Analysis on Human and Economic Resources in the Last Decade to Evaluate the SDGs Accomplishment in South Kalimantan, Indonesia

by Ratih Fitria Putri

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Abstract—South Kalimantan is one of leading provinces in Indonesia. Natural resources abundance in South Kalimantan had risen the expectation of optimal public services. The accomplishment of SDGs in South Kalimantan requires the equitable implementation considering economic, social, and environmental aspects. This research aimed (1) to find out the human and economic resources condition and (2) to determine the direction of development of South Kalimantan Province. This materials needed were institutional-secondary data which vary by spatial and temporal units, and GIS-based data processing software. Both qualitative and quantitative approach were used in the analysis to describe the regional development comprehensively. The results showed that (1) human resources in South Kalimantan was quantitatively capable of supporting the acceleration of regional development, however the the level of population density, early marriages, maternal and infant mortality, health services, education, and employment indicators were potentially off-track so that they associated poverty, it was then surpressed by gender disparity issue which disadvantaged either men or women on dimensions of health, knowledge, income, and employment, while land resources was getting more limited due to intensive agricultural uses, leading to the rise of industry and trade as potential sectors; (2) the regional development of South Kalimantan should be more sensitive to gender and environmental issues, as well as capable of reducing spatial disparities by balancing the aspects of land, human and economic resources that implemented by improving total medical workers and people's perception in gender-related topics, as well as reducing land pressure by switching some agricultural into industrial activities as it would be more profitable and stable.

Keywords— Development, Region, Resources, SDGs.

I. INTRODUCTION

Indonesia is one of developing countries in the world. Based on its gross national income (GNI) value, Indonesia was categorized into countries with lower middle income, i.e. between $1,036 and $4,085 [1] A country's development is classified based on economic indicators, so that the planning of development need to be focused on increasing the rate of economic growth. However, Indonesia is experiencing constraints in increasing the capital formation rate due to high poverty level [2]. Poverty reduction requires comprehensive efforts, so that it is not only focuses on economic indicators, but also social, cultural, political, and others who support the achievement of development goals.

The Sustainable Development Goals (SDGs) program established by the United Nations since 2005 has become a reference for any development progress of regions in the world, as a continuation of the Millennium Development Goals (MDGs). There were 5 fundamental principles in the SDGs known as the 5P, in order to balance the dimensions of economic, social and environmental issues, i.e.: (1) People, (2) Planet (the Earth), (3) Prosperity, (4) Peace, and (5) Partnership.

The five basic principles contained 17 goals and 169 targets that were connected and integrated each other as they were expected to support better human life [3]. The goals included comprehensive aspects of development, which was compiled based on the evaluation of MDGs. There were 242 indicators that could be measured to assess the SDGs accomplishment. The assessment is needed in Indonesia to understand the dynamics and spatial development patterns in the entire region.

South Kalimantan Province had become the most prominent area on Borneo Island, even before it became a province officially on January 1, 1957 [4]. The biggest contribution of South Kalimantan for Indonesia development was given by the mining sector, with coal and iron ore as the main commodities. The potential coal resources of South Kalimantan had spreaded throughout the regencies, such as Banjar, Tanah Laut, Tanah Bumbu, Hulu Sungai Tengah, Hulu Sungai Utara, Hulu Sungai Selatan, Tapin, and Tabalong [5].

Natural resources abundance in South Kalimantan rose the expectation of optimal public services, considering the bureaucracy had enough financial supports [6]. There were

several awards won by South Kalimantan due to its good public services, which were certainly influenced by social and cultural dynamics. There are about 3 million people in South Kalimantan, with 7 major ethnic groups i.e. Banjar, Dayak, Malay-Javanese, Bugis, Chinese and Arab Descent. Banjar people are dominant in South Kalimantan, with economic activities preferences are trading along the main river—the province was also well-known for its floating market—and farming in middle part of watersheds [6]. Human resources dynamics in South Kalimantan becomes important to review, as human being was positioned to be the central component of development in accordance with the new development paradigm introduced by United Nations Development Programme (UNDP) in 1990.

The accomplishment of sustainable development in South Kalimantan requires the equitable implementation considering economic, social, and environmental aspects. A detail and comprehensive study on the social and economic situations is necessary to determine the direction of regional development which is parallel to the SDGs agenda. This research aimed (1) to find out the human and economic resources circumstances and (2) to determine the direction of development of South Kalimantan Province. The objectives were expected to be able to picture South Kalimantan Province from different points of view of development.

II. THE MATERIAL AND METHOD

Based on its scale, this research was categorized in reconnaissance-level. The analysis units were the land, human, and economic resources of South Kalimantan Province, Indonesia. The research area map is shown by Fig. 1. The province consists of 11 regencies, i.e. Tanah Laut, Kotabaru, Banjar, Barito Kuala, Tapin, Hulu Sungai Selatan, Hulu Sungai Tengah, Hulu Sungai Utara, Tabalong, Tanah Bumbu, and Balangan; and 2 cities, i.e. Banjarmasin and Banjarbaru. This reseach was based on main secondary data which had both spatial and temporal variation (cross-section and time series) obtained from institutional sources. The materials needed were those regional data and data processing software (i.e. Ms. Excel), and GIS-based software (i.e. ArcMap). The research method is shown by flow chart in Fig. 2. The research used both qualitative and quantitative approach on data analysis to describe the regional development in South Kalimantan Province comprehensively, as shown by system thinking diagram on Fig. 3.

III. RESULTS AND DISCUSSION

A. Population and Gender-Based Human Development

The applied development of South Kalimantan Province had not been able to reach all aspects of creating a supportive environment for people to enjoy a healthy, long, and productive life. The development programs were still mainly applied on the priority regions, as written in [8], including Banjarmasin, Batulicin District of Kotabaru, and Kandangan District of South Hulu Sungai. Further policy towards the priority regions

were the Integrated Economic Development Area of Batulicin District in Kotabaru Regency. In the implementation, the policy had rise the spatial disparity between urban and rural areas (Fig. 4), as the priority regions would practically have superior achievement of human development indicators. The government was then expected to manage the development achievements for not too long, so that the equalization of urban and rural situations can be done.

There were 4,067,102 people in South Kalimantan in 2016 [7], with Banjarmasin as the most populated region, that was 684,183 people. The con-
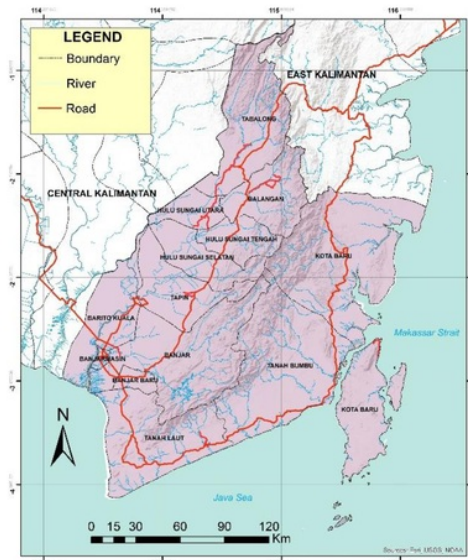

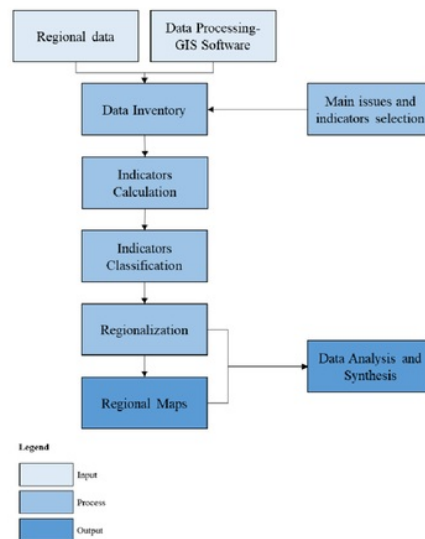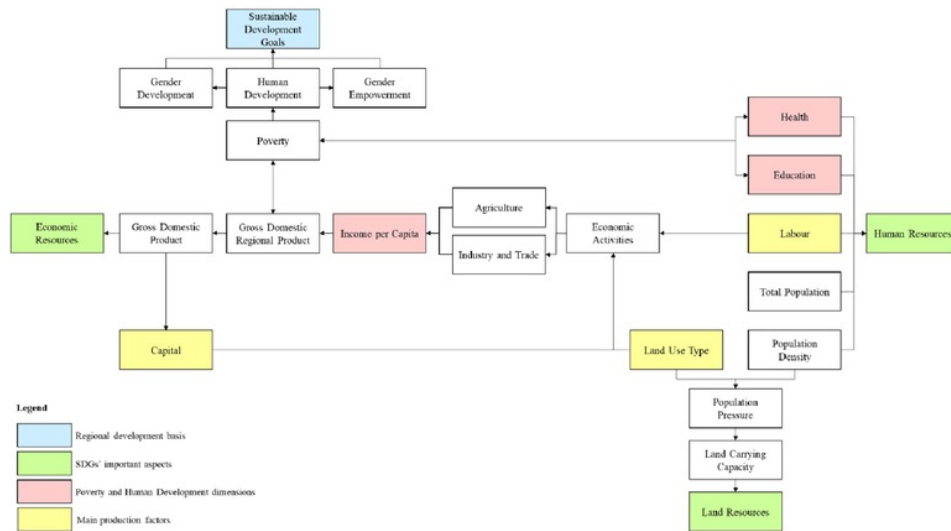Fig. 1 Map of South Kalimantan Province

Fig. 2 Flow Chart as Reseach Method

Fig. 3 System Thinking Diagram as the Research Design

Fig. 4 HDI Distribution of South Kalimantan

comes from dimensions of health, knowledge, and decent standard of living.
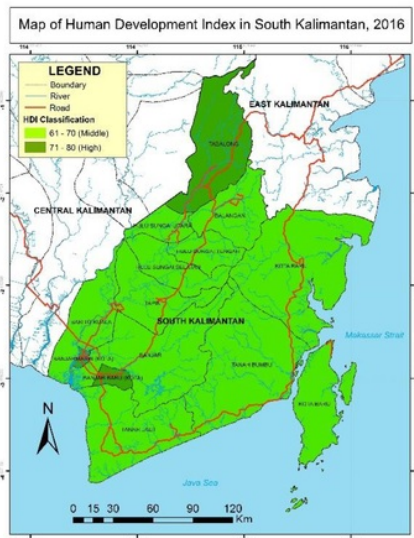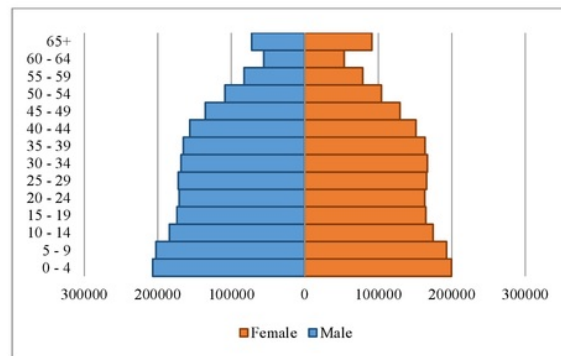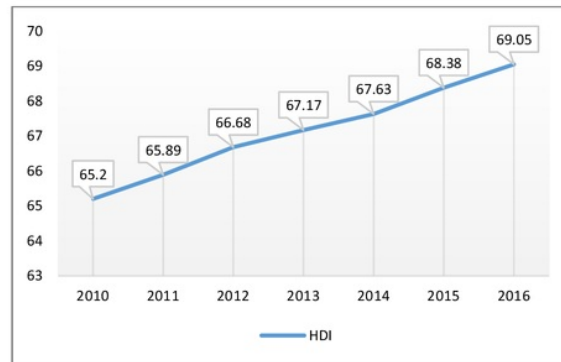

Fig. 5 Population Pyramid of South Kalimantan in 2016

Fig. 6 HDI Trend of South Kalimantan

dition of total population was as well as the population density, because the city had the least area among other regions. The population continuously grows each year, but its growth likely experiences a slowdown that reflects the accomplishment of Indonesia's Family Planning program. Population pyramid as shown in Fig. 5 pictured the population composition of South Kalimantan. The median age of population was 27, as people at the age of 20 to 29 dominate the age structure, as well as people over 65 years old. The dependency ratio was 48 %, while the sex ratio was 102.83 %. Based on the population structure, South Kalimantan quantitatively had the qualified human capital in order to support the regional development. The human development index (HDI) in South Kalimantan ranked 22nd of 34 provinces in Indonesia, with temporal trend as shown in Fig. 6. The indicators highlighted in human development

Reference [9] showed that health is a part of life which quality should always be maintained and enhanced to support productive life of people. In terms of health, the life expectancy of South Kalimantan was still below the national rate. There was a relatively high gap between life expectancy of regencies

(rural) and cities (urban), as in 2016 the high rate of life expectancy was owned by Banjarmasin and Banjarbaru (Fig. 7). People on urban areas tended to have better health because they had easier access to the health facilities. The health services would also be more qualified, due to advantages in terms of quantity as well as quality in health facilities. The number of operating hospital in South Kalimantan already met the minimum standard, where there were 31 units of hospital [10] of the standard of at least 17 units for the current population. Similar condition applied in community health centers. Each region of South Kalimantan had at least 1 unit hospital or community health center. However, the health service was constrained in the number of medical workers, as there were 557 doctors in the province out of minimum standard of 811 doctors. The condition held the optimization of health services back. Local government's response was very much needed to balance the conditions between health facilities and workers. It was stated that the local government of South Kalimantan had allocate 15% of total revenue and expenditure budget to fund health, based on [11].
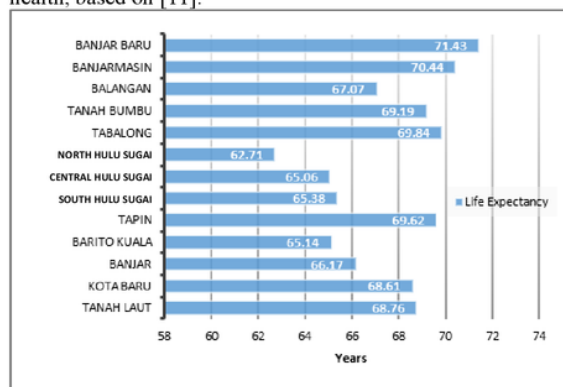

Fig. 7 Life Expectancy of South Kalimantan

Constraints on health service affected the low achievement of health indicators in South Kalimantan, that resulted the higher mortality rates by maternal and infant-child mortality, as well as mortality caused by certain diseases of morbidity. In 2005, South Kalimantan ranked 5th in the national level for its infant mortality rate, with the ratio of 41 deaths per 1000 live births—it was then increased to 44 deaths per 1000 live births in 2012. Meanwhile, the maternal mortality rate in 2007 was 307 deaths per 100,000 live births, which had yet to surpass the MDGs target, that was 230 deaths per 100,000 live births [12]. Maternal mortality in South Kalimantan continued to increase and reached the highest rate during 2010 to 2012. The burden of mortality rates was compounded by the increasing number of people with Tuberculosis (TB) and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) as the main mortality cause. In 2012, there were 76 people suffered for TB and 141 for HIV/AIDS. The prevalence of HIV/AIDS sufferers already exceeded 5% in 2014 that led South Kalimantan to be categorized to have a highly transmission risk of HIV/AIDS [13]. Based on indicators of life expectancy, health services, and mortality rates, South Kalimantan was still underdeveloped in terms of health quality. Those rates had not met the MDGs targets, whereas the development orientation was then moving on to SDGs.

In terms of education, the mean years of schooling indicator showed spatial disparity, as well as the health indicators. The City of Banjarmasin and Banjarbaru were on the top ranks for that indicator. Another indicator, i.e. the expected years of schooling showed that the regencial rates were still below the provincial and national rates—except for Banjarmasin, Banjarbaru, and North Hulu Sungai. One of big universities of Indonesia, i.e. the Universitas Lambung Mangkurat is located in the City of Banjarbaru and has become a point of interest on people's choice to have college degrees which leads to community welfare expectation. The education management strategies to increase the human quality in South Kalimantan became very urgent to be found and completely implemented [14].

The gaps on education quality in the regions of South Kalimantan was barely influenced by educational facilities availability, but rather by the public perception towards education. The ratio of students and teachers at school levels were approximately 10:1 to 12:1, so that one teacher was estimated to handle only 10 to 12 students. The ratio showed the lack animo of attending formal educational institutions for school-age people of South Kalimantan. People's participation in education were still not prevalent among regions. Some regions had about 30 students in 1 classroom, while others had only 10 to 15 students. Spatial disparities of people's participation in education were essentially disparites of mindset towards the urgency of education. The urban areas as the center of multi-dimensional development tend to have better quality of human resources shown by the higher enrollment rates.

The participation showed by gross, school, and net enrollment rates were having gaps for between elementary, junior high, and senior high school levels. In 2012, the gross enrollment rate was higher than 100% for elementary school level. It showed that there were too many people attending elementary schools when they were older than the common age, that is 7 years old. Meanwhile, the school enrollment rate for elementary school level was 97.85%, which was higher than the rate for both junior and senior high school levels (Fig. 8) as the City of Banjarbaru had the highest rate for all school levels. The condition showed that both horizontal (urban and rural areas) and vertical (school levels) disparities had become a serious topic of South Kalimantan development. The other indicator, i.e. the net enrollment rate for elementary school, junior high school and senior high school were 93.16%, 66.94% and 49.39% respectively. Senior high schools generally accommodated the lowest number of school-age people among all school levels, which indicated people's shallow expectation on attending schools, whereas there had been established the 12-years compulsory school program by Indonesian government since 2015. Despite that, the net enrollment rate of South Kalimantan was relatively high for elementary school and junior high school levels compared to the MDGs target of 100% which showed that the 9-years compulsory school program had at least been well done.
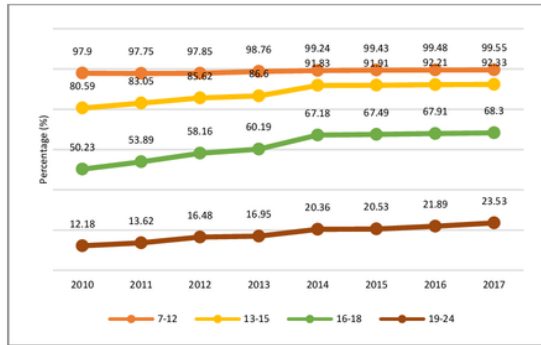
Fig. 8 School Enrollment Rate of South Kalimantan in 2012

As seen from the economical perspective of human development, it is necessary to evaluate people's decent standard of living, as indicated by expenditure per capita. As shown in Fig. 9, there had been an increase on expenditure per capita during 1888 to 2013, that was after experiencing a decline on the previous period (1996 to 1999) due to global economic crisis. Expenditure per capita had increased approximately from 9,000 IDR to 11,000 IDR for each person in one year. The increase showed that purchasing power of fulfilling necessities had became higher, which could only happen if the income per capita increases as well. The higher income per capita reflects economic growth, which leads to people's welfare. Economic growth had a role in the reduction of unemployment rate, as shown in Banjar Regency, the City of Banjarmasin, and the City of Banjarbaru that had both economic growth and unemployment decline even more than the provincial rate. Economic growth could essentially encourage the expansion of employment by increasing the productivity and value-added of leading sectors such as agriculture, marine and fisheries [15].
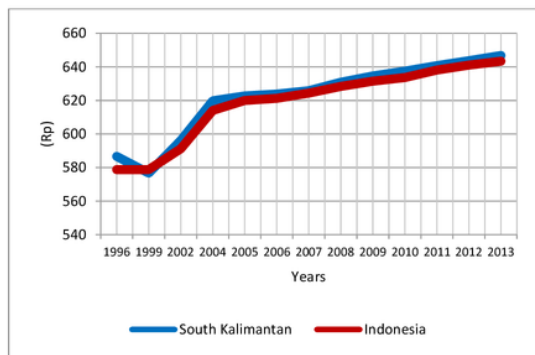

Fig. 9 Expenditure Per Capita of South Kalimantan in 1996-2013

A gender-based human development needs to be applied in order to support sustainable development in Indonesia, including South Kalimantan Province. Reference [16] showed that there were 13.9% of households in Indonesia that headed by women. Ironically, the gender equality was also a serious problem in Indonesia and specifically in South Kalimantan. The gender development needs to be considered as main topic of social-economic studies, which is measured based on the same dimensions and indicator as HDI. As shown in Fig. 10,

the male HDI were consistently higher during 2010 to 2014, which influenced the gender development index (GDI).

Overall, life expectancy of women in South Kalimantan tended to be higher than the men (Fig. 11). That indicated higher risks to face health problems. Pressures from family, jobs, the environment etc. could make men more prone to experience health problems. Meanwhile, each district had a relatively large gap on mean years of schooling of men and women, but the expected years of schooling of women were longer than the men rate; with increasing trend during 2010 to 2014. Cultural factor in the form of community mindset that preferred the men to take more jobs caused the less chances for men to access education. Although it occured in most regions of the province, there were still some regions with higher expected years of schooling of men, i.e. Banjarbaru, Barito Kuala, Tanah Bumbu, and Kotabaru. Gender disparity on the expected years of schooling indicator that occured in South Kalimantan demanded more inclusive efforts targeting on the better understanding of gender equality in socio-cultural system. In fact, the pattern of spatial disparity in gender issues tended to be consistent, as it is always difficult to improve the perception of gender in cultural values that have developed in the community. Main programs of Department of Women Empowerment, Protection, Population Control and Family Planning were women rights protection as well as women's life quality improvement.
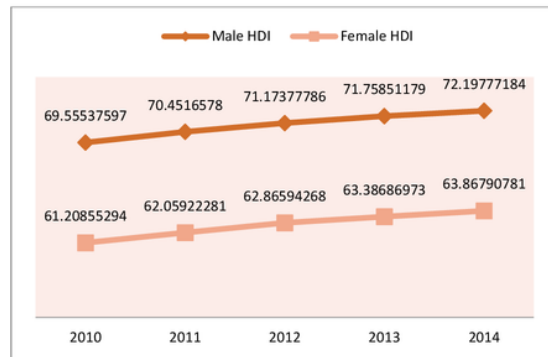

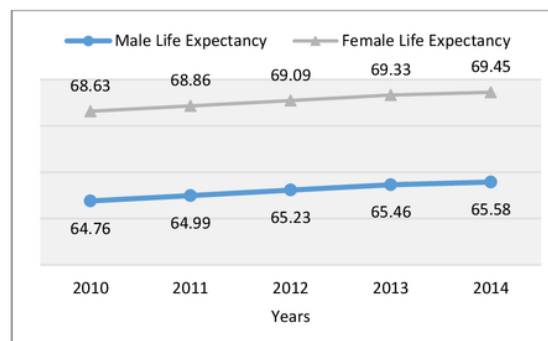Fig. 10 Male and Female HDI of South Kalimantan

Fig. 11 Men and Women Life Expectancy of South Kalimantan

The women's contribution of revenue had increased during 2010 to 2013, while the men's contribution was decreased (Fig. 12). In fact, the mean monthly wage for male workers was higher because of their higher education levels, job types, and

job status. In line with income share was the expenditure per capita. In 2015, there was a huge segregation in the labour market, as the male expenditure was 16,471 IDR, while the female's was 8,170 IDR. Reference [17] stated that men contributed more intensively in mining, agriculture, and construction sectors, while women dominated the jobs in manufacturing industries, trade, and public services. The condition showed that the gender-differentiation of job types was still applied in people's stereotype. Another gender disparity was showed by total job seekers of each gender group (Table 1). Total female job seekers increased by higher education levels, i.e. vocational high school, diploma/academy, and university. The condition showed that the educated female labour forces tend to be accepted to professional jobs slower than male labour forces. That was certainly an indication of gender discrimination in employment, though the percentage of women as professional labours had increased during 2014 to 2015.
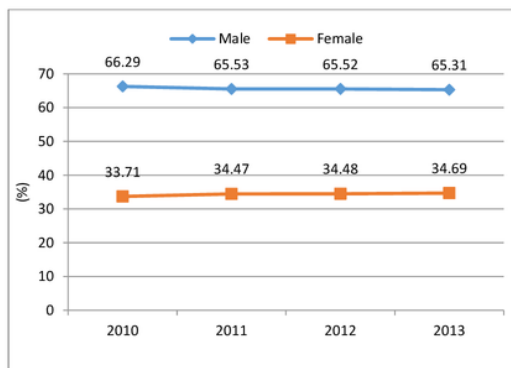
Fig. 12 Men and Women Revenue Contribution of South Kalimantan

TABLE 1
TOTAL MALE AND FEMALE JOB SEEKERS BY EDUCATION LEVELS IN SOUTH KALIMANTAN, 2015

Education Level	Male Job Seekers	Female Job Seekers	Total
Elementary School	252	64	316
Junior High School	882	152	1034
Senior High School	9447	4396	13843
Vocational High School	1138	2217	3355
Diploma/Academy	2577	2820	5397
University	25	35	60
Total			24005

The time series data of Gender Empowerment Index (GEI) of South Kalimantan is showed by Fig. 13. In terms of political carrier, women's contribution in parlement was relatively high (Fig. 14). The basic law holds an important role in political enrollments, which in this case is written in [18] which main idea was not to discriminate the political rights of both women and men. The strong patriarkhi culture of Banjar ethnical group really influenced the women position in political institutions. Meanwhile, women involvement as professional workers showed positive developments in Tapin, South Hulu Sungai, Central Hulu Sungai, Tanah Bumbu, Balangan, Banjarmasin,

and Banjarbaru. Women empowerment in political and economic terms had not yet been fully developed because of several constraints, such as the dichotomy of women role in either public or private spaces, which positioned women to seem less competitive and less powerfull (UNDP, 2010 as quoted in [19]). The government was expected to address the gender issues through the development strategy in Gender-responsive Budget to support the signation of appropriate programs.
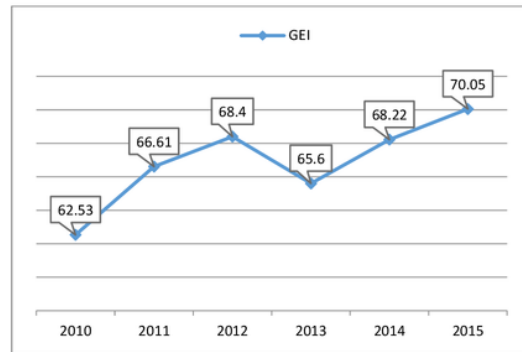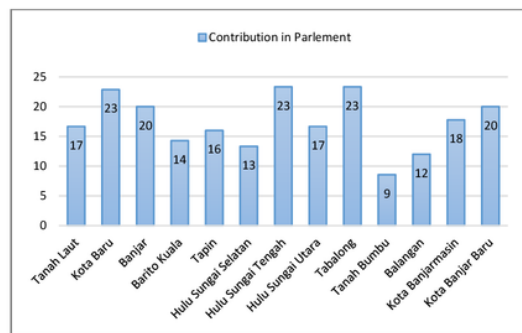

Fig. 13 GEI Trend of South Kalimantan

Fig. 14 Women's Contribution in Parlement of South Kalimantan

B. Land Productivity due to Land Use Changes

South Kalimantan had been known as one of the biggest producers of natural resources, specifically wood and coal. That could ensure both domestic and foreign investments. However, over the 30 years the exploitation of natural resources had cause environmental damages. The resources were not managed properly and correctly, due to disregarded rules and principles as written in related policies. Development control instruments in the form of environmental carrying and supporting capacities was not used as basis in determining the decisions of natural resources and environmental management [20].

During 2015 to 2016, there was massive land use changes in South Kalimantan. As shown in Table 2, the expansion occured on homogeneous plantations (44%), heterogeneous plantations (114%), settlements (50%), and mining areas (22%); while the constriction occurred on rice fields (6%) and forests (19%). Reduction of the rice fields was influenced by the lack of farmer forces, farmer income, as well as supporting irrigation infrastructures [20]. Forests were mostly converted to oil palm plantations by firing them up. It was Kotabaru and Tanah Bumbu that had been designated as the national plantation areas for oil palm. Otherwise, the land conversions were also

purposing on the expansion of coal mining areas. The Meratus Mountain Range is one of the largest coal reserves in Indonesia, so it experienced a massive development. Both oil palm and coal were high-valued commodities, that it influenced the high willingness to do land convertions.

TABLE 2
LAND USE CHANGES IN SOUTH KALIMANTAN

Land Use	2015 (ha)	2016 (ha)
Forests	1.338.867	1.360.248
Heterogenous Plantations	270.428,1	367.970,8
Homogenous Plantations	531.947,7	636.512,5
Rice Fields	401.217,3	400.235,3
Settlements	86.513,47	89.621,96
Mining Areas	52.881,59	51.818,84
Others	1.052.760	827.120,3
Total	3.734.615	3.733.528

The sustainability of land carrying capacity maintains its productivity, so as to ensure the availability of natural resources to fulfil people needs. A balance between the availability and need of resources is the ideal condition that allows acceleration of regional development. Agricultural land carrying capacity is determined from the population pressure. Table 3 shows the population pressure and land carrying capacity in 2016—both indicators were inversely proportional. Most regions had less-than-1 population pressure, which meant that its existence had not yet been a pressure for productive land; while North Hulu Sungai and Banjarmasin had the contrary conditions. Banjarmasin had high population pressure due to its lack of agricultural land use to provide large population.

Total population and population growth of certain regions will be directly related to the provision of foodstuffs. A large population demands high amounts of foods and agricultural land, as well as broader settlements, plantations, etc. Therefore, the land will be massively converted so they will be no longer in accordance with their carrying capacity. The large quantity of agricultural land use indicated the higher carrying capacity of the region. If land has enough carrying capacity to support the life on it, the productivity will be assured.
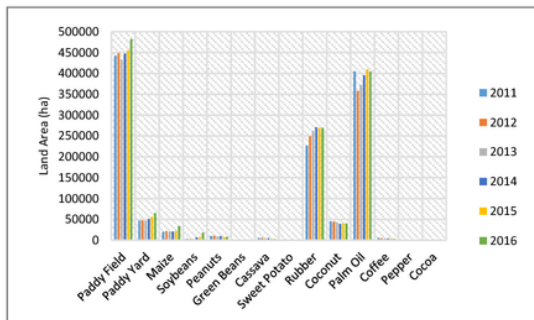
TABLE 3
POPULATION PRESSURE AND LAND CARRYING CAPACITY OF SOUTH KALIMANTAN

Regency/City	Population Pressure	Class	Land Carrying Capacity	Class
Tanah Laut	0.27	Low	3.69	High
Kotabaru	0.11	Low	8.88	High
Banjar	0.21	Low	4.71	High
Barito Kuala	0.51	Low	1.95	Medium
Tapin	0.33	Low	3.02	High
South Hulu Sungai	0.41	Low	2.44	High
North Hulu Sungai	1.44	High	0.69	Low
Central Hulu Sungai	0.34	Low	2.90	High
Tabalong	0.20	Low	5.07	High
Tanah Bumbu	0.94	Low	1.07	Medium
Balangan	0.15	Low	6.67	High
Banjarbaru	0.27	Low	3.72	High
Banjarmasin	7.01	High	0.14	Low

Agricultural land of South Kalimantan produced rice, maize, soybeans, peanuts, green beans, cassava, and sweet potatoes. Meanwhile, the main plantation commodities were rubber, coconut, oil palm, coffee, pepper, and cocoa. Fig. 15 showed that rice fields, oil palm, and rubber plantations ranked the largest harvested area. However, the highest productivity was owned by the land of cassava and sweet potatoes, followed by maize, rice and oil palm (Fig. 16). The sustainability of land production was physically affected by soil characteristics and some non-physical factors in the form of technology involvement and the positive response on food policies, e.g. the food diversification policy. In South Kalimantan, the intensive attention given to the land of cassava and sweet potatoes were driven by the primary food preference of tubers to most people since 1984 [21]. Increased land productivity and production quality could provide the value added for both the product and the labour involved [22] to support the whole system in regional development.
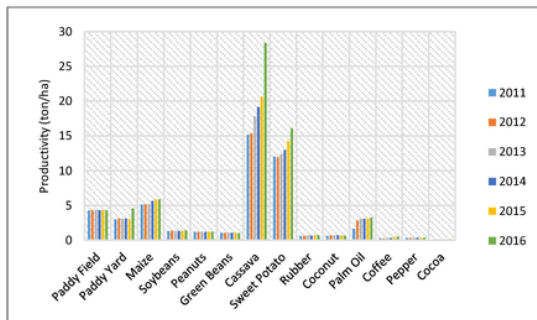

Fig. 15 Land Area of Agriculture in South Kalimantan

Fig. 16 Productivity by Comodity of South Kalimantan

C. *People's Welfare: Multidimensional Poverty and Food Sufficiency*

The problem of poverty and hunger had been the major concerns of the first and second SDGs. During the last decade (2007-2017), the impoverished people of South Kalimantan

ranked between 26th and 28th of 34 provinces in Indonesia. Poverty in South Kalimantan could be influenced by demographics, socio-cultural, educational, employment, income, and health factors. This section emphasizes the socio-cultural, employment, and income aspects because the other factors have been described in previous section about human development. Fig. 17 and Fig. 18 showed the poverty indicator maps in 2016.

As showed by Fig. 19, North Hulu Sungai (in 2007) and Banjarmasin (during 2008 to 2017) had the highest impoverished people. The influence of socio-cultural aspect reffered to the ethnical characteristics of the local community. Banjarmasin as the capital city of South Kalimantan had the major population, as well as the impoverished people; as the community was mostly from Banjar ethnic group which the

people were known as individual competitors who tend to be apathetic towards the social environment and prefer personal rather than family and community welfare [23]. That behavioral tendency took part in the region poverty stagnancy during 2008 to 2017. Meanwhile, Banjar had the lowest amount of impoverished people. Banjar ranked the 3rd lowest poverty in national level due to the multisectoral-based development commitment that integrated with community-based agroindustry program focusing on rubber, rice and ikan patin [24]. Meanwhile, North Hulu Sungai was one of 183 disadvantaged regions in Indonesia [25]. Tabalong and Balangan used to be parts of North Hulu Sungai, however since 2007 both districts were officially established as regencies, then it rapidly rose the poverty level of North Hulu Sungai. The condition was caused by the political rights of natural resources.

Fig. 17 Map of Total Poor Population of South Kalimantan in 2016

Fig. 18 Map of Multidimensional Poverty Index (MPI) of South Kalimantan in 2013

As seen from employment aspect, the poverty tended to be proportional to the unemployment rate, although the opposite condition occurred in some years (Fig. 20). The same correlation applied in national level, as stated in [26] that the increased unemployment contributed to poverty. Job opportunities that did not accompany economic growth would lead to *Cateris paribus*, that caused the economic growth along with increased poverty level [27].

Economic development is measured by GDRP growth and should pay attention to the income distribution. Decrease of GDRP is caused by the less quality and quantity of household consumption. If the people's income is very limited, the impoverished households will be forced to reduce the number of goods and the price options. The main idea in response to poverty problem is ensuring that the GDRP growth can reduce the poverty level effectively. It means that the benefits should spread throughout the community, including the disadvantaged people.
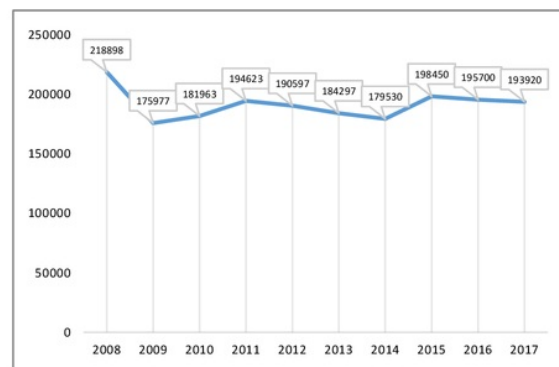

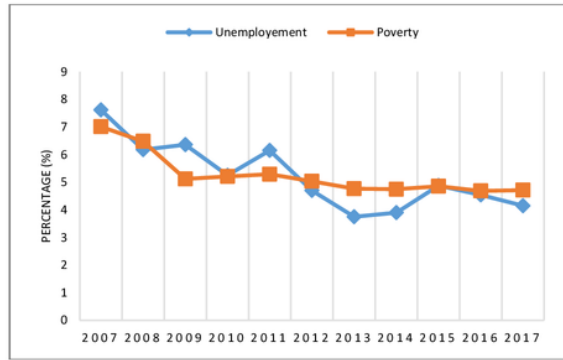Fig. 19 Total Impoverished People of South Kalimantan

Fig. 20 Poverty and Unemployment Rate of South Kalimantan

Meanwhile, the trend of food sufficiency in South Kalimantan, as showed by Fig. 21, was surplus of rice during 2011 to 2016. It meant that the available foodstuffs, specifically rice as the primary food could still be able to cover people's needs. In 2013, the rice sufficiency was declined due to its decrease of production. The declining production was due to the harvest drop by 0.69% and productivity drop by 3.30% [28]. In more detail level, there were several regions that were experiencing rice deficit in 2016, i.e. Kotabaru, Tanah Bumbu, Banjarmasin, and Banjarbaru (Fig. 22) due to the development of manufacturing industry and service instead of agriculture.
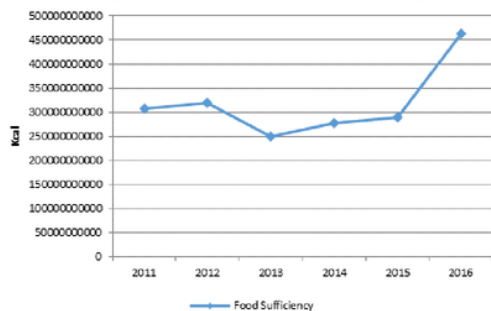
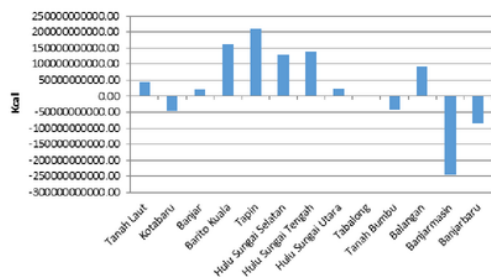Fig. 21 Food Sufficiency Trend of South Kalimantan

Fig. 22 Food Sufficiency of South Kalimantan in 2016

D. Potential Economic Sectors

South Kalimantan had primary and secondary production activities going. As it generally happens in Indonesia, agriculture was the major economic activity preffered by people of South Kalimantan. However, the community currently needs to switch on to the sectors that provide a guarantee of long-term investment, that are manufacturing

industry and trade. This research described the contribution of agriculture, industry, and trade sectors to get the comparison of the three sectors development.

1) Agriculture Contribution: Most regions of South Kalimantan had Location Quotient (LQ) value of agriculture that was greater than 1 (Table 4), sho that agriculture was still the basis sector. The leading subsectors of agriculture were plantation of oil palm and rubber commodities; as well as foof the estate with the mainstay of oil palm and rubber, as well as the foresty of rattan commodity. Rice fields and fisheries also contributed to GDRP of South Kalimantan. Meanwhile, there were only 4 regions which had agriculture as non-leading sector, i.e. Tabalong, Balangan, Banjarbaru, and Banjarmasin. Tabalong and Balangan had coal mining, Banjarbaru had transport services as the existence of Syamsuddin Noor Airport—it is the main airport in South Kalimantan, while Banjarmasin had manufacturing industry as its basis economic activities. Shift-share analysis of agriculture share in GDRP supported the LQ result (Table 5). The positive value of national share indicated the acceleration of economic growth, and vice versa [29]. It was positive growth for both total and sectoral GDRP in the periods of 2014-2015 and 2015-2016. Meanwhile, the component of proportional shift had negative value for the entire region of South Kalimantan during 2014 to 2015, which showed a slowing growth of agricultural sector compared to provincial growth. The component differential shift showed the spatial variation of agriculture competitiveness, in the form of either acceleration or slowdown of growth. The land use changes held important role in both accelerated and slowing growth of agriculture. The changes were mostly applied from agriculture land to mining area, which influenced the decression of land productivity.

TABLE 4
LOCATION QUOTIENTS OF ARICULTURE IN SOUTH KALIMANTAN

Regency/City	LQ			LQ Class		
	2014	2015	2016	2014	2015	2016
Tanah Laut	1.26	1.26	1.26	Basis	Basis	Basis
Kotabaru	1.33	1.31	1.29	Basis	Basis	Basis
Banjar	1.24	1.21	1.22	Basis	Basis	Basis
Barito Kuala	2.02	1.96	1.93	Basis	Basis	Basis
Tapin	1.35	1.37	1.39	Basis	Basis	Basis
South Hulu Sungai	1.87	1.85	1.85	Basis	Basis	Basis
North Hulu Sungai	1.30	1.25	1.17	Basis	Basis	Basis
Central Hulu Sungai	1.82	1.80	1.79	Basis	Basis	Basis
Tabalong	0.69	0.69	0.70	Non-basis	Non-basis	Non-basis
Tanah Bumbu	1.08	1.11	1.11	Basis	Basis	Basis
Balangan	0.71	0.72	0.74	Non-basis	Non-basis	Non-basis
Banjarbaru	0.16	0.15	0.15	Non-basis	Non-basis	Non-basis
Banjarmasin	0.17	0.17	0.17	Non-basis	Non-basis	Non-basis

TABLE 5
SHIFT-SHARE ANALYSIS OF AGRICULTURE IN SOUTH KALIMANTAN

Regency/City	Regencial Shift-Share Component				Natinal Share Component			
	Gj of Regencial GDRP		Gj of Regencial Agriculture GDRP		Nj of National Share		Nj of National Agriculture Share	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
Tanah Laut	247,028.45	288,573.91	35,201.13	62,261.82	347,945.72	393,306.97	50,734.95	66,523.14
Kotabaru	478,345.05	624,709.89	43,843.12	76,156.42	578,006.90	597,373.31	88,270.55	90,653.65
Banjar	419,805.17	467,228.51	30,230.11	86,973.53	385,863.49	402,859.83	55,127.51	57,849.09
Barito Kuala	236,927.40	243,758.30	28,461.30	46,380.10	182,153.41	191,745.72	42,345.97	43,797.30
Tapin	207,762.77	259,230.51	59,847.76	67,987.43	207,925.50	216,337.03	33,435.32	35,562.78
South Hulu Sungai	213,578.03	227,580.84	47,989.17	59,196.22	142,818.08	151,465.06	31,695.35	33,547.72
North Hulu Sungai	136,430.30	126,598.90	7,035.60	-8,425.40	103,426.02	108,949.58	15,335.81	15,072.16
Central Hulu Sungai	227,935.00	245,054.00	48,645.00	59,735.00	150,572.68	159,800.91	32,380.92	34,250.15
Tabalong	297,866.00	394,830.00	25,289.00	52,861.00	510,985.35	523,044.83	40,708.96	42,363.09
Tanah Bumbu	383,263.00	419,802.00	105,125.00	65,120.00	530,119.61	545,636.49	68,117.59	70,155.33
Balangan	205,901.51	212,441.75	39,881.57	39,200.46	331,083.42	339,419.61	27,747.76	28,974.42
Banjarbaru	308,555.60	331,418.75	1,912.00	4,708.00	180,683.21	193,175.48	3,301.28	3,448.61
Banjarmasin	958,390.14	1,099,749.20	14,153.30	22,822.50	670,205.03	709,006.66	13,670.56	14,384.72

(Continuation)

Regency/City	Proportional Shift Component				Differential Shift Component	
	(P+D)j		Pj		Dj	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
Tanah Laut	-37,142,160,807,017.90	-43,684,128,325,259.50	-1650349.904	-1693460.651	-14,432.30	-1,801.20
Kotabaru	-61,700,500,852,212.20	-72,903,903,486,121.60	-2889446.52	-2946346.586	-43,055.49	-35,302.80
Banjar	-41,189,768,587,735.70	-49,165,327,739,945.30	-1801578.257	-1840078.142	-23,951.44	17,364.03
Barito Kuala	-19,444,329,873,321.30	-23,400,796,982,935.00	-1378422.273	-1413448.119	-12,994.05	-7,090.15
Tapin	-22,195,422,244,906.50	-26,401,940,186,353.20	-1049478.876	-1116023.027	28,285.20	25,768.66
South Hulu Sungai	-15,245,401,341,871.10	-18,484,913,788,215.80	-1003962.18	-1057945.244	17,795.51	19,174.51
North Hulu Sungai	-11,040,417,262,122.10	-13,296,291,100,237.90	-502606.276	-511886.7914	-8,080.05	-27,789.92
Central Hulu Sungai	-16,073,180,974,724.10	-19,502,227,929,288.50	-1026075.541	-1080828.611	17,786.29	18,847.62
Tabalong	-54,546,151,731,012.90	-63,832,798,851,148.30	-1327291.113	-1358806.997	-14,628.61	1,457.80
Tanah Bumbu	-56,588,675,919,969.50	-66,589,902,716,460.80	-2155581.651	-2273668.91	40,296.99	-20,892.08
Balangan	-35,342,161,410,864.00	-41,423,033,483,502.50	-881137.6042	-926180.2786	13,381.79	4,163.37
Banjarbaru	-19,287,390,098,820.40	-23,575,285,421,375.90	-107779.8196	-110191.16	-1,329.45	539.47
Banjarmasin	-71,542,373,363,719.70	-86,527,725,084,523.20	-439829.5776	-456303.1258	925.63	5,560.69

2) Industry Contribution: The industrial sector of South Kalimantan had not been optimally developed due to challenges in national level, in the form of low competitiveness in the international market due to the increase of energy costs; high economic costs; and bureaucratic service insufficiency. It was all due to economic dependency on primary sectors, which were agriculture, mining and excavation. [15]. The greatest contributions in 2017 came 20.75% from mining and excavation; 14.59% from agriculture, foresty and fisheries; and 14.39% from manufacturing industry. Industrial development of South Kalimantan reviewed by its share to GDRP, total units of company, labour, and labour wages. The industrial sector of GDRP shows the total value added or the value of final goods and services resulted from units of company of manufacturing industry. The development of the industrial GDRP in South Kalimantan during 2007 to 2016 is shown by Fig. 23. It tended to be increasing due to GDRP growth on each type of manufacture activity. The type that contributed the most for GDRP was food and beverage processing industry, which commodities were drinking water, frozen shrimp, biscuits, instant noodles, traditional medicines, coated beans, flour, and soy sauce. Another developing industry was furnitures from corks, handicrafts from bamboo and rattan, rubberly goods from rubber and plastics, as well as non-metallic resources industry. On the contrary, the industry type that contributed the least was machinery and equipment industry [30]. The development of non-oil-and-gas industry needed to be developed any further in order to absorb more labour and to shift the labour pressure in agriculture and services that were less productive. The development of industrial company units was potentially able to raise the region's economy. The annual development of total company units in South Kalimantan is showed by Fig. 24. In 2007, there were 50,154 units of company, then consistently increasing until 2016. The small and medium industries dominated the region, reaching the total amount of 3,846 units in 2016 and the growth of 5.21% during 2015 to 2016, whereas the target was 5% [31]. Small and medium industries generally produced goods and services with low demand elasticity towards income, so that the mean income of people was not significantly affecting the goods demand. Therefore, there were only few benefits that could be donated by small industries to GDRP. Industry became a developing sector of the economy by the labour absorption, and it followed the current leading sectors of South Kalimantan, i.e. agriculture and mining. The total industrial labour tended to increase during 2007 to 2016 (Fig. 25). During that period of time, there were approximately 10.42% of labour forces who worked at industrial sector. Industrial labor productivity showed the ratio between output (the amount of industrial GDRP) and input (the amount of industrial labour). It was an increasing trend of industrial GDRP in South Kalimantan during 2007 to 2016, as followed by increasing number of labour. The declining productivity during 2012 to 2013 and 2015 to 2016 were caused by the less growth of GDRP compared to the growh of total labour. Based on the Efficiency Wage Theory as stated in [32], worker's productivity is positively correlated with the earned

wages, as long as the wages can fulfill the needs as well as reaching the expected amount. Productivity-based wages system for workers would make them feel more respected and productive as they get highly-valued feedback [33]. Meanwhile, as seen from the company perspective, the productivity-based wages system will boost the competitiveness of products that leads to economical benefits. The minimum wage of South Kalimantan Province for industrial labour were increasing during 2007 to 2016, and the development was consistently

taking place above the national level (Fig. 26). The largest increase of provincial wage happened during 2013 to 2014, as much as 21%. On the other hand, increasing wages could also cause the less absorption of labour, as this could be a compsny strategy to reduce production costs. If companies continue to be suppressed by increasing wage, the production cost will be higher as well. The further impact would be mechanization by shifting human power to machinery, as it has less costs. The condition might lead to labour productivity drops in each year.
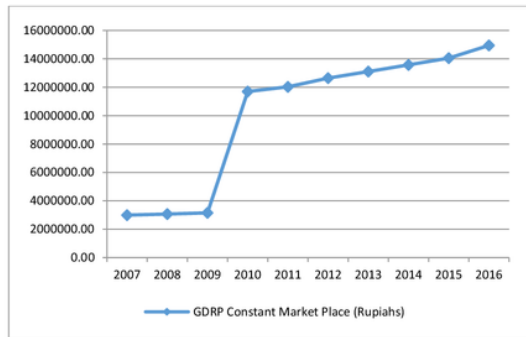

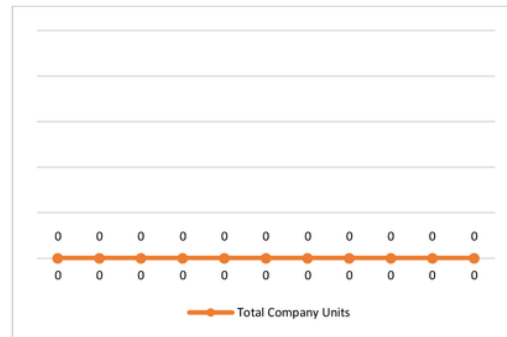Fig. 23 Industrial GDRP Trend of South Kalimantan

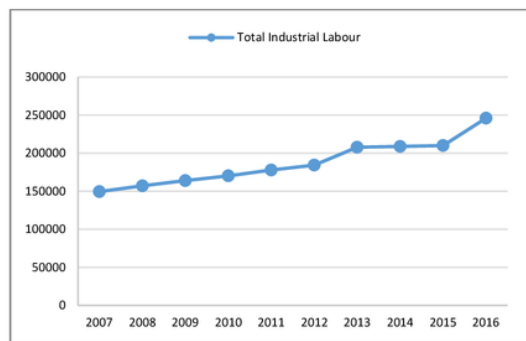
Fig 24. Total Industrial Company Units of South Kalimantan
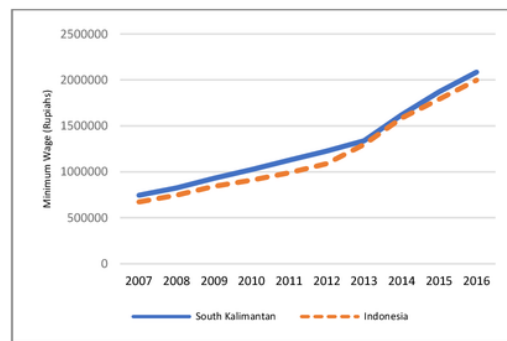

Fig. 25 Total Industrial Labour of South Kalimantan

Fig. 26 Minimum Wage of South Kalimantan

3) *Trade Contribution:* The macroeconomic theory stated that the correlation between export value and economic growth or national income is an identity equation, as exports impacted national income [34]. South Kalimantan mainly exported mining, agriculture, foresty, and plantation commodities as showed by Table 6. It was one of three broadest coal reserve regions [35].

TABLE 6
VALUE OF MAIN EXPORT COMMODITIES OF SOUTH KALIMANTAN

Comodities	Value (000 US $)	
	2015	2016
Rubber	137,870.80	129,531.00
Palm Oil	1,084,130.27	968,405.00
Woods	215,210.39	239,078.00
Rattan	764.83	821.00
Fishery	14,613.27	12,229.00
Coal	4,965,627.65	4,850,132.00
Clinker	2,003.29	6,652.00
Hematite	0.00	30,234.00
Zirkon Sand	6,576.32	15,832.00

The main destination for coal export were India, China, and Japan. Coal export to India and Japan contributed as much as

73% of the total exports [36]. The decrease in export value of coal during 2012 to 2016 was caused by a sharp decline of oil price on the world market despite the rising production. As a result, the performance of coal mining companies in South Kalimantan went down, specifically in 2015, when some companies commited to reduce production [37]. The second biggest export commodity was oil palm, which had increasing value during 2012 (to 2014, though it was then declining after 2014. The oil palm export value tended to rise from 0.08 to 16.06% per year. Oil palm products were mostly exported across continents of Asia, Africa, Australia, America and Europe, which Asian countries dominated the destination. Several countries as the oil palm export destinations were India, Malaysia, Singapore, and Spain [30]. The economic dependency of raw materials, specifically coal might be vulnerable to price fluctuations on the international level. Thus, it was necessary to develop other potential sectors, i.e. agriculture, foresty, fishing, and manufacturing industry. As for industrial sectors, it needed to be improved in terms of spatial parity. It was also related to the absorption labour, specifically in the manufacturing industries. The development should be

directed to the manufacture of potential natural resources so that it would be the export-oriented industrial development. The attempts could be done by improving infrastructures, marketing efforts, as well as labout trainings. The applied Gravity Model in trade analysis considered the regional income and total population as the mass which was inversely proportional with the distance between two regions [38]. Thus, the analysis required the correlation between export value and variables of Gross Domestic Product (GDP), total population, as well as distance of each export destination (Fig. 27). The export-import flows of international trade is showed by trade openness value, which reflects the proportion of trade volume in GDP. There were 64 countries that was export destinations of South Kalimantan during 2011 to 2016, as showed by Fig. 28. The export value and GDP of each destination country during 2012-2016 showed inversely proportional (negative) correlation, which meant that high export values were owned by relatively low-GDP countries. According to Reference [39], the products diversification based on either market types or income groups was one of the indicators used in measuring export development. South Kalimantan had trade partners which included countries with lower middle GDP, or also known as developing countries. The major importer countries of South Kalimantan products were distributed in Asia, as they were experiencing the industrialization leading to high economic growth repeatedly over the past few decades [40].

The development of manufacturing industries in Asian countries were highly dependent on natural resources to be processed, which South Kalimantan was likely available of. Meanwhile, the export value and total population of each destination country during 2012-2016 showed a positive correlation. It meant that countries with large population of had high export value. A positive correlation between the two variables happened to China, USA, and India. Those countries had the largest population in the world that it would rise the demand of goods. Reference [41] showed that the increasing population may affect the country's trade through the export and import activities, regarding to the demands. According to Reference [42], the high number of population would create high demands for commodities. The higher export value would reduce export demands a country's importers [43]. The longer distance between the two countries would cause the more costs needed for the goods transportation, so that the trade intensity would go down. However, there were exception for certain countries with strong interrelation. The special condition occured in countries with high purchasing power—reffered to GDP, which had an influence on rising import demands so that the transportation costs could be covered by a large volume of trade. Therefore, the variable of geographic distance should consider GDP to be shifted into economic distance as for determining the amount of demands [44].
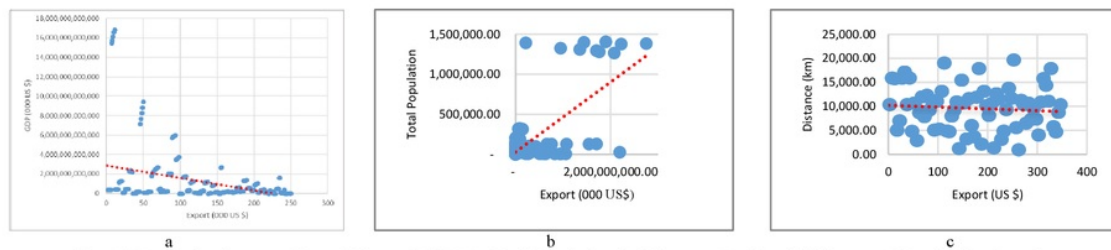

Fig. 27 Correlations between Export Value and GDP (a), Total Population (b), Distance (c) of South Kalimantan's Destination Countries
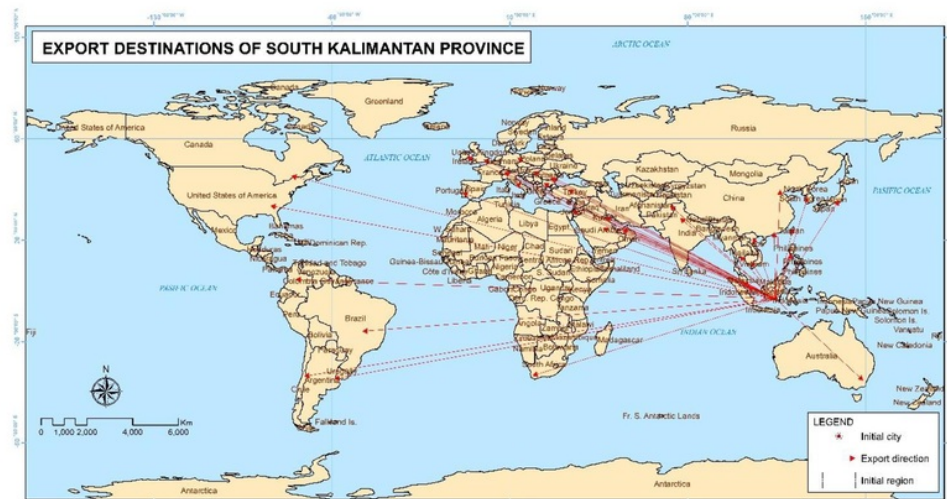

Fig. 28 Map of South Kalimantan Export Destinations

According to [45], the trade openness generally indicated the contributing sectors in the trade flow. South Kalimantan had approximately 24-times higher trade openness value than Indonesia (Fig. 29). The high value was due to the narrower analysis unit (at provincial level), while the analysis of international trade commonly used intercountries level. The decreasing trend of trade openness was influenced by the declining export and import values during 2012 to 2016, while GDP tended to be stable at 1 trillion US$ (Table 7). Trade openness had a positive correlation with export and import values, so that the decreasing import-export values would affect trade openness with similar trend. The value of the exports were likely to decline over the last 5 years due to the world economy and the competitiveness of products. According to [46], the world economy faced to the situation where there were not yet any established any policies to defuse crisis, to decline world oil prices, as well as to rise the US$ exchange rate of the IDR. The condition caused the declining demand for export products in Indonesia, including South Kalimantan. The unstability of global economy was then surpressed by the low competitiveness of export products of South Kalimantan, as in the commodity of oil palm and rubber ([46], [47]). South Kalimantan had been running its international trade by resource-based manufacturing products. The export value of South Africa contributed the most to the GDP. Other countries that had high export value and had been positively contributed to the GDP were China, India, Japan, Singapore, Taiwan, United Kingdom, Philippines, Malaysia, Thailand, South Korea, and USA. According to [48], Indonesia and South Africa had an agreement on international trade in the form counter trade. The scheme involved the intergovernmental role, which targeted energy products in the form of African oil and gas that can be bartered with Indonesian products. Specifically for South Kalimant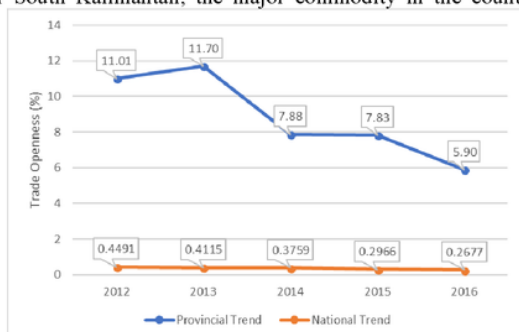an, the major commodity in the counter trade was oil palm. The agreement was politically right, as South Africa was a well-developed country in the African continent. Although South Africa export value was higher than other destination countries, but the trade openness between South Kalimantan and South Africa showed the contrast situation, which indicated that the policies implementation was not optimal yet. There were 9 countries that consistently be the trade partners of South Kalimantan during 2012 to 2016, i.e. USA, China, India, Japan, Germany, Republic of Korea, Singapore, Taiwan, and Thailand. The main factors affecting the cooperation in international trade between Indonesia—particularly South Kalimantan—and those countries was a spatial interrelation and interdependency. Based on Fig. 30, China and Singapore had the best trade relations toward South Kalimantan, followed by India, Japan, Republic of Korea, Taiwan, and Thailand. Meanwhile, the USA and Germany were at the lowest level. Countries with relatively high value of trade openness were geographically located in Asia continent. The shorter distance would directy cause the better spatial interdependency. In addition, most of those countries, such as China, Japan, Republic of Korea, Singapore, Taiwan, and Thailand were members of the Asia Pacific Economic Cooperation (APEC) as well as Indonesia, so that they supported the consistent trade openness value during 2012 to 2016. The decline in trade openness of South Kalimantan with China and Taiwan in the middle of the period was influenced by economic policies that applied in those country territories. According to [46], the countries of China were coundevaluing their currency value, that caused their export values of South Kalimantan were decreasing. In fact, both China and Taiwan were included in the biggest export destinations of South Kalimantan.
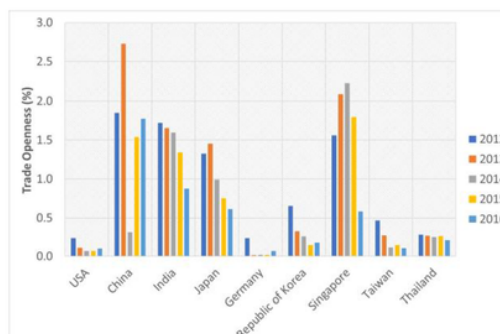

Fig. 29 Trade Openness Trends of South Kalimantan and Indonesia

Fig. 30 Trade Openness between South Kalimantan and Country Relatives

TABLE 7
TRADE OPENNESS VALUE OF SOUTH KALIMANTAN

Year	Export Value (US$)	Import Value (US$)	GDRP (US$)	Trade Openness
2012	10,881,224,989,500.00	3.509,808,828,000.00	1,307,321,613,000.00	11.01
2013	9,501,471,933,100.00	3.082,260,381,000.00	1,075,248,175,000.00	11.70
2014	6,107,534,912,040.00	2.495,287,354,000.00	1,091,366,559,000.00	7.88
2015	6,589,618,617,250.00	1.388,571,703,000.00	1,018,569,772,000.00	7.83
2016	6,281,777,100,000.00	163,209,025,780.00	1,091,502,738,000.00	5.90

E. Sustainable Development of South Kalimantan

Development in South Kalimantan had been focused on the priority regions, so that the spatial disparity occurred between urban and rural areas in human development indicators. The implementation of development in the world is currently referring to the agenda of SDGs which ensures a balance of economic, social and environmental aspects. The accomplishment of development in South Kalimantan that was reviewed by goals, targets and indicators of SDGs became the determination basis of the direction of development in the future.

The poverty of South Kalimantan was the least among Kalimantan region [49]. In 2015, there were 4.99% of the population that lived below the poverty line, and then it was decreasing into 4.85% in 2016 [50]. According to the smaller spatial scope, Banjar Regency had the lowest poverty in South Kalimantan [51]. However, the multidimensional approach showed that more than a third of people were experiencing deprivation [52].

South Kalimantan had abundant natural resources, but irronically could not reach the expectation of people's welfare. The electricity crisis was still going on in South Kalimantan along with that occurred in Central Kalimantan until 2016 [53]. The condition showed that the infrastructure problems had not been managed well, and it reflected that development goals had not been multidimensionally applied. The spatial disparity showed that the total impoverished people in rural areas were twice the ones in urban areas. South Kalimantan had great economic potential as well as the community finances [52] so that infrastructure development programs only required optimization with more appropriate targets.

South Kalimantan had minimum food security problems, due to the availability of food commodities in the form of rice, beans, cassava, and fruits [54]. There were 9.17% of the population had the minimum intake below 1,400 kcal/capita/day in 2015 [50]. The number was then decreasing into 8.86% in 2016. The rising expenditure per capita for foods occurred in 2008, that was 1,743,326.49 IDR. It was then consistently decreasing into 916,708 IDR in 2011. A regular decrease in food consumption since 2009 indicated a shift of goods/commodities purchased by people to the non-food needs. The condition might be influenced by modernization as there were changes in people's life style, including the needs that were no longer focused on foods. The upgraded life style was an implication of the rising social welfare, that reflected the development progress in South Kalimantan.

Demographic issues were still important targets in South Kalimantan development. Health services needed to be improved, specifically those for mothers and children; as well as public perception of accessing both health and education services. The accomplishment of Gender Development Index and Gender Empowerment Index (based on the latest data year 2015) in South Kalimantan also was not yet meeting sustainable development goals.

Reference [55] showed that South Kalimantan produced the largest amount of rice during 1993 to 2015 in Kalimantan region. South Kalimantan had the agricultural value added as much as 30,038 IDR per labour in 2015, then increased to 30,791 IDR per labour in 2016 [50]. The condition indicated an increasing economic value of commodities after being processed, transported or stocked into storage in productions. However, according [17], the rice fields productivity was decreasing in 2014-2015, despite the increasing production. The condition became a barrier to the food self-sufficiency target, as agricultural land resources was the main factor of production required to meet the food needs of people. It could be stated that South Kalimantan had been facing the scarcity threat of productive land resources.

Environmental aspect of sustainable development consists of the adequacy of clean water and feasibility of sanitation. Nearly half of the total households in South Kalimantan did not have access to decent sources of drinking water, so the region was contracted by some bacteria-caused diseases. Decent sanitation services had been used by 60.13% of households in 2015, then increased to 60.89% of households in 2016; but it was still below the national figure (62.14% of households in 2015 and 67.80% of households in 2016).

Economic growth of South Kalimantan at the 2nd quarterl of 2017 was somewhat restrained due to the adjustment of export demand from China, but it was then increased at the last quarter as supported by the rising exports, specifically for coals [56]. The economic growth of South Kalimantan at the 3rd quarter of 2017 was 5.60% and it was projected as 5.37% by 2019. Table 8 showed that the mining and excavation sectors were the largest GDRP contributor of South Kalimantan, followed by agriculture, foresty and fisheries; while the smallest contributors were company service and procurement of electricity and gas sectors.

TABLE 8
SECTORAL CONTRIBUTION IN GDRP OF SOUTH KALIMANTAN

Sectors of GDRP	Contribution by years (%)		
	2015	2016	2017
Agriculture, forestry, and fishery	15	14.92	14.59
Mining and excavation	22.84	20.94	20.75
Manufacturing	13.57	14.17	14.39
Electricity and gas	0.10	0.12	0.13
Water supply	0.39	0.40	0.40
Construction	7.75	7.93	8.01
Wholesale and retail trade; repair of motor vehicles and motorcycles	9.05	9.41	9.68
Transportation and storage	6.24	6.42	6.48
Accommodation and food service activities	1.93	1.96	1.97
Information and communication	3.29	3.41	3.47
Financial activities	3.44	3.56	3.60
Real estate activities	2.23	2.26	2.21
Business activities	0.62	0.65	0.66
Public administration and defence; compulsory social security	6.29	6.18	5.94
Education	4.27	4.53	4.58
Human health and social work activities	1.85	1.95	1.93
Other services activities	1.14	1.20	1.22

South Kalimantan's economic dependency of raw materials, specifically coal might be vulnerable to price fluctuations on the international level. Thus, it was necessary to develop other potential sectors, i.e. agriculture, foresty, fishing, and manufacturing industry. As for industrial sectors, it needed to be improved in terms of spatial parity. It was also related to the absorption labour, specifically in the manufacturing industries. The development should be directed to the manufacture of potential natural resources so that it would be the export-oriented industrial development. The attempts could be done by improving infrastructures, marketing efforts, as well as labout trainings.

South Kalimantan development should be based on the system thinking diagram (Fig. 3). Land, humn, and economic resources must equally be able to support development, so as to guarantee the accomplishment of environmental, social, and economical aspects of SDGs. The main human resources issues in South Kalimantan was the gap that occured in health services as well as gender issues. The health services were not constrained by availability of facilities, but rather by the total medical workers which was less than the regional minimum standard. Meanwhile, the gender issues that caused the difference between men and women in opportunities of accessing education, employment, health, and so on were certainly showed that the applied development had not yet been based on the new paradigm.

The higher pressure on land needed the appropriate solution which should br directed to reduce the intensity of agriculture activities as well as to switch into the developing sector, i.e. manufacturing industry. Physically, the optimization of industrial sector could minimalize the load against agricultural land, because the primary activity in the form of taking raw materials directly was switched into the secondary ona in the form of processing of raw materials into either half-finished or finished goods. Reviewed from the economical perspective, the industrial sector could be more profitable for the region as it was already contributing to GDRP. The optimization of industrial sector was recommended on the basis of financial security in international trade, since it would not dependent on the fluctuations of world oil prices.

IV. CONCLUSION

Human resources in South Kalimantan Province was quantitatively capable of supporting the acceleration of regional development, however there were some indicators that potencially off-track towards the ideal development qualitatively, such as the level of population density, early marriages, maternal and infant mortality, health services, education, and employment. Those indicators allowed poverty which was also influenced by internal factor in the form of income per capita as well as external factors in the form of political dynamics and individual characteristics in local community. Human development was still facing gender disparity issue that would give disadvantages to either men or women on dimensions of health, knowledge, income, and employment. Utilization of land resources in South Kalimantan Province was getting more intensive that it led to more limited natural land. The economic resources of South Kalimantan Province came mainly from the contribution of agricultural sector, while industry and trade became potential sectors based

on the state of industrial labour, wages, and company units that tended to increase during 2007 to 2016.

The regional development of South Kalimantan should follow the basis of new development paradigm which was sensitive to gender and environmental issues, as well as capable of reducing spatial disparities. Regional development needed to balance the aspects of land, human and economic resources in order to reach the sustainable development goals. The handling should be done by improving the quantity and quality of the medical workers as well as people's perception in gender-related topics. At the same time, pressure on land resources should be reduced by switching to the manufacturing industry sector as it would be more profitable and stable.

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