 ha (five hundred and thirty-four hectares). The area is in the Matuari District, Bitung City, North Sulawesi Province. The Bitung SEZ bordered with

Manembo-nembo Village in the north; with Manembo-nembo Villages, Tanjung Merah Villages, and Lembeh Strait in the east; with Tanjung Merah Village in the south; and with Sagerat Village in the west. The Bitung Special Economic Zone consists of an Industrial Zone, a Logistics Zone, and an Export Processing Zone.

From 534 hectares, Land Management Rights (HPL) Decree (SK) has been issued by the Minister of ATR/Head of BPN for an area of 92.79 hectares. Meanwhile, the remaining around 441.21 hectares are in the consultation phase with the Ministry of ATR/BPN (Bappenas, 2021; Hutapea, 2019; Purboyo, 2019). According to the Head of the North Sulawesi Province National Land Agency Regional Office, Fredy Kolintama, he said, "We are currently being consulted with the Ministry, whether directly 'Building rights' or have to go through 'Land Use Rights' first" (Bappenas, 2021; Hutapea, 2019). In the development processes, there were also land disputes and land conflicts. The conflicts occurred over an area of approximately 92 ha. The existing

dispute is related to the 'Cultivation Rights' whose contract has been completed. In the agreement, if the contract of the land has been completed the land should be returned to the government, but it has not happened. There are still many people who claim the land ownership. Furthermore, and without mentioned before, the land was then sold in pieces and there are already 300 houses built on it. Even though, the land for housing must be used as a road to the Bitung SEZ (Bappenas, 2021; Kusuma, 2018).

Infrastructures

The Bitung SEZ infrastructure consists of infrastructure within the region and infrastructure outside the region (see **Figure 2**). The infrastructure in the Bitung SEZ is in the form of roads, Water Treatment Plants (WTP)/Clean Water Management, Electrical Energy Sources, and Wastewater Management Installations/WWTPs. Meanwhile, the infrastructure outside the Bitung SEZ is Final Disposal Site/TPA, Water Resources, Energy, Airports, Ports, National Roads, and Toll Roads.



Figure 2. Infrastructure within (left) and outside (right) Bitung SEZ
Source: kek.go.id, 2021 (edited)

Table 1. Conditions of Bitung SEZ Infrastructure Development

Infrastructure	Condition	Description
Within SEZ		
Roads	Intermediate	Road to SEZ area and office building has been built (through rigid pavement). The road is 20m wide and 1 km long. Although there is already a road in the SEZ, it needs to be added and developed to support the operationalization of the area.
Water Treatment Plant (WTP)	Intermediate	WTP is under construction.
Electrical Energy Sources	Good	The SEZ is available and has operated a source of electrical energy, namely the Tanjung Merah Substation 30 MW in the Bitung SEZ location
Wastewater Management Installation	Intermediate	Wastewater Management Installation is under construction.
Outside SEZ		
Landfills	Bad	There is not yet a waste disposal site available to accommodate the waste.
Water resources	Good	There is still a dam in the process of construction, namely the Kuire Dam. The dam is targeted for completion in 2022.
Electrical Energy Sources	Good	Electrical energy is available.
Airport	Good	Already available airport, namely Sam Ratulangi airport. Development is being carried out to support the operationalization of the Bitung SEZ. The development and expansion is targeted for completion in 2021.
Port	Good	There is already available Bitung International Port. Now, PT Pelabuhan Indonesia IV (Persero) is accelerating the development which is focused on adding docks, stacking yards, and equipment.
National Road	Good	There is available Manado – Bitung National Road (\pm 45 km) and Girian – Kema National Road (\pm 85 km.)
Toll	Good	Manado-Bitung Toll Road is under construction which is planned to be completed in 2021. Access to the toll road reaches the Bitung SEZ gate.

Source: SEZ Evaluation Report (Bappenas, 2021)

Based on the evaluation carried out by the Directorate of Regional III of

Bappenas in the first quarter of 2021, the condition of most infrastructure

development are good, with few infrastructures in intermediate condition, but there is one in bad condition, which is the absent of waste disposal site. The current conditions of the Bitung SEZ infrastructure development are as shown in **Table 1**.

Industries

The industrial development opportunities in the Bitung SEZ includes:

a. Coconut Industry

Coconut derivative products can be used to produce coir and coco coir separators, which can then be processed into coco fiber/coconut dust. Split coconut derivative products can produce coconut water and nata de coco. By using meat, split coconut can produce coconut meat which is then processed into Virgin Coconut Oil (VCO) and Straight Vegetable Oil (SVO). SVO is a raw material for biodiesel. Meanwhile, coconut shells through the cooking process can become charcoal briquettes and activated carbon.

b. Pharmaceutical Industry

The Pharmaceutical Industry Zone in the Bitung SEZ was built to be the first pharmaceutical industry in Eastern Indonesia. The pharmaceutical industry will process several natural raw materials such as patchouli leaves, coconut, sago, cloves, and other fruits.

c. Fishing Industry

Basically, the fishing industry is divided into two major parts, namely: upstream fishery products, such as fish, mollusks, and crustaceans that can be consumed directly or as raw materials for the downstream fishing industry; as well as downstream fishery products, processed through the canning industry, salting, smoking, freezing, and processing using skipjack, shrimp, lobster, and other aquatic biota products. This product has a high added value when used as processed food.

Regarding the existing industrial opportunities, Jefferson R. Lungkang as the President Director of Membangun Sulut Hebat, explained that there were 45 potential investors who had signed a Letter of Intent (LoI) to invest in the Bitung SEZ until the end of 2019. Of that number, nine companies signed a Memorandum of Understanding (MoU) and one company memorandum of agreement (MoA). Furthermore, Jefferson also said that of the 45 potential investors, some of them are existing companies. This means that they were already running a business at the location before the Bitung SEZ was established. Until June 2021, the Bitung SEZ is still being prepared and is still in the process of attracting investors. Even Investment

Minister Bahlil Lahadalia ensured the acceleration of the arrival of investors in the Bitung Special Economic Zone (SEZ). He also promised that there will be 2 investors who are ready to enter the Bitung SEZ (Bappenas, 2021; Papuling, 2021; Pratomo, 2020; Ramalan, 2021).

Institutional

Local Regulation

The Bitung City Government is ready to run the SEZ program, this is based on the issuance of supporting regulations (see **Table 2**). The issuance of the regional regulation was the result of a policy that was formed before Bitung was ratified as a SEZ in 2014. The negative impacts of the program that arise the Bitung SEZ must be controlled with the right policies and accompanied by consistent implementation assistance. Benefits received if able to anticipate negative impacts: (1) create direct attraction for investors to invest; (2)

absorb movement labor; (3) increase GRDP and people's income; (4) creating access to world markets; (5) encourage the transfer of technology that can improve the quality of human resources; (6) increasing domestic sales (utilization of local products); (7) increase the country's foreign exchange.

Policies in SEZ are attached to the state/government domain and are a manifestation of regional regulation. The government promises that the regions that are designated as SEZs will be given certain incentives to attract investors. The SEZ policy has the consequence of providing incentives to support ease of investment. The incentives provided include policies related to tax systems and rates; come in; employment regulations; licensing; land; and others (according to the agreement with the business world).

Table 2. Bitung City Regulations

	Regulation	Foundation of Regulation	Relevance
1	Bitung Regional Regulation Number 11 Year 2013 on Urban Planning for Bitung Region 2013-2033	This regulation was formed to direct the development objectives of the Bitung City area (including space utilization and regional spatial patterns).	This regulation is the basis for the integrated use of the area and its potential.
2	Bitung Regional Regulation Number 7 of 2011 on Regional Medium-Term Development Plan	This regulation was formed to guide government and community actions through a structured planning approach.	This regional regulation is the juridical basis for institutions in the Bitung city area in formulating regional development programs.
3	Bitung Regional Regulation Number 6 of 2009 on Procedures for Domestic Investment and Foreign Investment in Bitung City	This regulation was established for the development of the city of Bitung and ensures the continuity of investment	This regional regulation is a guideline for developing a structured investment climate in the city of Bitung, to support the Bitung SEZ area.

	Regulation	Foundation of Regulation	Relevance
4	Bitung Regional Regulation Number 7 of 2009 on the Implementation of Integrated Licensing Services in Bitung City	This regulation was established to provide competitive investment in Bitung.	This regional regulation is a guide for investors to invest in the Bitung region, especially in Bitung SEZ area.
5	Bitung Mayor Regulation Number 19 of 2013 on Standard Operating Procedures for Licensing Services At The Bitung City Integrated Licensing And Investment Service Agency	This regulation was established to optimize services especially for investment.	This regulation is a technical provision as an effort to provide comfort to businesses who invest in Bitung.
6	Bitung Mayor Regulation Number 45 of 2008 on Details of Duties, Functions, and Work Procedures of the Integrated Licensing and Regional Investment Services Agency of Bitung City	This regulation was formed as a guide to know the organizational structure, position, duties, functions, and work colleagues for Bitung City Integrated Licensing and Investment Service Agency	This regulation is a form of authority for the Bitung City Integrated Licensing and Investment Service Agency in carrying out its obligations to capture investment

Source: Pramoda & Apriliani (2016) (with adjustment).

Table 3. LQ calculation

Sector	Bitung City	GRDP North Sulawesi	LQ
Agriculture, Forestry, and Fisheries	1845858.74	17695949	0.57
Mining and Quarrying	61537.81	4650508	0.07
Processing Industry	3899436.94	8752856	2.43
Electricity and Gas Procurement	14254.27	119828	0.65
Transportation and Warehousing	1483778.81	6797629	1.19
Estate	276695.67	3328413	0.45
Sector	7,581,562.24	41,345,183.00	

Source: Own Analysis

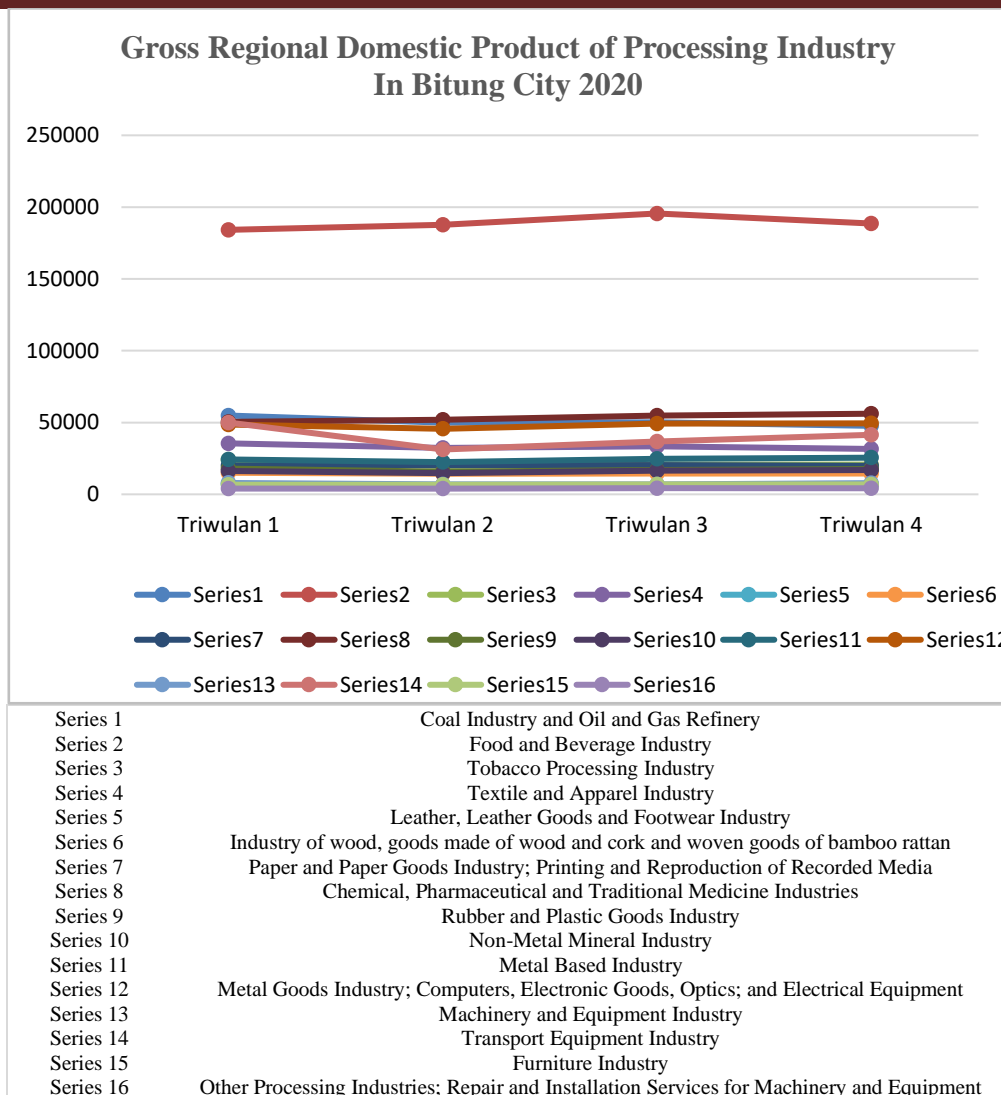


Figure 3. GRDP of the industrial sector divided into 16 types
 Source: Own Analysis

**Social-Economic
 Economic Aspect**

In this research, the LQ calculation used Gross Regional Domestic Product (GRDP) at constant price by business field data from the Central Statistics Agency of Bitung City 2020. Based on the results of the LQ calculation, it can be concluded that the manufacturing sector and warehousing transportation are the base sector because they have an LQ value > 1 so that they have a comparative

advantage. This is in accordance with the designation of the main economic activity in the Bitung SEZ so that the sector can be economically prepared to support the Special Economic Zone (see **Table 3**).

From the graph on **Figure 3**, it can be concluded that the sectors that contribute the highest to GRDP are the food and beverage, coal, and pharmaceutical industries. The pharmaceutical/herbal industry is an

economic activity in the SEZ so that it becomes a consideration in the SEZ development. Meanwhile, warehousing transportation consisting of rail, land, sea, air, river and crossing transportation can support Special Economic Zones in the activities of transporting goods and services to be supplied outside the region, both regionally, nationally, and internationally.

Social Aspect

The social dimension in the study focused on population growth and labor force growth as positive factors in spurring economic growth (Purwanti, 2009). Based on the results of population growth, Bitung City's population growth in 2014-2020 has increased between 200,000-230,000 inhabitants (see **Figure 4**). The increase in population is expected to increase labor growth which will improve the economy.

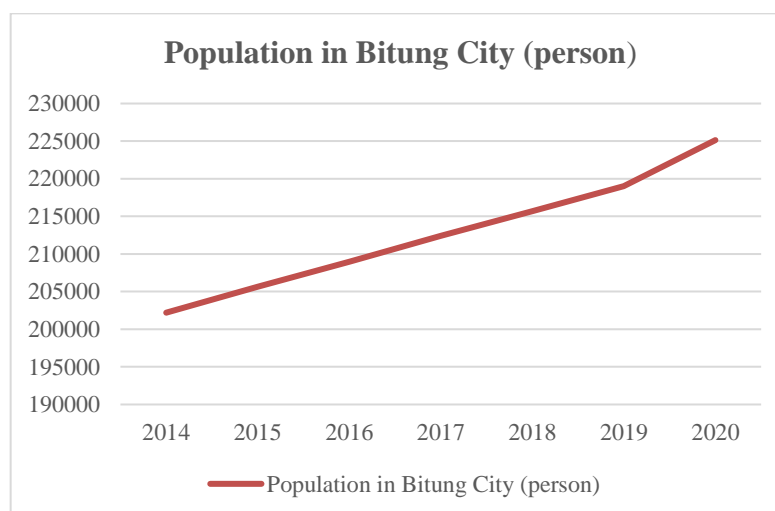


Figure 4. Bitung City Population Growth 2014-2020
Source: Own Analysis

In addition to population growth, the level of education can affect the quality of human resources as an economic driver (Todaro & Smith, 2003). Based on the aspect of education, seen from the Net Participation Rate (NPR), Bitung City's NPR at the high school level is 56.9%. There was a decline in the high school level NPR in 2017 (see **Figure 5**). The low level of education can

be one of the reasons why the absorption of manpower is low. The limited number and qualifications of local human resources have a low economic impact.

Based on the growth of the workforce (see **Table 4**), as seen from changes in job opportunities resulting from shift-share analysis, it was found that job opportunities in Bitung City during the 2021 period showed an

increase of 55.73%. There was a positive change in group 1 consisting of agriculture, forestry, fisheries by 3.69%, and group 2 one of which included the processing industry of 63.01% which is the main sector of the Bitung SEZ. There is a decrease in job opportunities in group

3 by 10.97%. One of the sectors in the group is the main sector of SEZ, namely the transportation and warehousing sector. When compared to the province, the change in employment opportunities is lower.

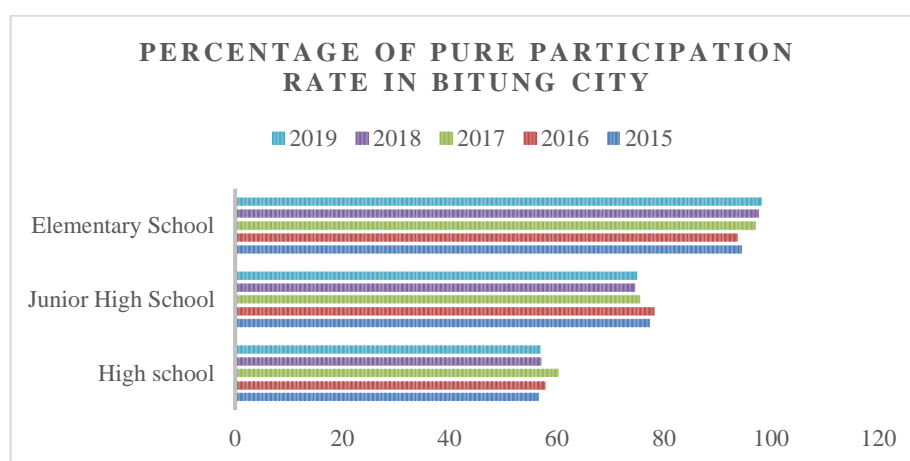


Figure 5. Bitung City Pure Participation Rate 2015-2019
Source: Own Analysis

Table 4. Changes in Employment Opportunities by Sector in Bitung City and North Sulawesi Province

Business field	Bitung City		Change		North Sulawesi Province		Change	
	2018	2020	absolute	percent	2018	2020	absolute	percent
	Eij	E*ij	(people)	rij	Ein	E*in	(people)	rin
Agriculture, forestry, fisheries	10365	10747	382	3.69	269884	337624	67740	25.10
Mining and excavation; Processing industry; Electricity and Gas Procurement; Water Supply; Waste, Waste and Recycling Management; and Construction.	15792	10747	9951	63.01	99228	213649	114421	115.31
Wholesale and Retail Trade; Car and Motorcycle Repair; Transportation and Warehousing; Provision of Accommodation and Food and Beverages; Information and Communication; Financial and Insurance Services; Real Estate; Company Services; Government Administration, Land Affairs, and Mandatory Social Security; Education Services; Health Services and Social Activities; and Other Services.	61926	55132	-6794	-10.97	726033	583529	-142504	-19.63
Total	88083	91622	3539	55.73	1095145	1134802	39657	120.78

Source: Own Analysis

D. CONCLUSIONS

SEZ development applies the concept of top-down development. The

development of the Bitung SEZ is expected to accelerate national economic growth, the entry of foreign investment and domestic investment. The existence

of a growth center is expected to provide a multiplier effect for the surrounding area. Based on physical readiness and policies, although the construction is slow, the support for the physical dimensions and development policies of the Bitung SEZ is already underway and ready to be utilized. In the future, other infrastructure improvements are needed to intensify regional functions.

Based on the analysis of socio-economic readiness, the base sector that is calculated is in accordance with the leading sector determined by the Bitung SEZ, namely the processing industry with the largest commodity GDP contribution, the pharmaceutical/herbal industry. Meanwhile, the warehousing and transportation sector which consists of rail, land, sea, air, river and ferry transportation can support the Special Economic Zones through the activities of transporting goods and services that will be exported outside the region regionally, nationally and internationally. Based on the analysis of the social dimensions of the population, although employment opportunities in the SEZ sector (industry, fisheries) have increased, population growth is high, but the low level of education (Senior High School 50% NPR) can be one of the factors for the low absorption of labor in SEZs.

E. REFERENCES

- Aggarwal, A. (2019). SEZs and economic transformation: towards a developmental approach. *Transnational Corporations*, 26(2), 27–48.
<https://doi.org/10.18356/d5636c42-en>
- Astasari, C. P., Ibrahim, J. T., & Harpowo, H. (2018). Analisis Location Quotient (LQ) Komoditas Cabai di Kabupaten Kediri. *Agriecobis : Journal of Agricultural Socioeconomics and Business*, 1(2), 11–22.
<https://doi.org/10.22219/AGRIECO BIS.VOL1.NO2.11-22>
- Bappenas. (2021). *Laporan Evaluasi KEK Triwulan I tahun 2021*.
- CNN Indonesia. (2020). KSP Temukan Masalah dalam Pengembangan KEK Bitung. *Cnnindonesia.Com*.
<https://www.cnnindonesia.com/ekonomi/20201125194030-92-574518/ksp-temukan-masalah-dalam-pengembangan-kek-bitung> downloaded on 01 Desember 2021
- Elena, M. (2021). Kendala Lahan dan Infrastruktur Bikin KEK Bitung Tak Laku. *Ekonomi.Bisnis.Com*.
<https://ekonomi.bisnis.com/read/20210613/9/1404847/kendala-lahan-dan-infrastruktur-bikin-kek-bitung-tak-laku> downloaded on 01 Desember 2021
- Farole, T., & Akinci, G. (2011). The Special Economic Zones: Progress, Emerging Challenges, and Future Directions. In *The World Bank*. World Bank Publications; Illustrated edition.
<https://www.amazon.com/Special-Economic-Zones-Challenges-Development/dp/0821387634>
- Hendayana, R. (2003). Aplikasi Metode Location Quotient (LQ) dalam

- Penentuan Komoditas Unggulan Nasional. *Jurnal Informatika Pertanian*, 12, 658–675.
- Hidayat, S., & Negara, S. D. (2020). Special Economic Zones and the Need for Proper Governance on JSTOR. *Contemporary Southeast Asia*, 42(2), 251–275. <https://www.jstor.org/stable/26937802>
- Hutapea, E. (2019). *Lahan KEK Bitung sudah bisa dikelola*. Nasional.Kontan.Co.Id. <https://nasional.kontan.co.id/news/lahan-kek-bitung-sudah-bisa-dikelola> downloaded on 01 Desember 2021
- KEK Bitung. (2021). *KEK Bitung*. Kek.Go.Id. <https://kek.go.id/kawasan/kek-bitung> downloaded on 01 Desember 2021
- Knowledge Innovation Zone Research Report. (2006). *Special Economic Zones (SEZ) versus Knowledge Innovation Zones (KIZ) – a Comparison*.
- Kumar, R. S. (2008). SEZs In India: Concept, Objectives and Strategies. *National Seminar on SPECIAL ECONOMIC ZONES*.
- Kusuma, H. (2018). *Masalah Klasik Pembebasan Lahan Hambat Pembangunan 4 KEK*. Finance.Detik.Com. <https://finance.detik.com/berita-ekonomi-bisnis/d-3920909/masalah-klasik-pembebasan-lahan-hambat-pembangunan-4-kek> downloaded on 01 Desember 2021
- Maramis, J. B. (2013). *Kawasan Ekonomi Khusus (Kek) Dan Perekonomian Daerah: Sejarah, Defenisi, Keuntungan dan Kelemahan KEK (Draf Buku: Kawasan Ekonomi Khusus (KEK) dan Perekonomian Daerah)*. <http://joubertbmaramis.blogspot.com/2013/02/sejarah-defenisi-keuntungan-dan.html> downloaded on 01 Desember 2021
- Papuling, D. (2021). *Tinjau KEK Bitung, Menteri Investasi: Dua Investor Siap Masuk KEK Bitung*. Manado Post. <https://manadopost.jawapos.com/berita-utama/12/06/2021/tinjau-kek-bitung-menteri-investasi-dua-investor-siap-masuk-kek-bitung/> downloaded on 01 Desember 2021
- Peraturan Pemerintah Nomor 100 Tahun 2012 tentang Perubahan Atas Peraturan Pemerintah Nomor 2 Tahun 2011 tentang Penyelenggaraan Kawasan Ekonomi Khusus
- Peraturan Pemerintah Nomor 2 Tahun 2011 tentang Penyelenggaraan Kawasan Ekonomi Khusus
- Peraturan Pemerintah Nomor 32 Tahun 2014 Tentang Kawasan Ekonomi Khusus Bitung.
- Pramoda, R., & Apriliani, T. (2016). Kebijakan Penetapan Bitung Sebagai Kawasan Ekonomi Khusus (KEK). *Jurnal Borneo Administrator*, 12(2), 149–169. <https://doi.org/10.24258/jba.v12i2.238>
- Pratomo, M. N. (2020). *45 Investor Lirik KEK Bitung, 10 Perusahaan Teken MoU dan MoA*. Sulawesi Bisnis.Com. <https://sulawesi.bisnis.com/read/20200207/540/1198646/45-investor-lirik-kek-bitung-10-perusahaan-teken-mou-dan-moa> downloaded on 01 Desember 2021
- Purboyo, M. R. (2019). *Pembebasan Lahan KEK Bitung Dipercepat - Ekonomi Bisnis.com*. Ekonomika Bisnis.Com. <https://ekonomi.bisnis.com/read/20190429/45/916731/pembebasan-lahan-kek-bitung-dipercepat>

- downloaded on 01 Desember 2021
- Purwanti, P. A. P. (2009). Analisis Kesempatan Kerja Sektoral Di Kabupaten Bangli dengan Pendekatan Pertumbuhan Berbasis Ekspor. *PIRAMIDA`- Jurnal Kependudukan Dan Pengembangan Sumber Daya Manusia*, 5(1). <https://ojs.unud.ac.id/index.php/piramida/article/view/2984>
- Ramalan, S. (2021). *Ada Investor Mau Masuk, Bahlil Cek Kesiapan KEK Bitung*. Sindonews.Com. <https://ekbis.sindonews.com/read/454336/34/ada-investor-mau-masuk-bahlil-cek-kesiapan-kek-bitung-1623578769> downloaded on 01 Desember 2021
- Soepono, P. (1993). Analisis Shift-Share: Perkembangan dan Penerapan. *Journal of Indonesian Economy and Business (JIEB)*, 8(1), 43–54. <https://jurnal.ugm.ac.id/jieb/article/view/40049>
- Tiebout, C. M. (1965). Exports and Regional Economic Growth on JSTOR. *Journal of Political Economy*, 64(2), 160–164. <https://www.jstor.org/stable/1826831>
- Todaro, M. P., & Smith, S. C. (2003). Pembangunan Ekonomi di Dunia Ketiga. In *Erlangga*. Erlangga.
- Wahyuni, S., Astuti, E. S., & Utari, K. M. (2013). Critical Outlook At Special Economic Zone in Asia: a Comparison Between Indonesia, Malaysia, Thailand and China. *Journal of Indonesian Economy and Business*, 28(3), 336–346. <https://jurnal.ugm.ac.id/jieb/article/view/6218>
- Undang-Undang No. 25 Tahun 2007 tentang Penanaman Modal
- Undang-Undang Nomor 39 Tahun 2009 tentang Kawasan Ekonomi Khusus