

Overview:

**South Sulawesi's
economy**

By Kevin Evans, Marlene Millott

May 2020

South Sulawesi.

Overview: South Sulawesi's economy

Authors: Kevin Evans and Marlene Millott

Editorial: Tim Fitzgerald

May 2020

You are allowed to copy, distribute, and transmit this work for non-commercial purposes.

Disclaimer

The report is a general overview and is not intended to provide exhaustive coverage of the topic. The information is made available on the understanding that the AIC is not offering professional advice.

While care is taken to ensure the information in this report is accurate, we do not accept any liability for any loss arising from reliance on the information, or any error or omission, in the report.

We do not endorse any company or activity referred to in the report, and do not accept responsibility for any losses suffered in connection with any company or its activities.

The Partnership for Australia-Indonesia Research (PAIR)

The Partnership for Australia-Indonesia Research (PAIR), an initiative of The Australia-Indonesia Centre, is supported by the Australian Government and run in partnership with the Indonesian Ministry of Research and Technology, the Indonesian Ministry of Transport, the South Sulawesi Provincial Government and many organisations and individuals from communities and industry.

Read more at pair.ausindcentre.org

The Australia-Indonesia Centre

The Australia-Indonesia Centre is a bilateral research consortium supported by both governments, leading universities and industry. Established in 2014, the Centre works to advance the people-to-people and institutional links between the two nations in the fields of science, technology, education, and innovation. We do this through a research program that tackles shared challenges, and through our outreach activities that promote greater understanding of contemporary Indonesia and strengthen bilateral research linkages.

To discover more about the Centre and its activities, please visit: ausindcentre.org

The views expressed in this publication are the authors' own and do not represent those of the Australia-Indonesia Centre.

Copyright ©Australia-Indonesia Centre 2020

PRINCIPAL PARTNERS



UNIVERSITAS AIRLANGGA
Excellence with Morality



UNIVERSITAS
GADJAH MADA



UNIVERSITAS
HASANUDDIN



UNIVERSITAS
INDONESIA
Veritas, Probitas, Justitia | Est. 1849



THE UNIVERSITY OF
MELBOURNE



MONASH
University



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA



ITS
Institut
Teknologi
Sepuluh Nopember



THE UNIVERSITY OF
WESTERN
AUSTRALIA

The Principal Partners of the AIC are 11 leading universities: Universitas Airlangga, Universitas Gadjah Mada, Universitas Hasanuddin, Universitas Indonesia, IPB University, The University of Melbourne, Monash University, The University of Queensland, Institut Teknologi Sepuluh Nopember, Institut Teknologi Bandung and The University of Western Australia.

Overview: South Sulawesi's economy

By Kevin Evans and Marlene Millott

When Joko “Jokowi” Widodo became President of Indonesia in 2014, one of his boldest policy moves was to spend big on infrastructure. After decades of under-spending, Indonesia was being left behind with a massive infrastructure gap. In his first five-year national plan (2015-2019), he made accelerating infrastructure investment his priority – a strategy that will continue for his second five-year term.¹

South Sulawesi was a big winner in this approach, as it has become a focal point of the President's infrastructure bonanza in eastern Indonesia. This development will have a transformational impact on the province, which is already among the most influential in the country. This paper provides a snapshot of the economy of South Sulawesi, based on figures provided by the Indonesian Bureau of Statistics.

The economy of South Sulawesi is the largest in eastern Indonesia and a major hub for the region. If Surabaya is the centre of connectivity between Java and eastern Indonesia, Makassar is the actual gate. (See Figure 1.)

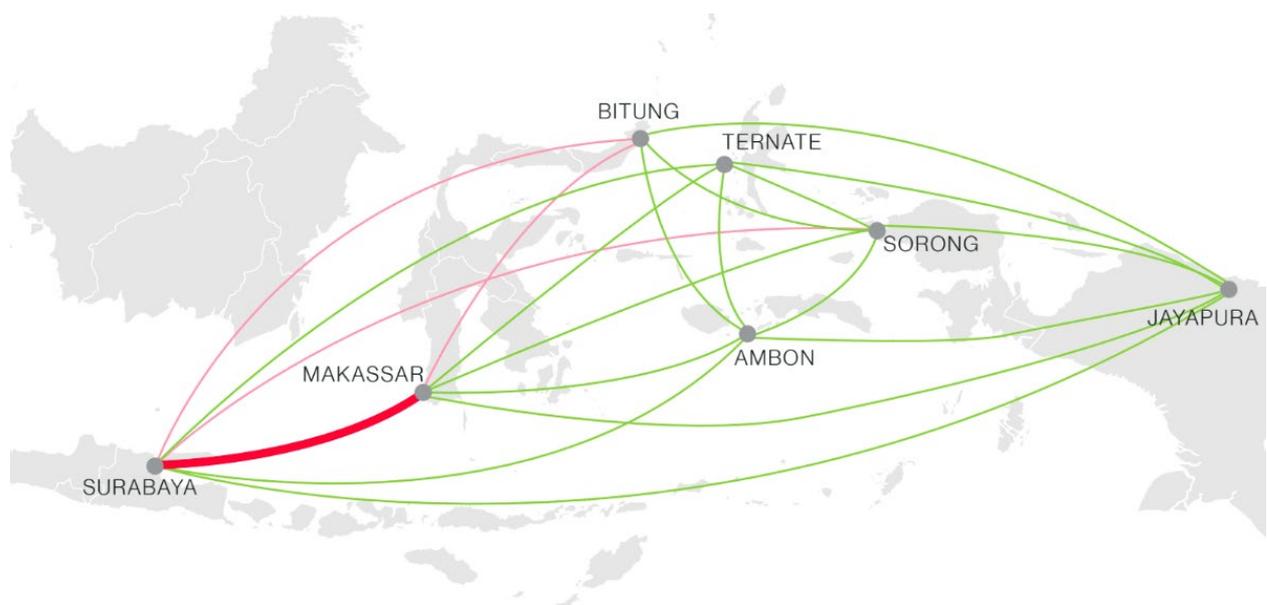


Figure 1². Major connectivity hubs between Surabaya and Makassar for distribution of goods to Eastern Indonesia

The strategic importance of South Sulawesi's economy is bolstered by the size of its population – by far the largest in eastern Indonesia at 8.8 million.³ It is the ninth-largest provincial economy in Indonesia, and from the turn of the century to 2019 the province has enjoyed average annual rates of economic growth of 6.8 per cent. This was a slightly lower annual average than the island of Sulawesi as a whole, which was 7.2 per cent, but well ahead of the national average of 5.2 per cent. Indeed the regional economy of Sulawesi has grown faster than any other big island region of Indonesia this century, reflecting a process of 'catching up' after years of laggard development.

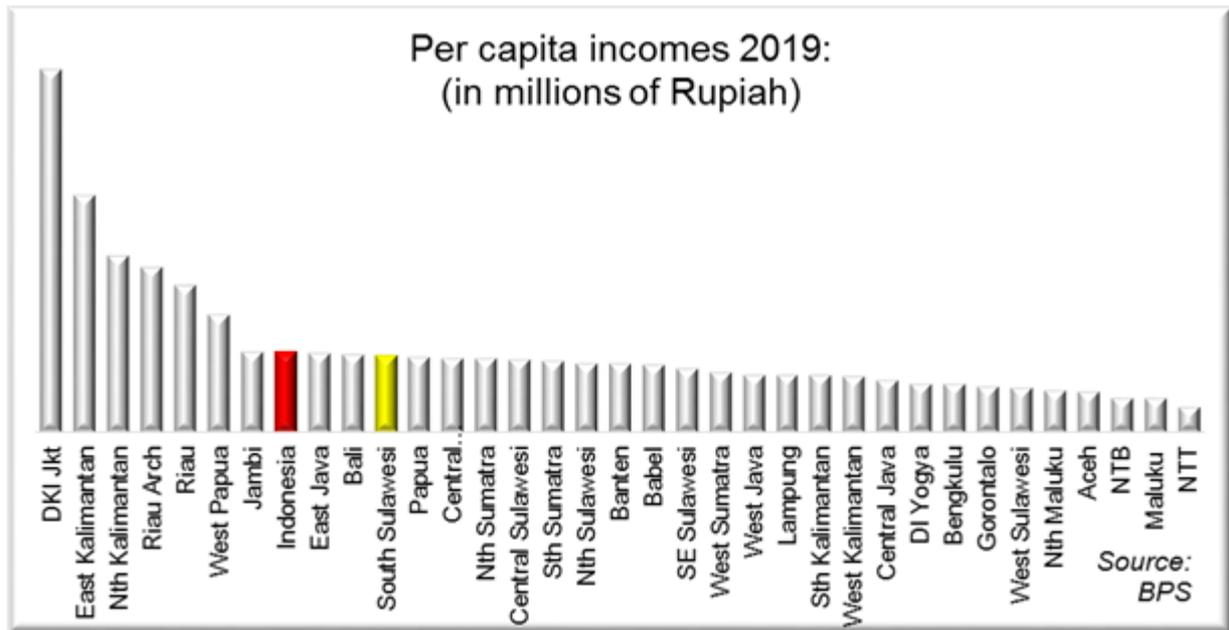


Figure 2: Per capita incomes of Indonesia's provinces.

The Province

South Sulawesi consists of 24 [cities and regencies](#). For the purposes of this report, we have grouped a number of them into six regions for ease of comparison across the province. These 'regions' do not reflect any actual administrative, historic or other form of unity between these regencies. The only exception is the Makassar megapolitan region that has been identified by the government as part of its major urban development plan. Figure 3 (over the page) identifies the clusters of cities and regencies, highlighting the dynamics across the province.

Region	Administrative divisions				
	Area Sq.Km.	Sub- districts	Urban suburbs	Rural villages	
Sulawesi Selatan	45,765	305	771	2,107	
South	Kabupaten Kep. Selayar	904	11	7	81
	Kabupaten Bulukumba	1,155	10	27	109
	Kabupaten Jeneponto	903	11	31	82
	Kabupaten Bantaeng	396	8	21	46
	Kabupaten Sinjai	820	9	13	67
	Total	4,177	49	99	237
	Makassar Megapolitan	Kabupaten Takalar	567	9	24
Kabupaten Gowa		1,883	18	46	121
Kota Makassar		176	15	153	0
Kabupaten Maros		1,619	14	2	80
Total		4,245	56	225	277
West Coast	Kabupaten Pangkajene dan Kepulauan	1,112	13	38	65
	Kabupaten Barru	1,175	7	15	40
	Kota Parepare	99	4	22	0
	Kabupaten Pinrang	1,961	12	39	69
	Total	4,348	36	114	174
Central-East	Kabupaten Bone	4,559	27	44	328
	Kabupaten Soppeng	1,359	8	21	49
	Kabupaten Wajo	2,506	14	48	142
	Kabupaten Sidenreng Rappang	1,883	11	38	68
	Kabupaten Enrekang	1,786	12	17	112
	Total	12,094	72	168	699
Toraja-land	Kabupaten Tana Toraja	2,054	19	47	112
	Kabupaten Toraja Utara	1,151	21	40	111
	Kabupaten Luwu	3,000	21	20	207
	Kabupaten Luwu Timur	6,945	11	3	124
	Kabupaten Luwu Utara	7,503	11	7	166
	Kota Palopo	248	9	48	0

Figure 3⁴: We grouped many of South Sulawesi's cities and regencies into six regions for ease of comparison across the province.

Economic Growth

At the end of 2019, South Sulawesi's gross regional product was worth Rp. 505 trillion (approximately AUD 50 billion), representing 3.1 per cent of the Indonesian economy – compared to 2.3 percent ten years ago. This reflects its much faster average growth than the country as a whole, which saw economic growth of 5.0 per cent in 2019 compared to South Sulawesi's 6.9 per cent. Its high level of growth is largely due to solid performance in several parts of the services industries: fisheries, food and beverage, and basic minerals refining have been the key areas, in both primary and secondary sectors, to enjoy solid and sustained rates of growth.

At a provincial economy level, the Makassar megapolitan region contributes some 47.2 per cent of the total. The second largest regional block is the central-east region which provides 16.5 per cent, followed by the west coast (12.0 per cent) and greater Luwu (11.9 percent). The two smallest regions by economy are the south (9.5 per cent) and finally Torajaland (2.9 per cent) to the north. The provincial administration has the ninth largest budget out of the 34 provinces while the total budget of all the cities and regencies of South Sulawesi is the fifth largest for that administration level out of all the provinces.

The impressive economic performance has seen South Sulawesi's per capita income rise to be the ninth highest of all 34 provinces in 2019, up from fourteenth in 2015. In other measurements of development South Sulawesi still faces certain challenges. The agricultural sector, ever vulnerable to the vagaries of weather and global commodity prices, remains very significant at 21.3 per cent of the economy (versus only 12.7 per cent nationally). Meanwhile the manufacturing sector is very underdeveloped at 13.2 per cent (versus 19.7 per cent nationally). In levels of domestic investment, the province ranks sixteenth out of 34 provinces while for foreign investment it is even lower at eighteenth. This is quite low for such a significant province.

Foreign and domestic investment

In the three years to the end of 2019, investment in South Sulawesi totalled AUD 3.38 billion. This included AUD 1.6 billion in realised foreign investment (PMA) and AUD 1.1 billion in realised domestic investment (PMDN). Domestic investment comprised 32 per cent of the total. Overall these levels of realised investment constitute just 1.5 per cent of total realised investment in Indonesia during these three years.

Investment is largely in minerals and mining, with the province's non-metallic mineral industry attracting 25 per cent of foreign and domestic investments. Mining is not far behind with 23 per cent. Electricity, gas and water attracts 16 per cent and food processing 12 per cent.

Between 2017 and 2019, South Sulawesi captured approximately only 1.1 per cent of national domestic investment. This is disproportionately low as South Sulawesi's population constitutes approximately three per cent of all Indonesians.

The situation with regard to foreign investment is only slightly better with South Sulawesi only capturing 1.8 per cent of national foreign investment during those same three years.

Exports

South Sulawesi's total exports to the world were valued at USD 1.21 billion (AUD 1.85 billion) in 2019. Its major export commodity is nickel – valued at USD 784 million (AUD 1.2 billion) – with the biggest destination being Japan.⁵ While nickel remains the highest earning international export, its contribution to revenue has been on a downward trajectory in recent years. In fact, Indonesia enforced a complete ban on the export of raw nickel ore from 1 January 2020 – two years earlier than planned – as it seeks to lock in supplies for dozens of smelters that are under construction and build up local processing capacity.⁶

Other top export commodities include seed oils (USD 109 million/AUD 167 million); salt, sulphur and lime (USD 61/AUD 93.5 million); and lak, gum and damar (USD 53 million/AUD 81 million).

Export product	FOB value (USD millions)				
	2015	2016	2017	2018	2019
Nickel	790	584	629	777	784
Seed oils	107	85	98	115	109
Salt, sulphur, lime	15	18	32	55	61
Fish and shrimp	82	109	69	37	31
Lak, gum and damar	11	10	8	31	53
Wood wood products	37	20	32	28	10
Cocoa and chocolate	199	160	53	37	28
Coffee, tea and spices	21	18	5	9	8
Residual animal products	17	19	16	19	21
Total Sulsel exports	1,409	1,155	1,021	1,165	1,214
Total Indon exports	150,366	145,186	168,729	180,013	167,497
Sulsel as % of national exports	0.9	0.8	0.6	0.6	0.7

Source: BPS: Statistik Indonesia 2020, BPS Sulsel: Provinsi Sulsel Dalam Angka 2020

Figure 4: The value of export products in South Sulawesi's economy, as measured at the point they became the property of the buyer, also known as the 'free on board' point, or FOB.

In 2019 South Sulawesi's major export destination was Japan (USD 809 million/AUD 1.2 billion) and China (USD 261/AUD 373 million). Australia is the third largest export market (USD 29 million/AUD 41 million) with Malaysia and South Korea rounding up the top five.

Export destination	FOB value (USD millions)				
	2015	2016	2017	2018	2019
Japan	844	630	666	810	809
China	124	108	123	177	261
Australia	8	10	11	26	29
Malaysia	123	102	45	23	26
South Korea	23	20	17	18	18
Philippines	30	9	9	28	16
USA	106	119	72	28	9
Vietnam	17	29	25	20	12
Total Sulsel exports	1,409	1,155	1,021	1,165	1,214
Total Indon exports	150,366	145,186	168,729	180,013	167,497
Sulsel as % of national exports	0.9	0.8	0.6	0.6	0.7

Source: BPS: Statistik Indonesia 2020, BPS Sulsel: Provinsi Sulsel Dalam Angka 2020

Figure 5: The total value of exports from South Sulawesi to various destinations.

Imports

The chart below outlines the prime sources of imports into South Sulawesi from international markets:

Import source	FOB value (USD millions)				
	2015	2016	2017	2018	2019
Singapore	221	111	210	465	368
China	185	269	269	143	127
Argentina	45	68	65	86	112
Thailand	14	16	74	120	88
Malaysia	30	21	26	22	55
Canada	57	52	48	28	44
Ukraine	8	66	25	27	44
Japan	17	16	7	19	42
Germany	25	16	18	6	30
Total Sulsel imports	944	844	1,043	1,184	1,154
Total Indon imports	142,695	135,653	156,986	188,711	170,727
Sulsel as % of national imports	0.7	0.6	0.7	0.6	0.7

Source: BPS: Statistik Indonesia 2020, BPS Sulsel: Provinsi Sulsel Dalam Angka 2020

Figure 6: The value of imported products from various sources in South Sulawesi's economy.

Senior provincial government officials believe the growing role of the Port of Makassar will help support overall export performance by reducing dependency on other domestic ports, such as the Port of Surabaya, for shipping to international markets. Moreover, the fledgling ASEAN Economic Community also stands to open up further opportunities for exporters. While South Sulawesi has superior commodities such as oily grains and medicinal plants, salt, sulfur, lime, fish and shrimp, one issue is 'decreasing and increasing exports'. Academics at Universitas Hasanuddin have observed this phenomenon and point to the need to improve export strategies to help address fluctuation in export value.⁷ Suggestions include maintaining price stability, improving the timeliness of distribution, increasing quality of human resources and improving the quality, productivity and efficiency of commodities.

Economy distribution by sector

The following 2019 data provides a snapshot of the sectors and sub-sectors of the South Sulawesi economy, with comparison to Indonesia as a whole.

Size of sectors and sub-sectors of economy as percentage of GDP, South Sulawesi and Indonesia, 2019		
Sector/sub-sector	Sulsel	Indonesia
Agriculture, Forestry & fisheries	21.3	12.7
- Fisheries	8.4	2.7
- Basic crops	6.3	2.8
- Animal Husbandry	1.2	1.6
Mining and Quarrying	4.6	7.3
- Minerals and quarrying	4.1	2.1
- Hydrocarbons (oil/gas/coal)	0.5	5.1
Manufacturing	13.2	19.7
- Food and beverage	7.4	6.4
- non-metallic quarrying goods	4.9	0.6
- Timber, furniture, pulp and paper	0.3	1.5
- Chemicals and pharmaceuticals	0.0	1.7
- Metals, computers and peripherals	0.3	1.7
- Vehicle and transport equipment	0.0	1.6
Construction	14.2	10.8
Commerce, retail, vehicle sales	14.8	13.0
Transport and warehousing	4.2	5.6
- Air transport	1.8	1.6
- Road transport	1.5	2.5
- shipping	0.2	0.3
- Warehousing and postal services	0.6	1.0
Accommodation and Restaurant	1.4	2.8
Information and communication	5.1	4.0
Financial services	3.7	4.2
Real Estate	3.7	2.8
Education	5.3	3.3
Health and social services	2.0	1.1
Other services	1.4	2.0

Source: BPS and BPS Sulsel

Figure 7: Size of sectors and sub-sectors of economy, as a percentage of GDP, for South Sulawesi and Indonesia in 2019.

The chart indicates that the most significant difference between South Sulawesi and the national economy is that South Sulawesi remains more dependent on primary industries than Indonesia overall. This includes extraction and collection of natural resources such as agricultural, forestry, mining and fisheries. The secondary sector (light and heavy industries) is much smaller. Meanwhile the tertiary and quaternary sectors (transport and warehousing, education, tourism) are almost the same size proportionally as in Indonesia overall.

Some further points to note:

- The secondary sector in South Sulawesi is developing at a modest speed, consisting mainly of the food and beverage sub-sector.

- The most notable element of the manufacturing industry is in non-metallic quarrying goods such as cement production.
- The construction sector is larger in South Sulawesi than in Indonesia overall reflecting the higher than average rates of economic growth enjoyed by the province over the last two decades.
- For similar reasons, the real estate sector is also proportionally more significant.
- In transport and warehousing, it is notable that air transport is the largest sub-sector in South Sulawesi while road transport is larger across Indonesia.
- The shipping sub-sector is smaller in South Sulawesi than it is across Indonesia – surprising considering the historic importance of shipping in South Sulawesi.
- Information and communications, education and health and human services are the most developed areas of the services sector, while tourism and restaurant hospitality are less developed – the provincial administration has identified these sub-sectors as development priorities.

Economic drivers

From 2011 to 2019 key drivers of growth in the economy of South Sulawesi were: agriculture, forestry and fisheries (21.3 per cent of the provincial economy); mining (4.6 per cent); and infrastructure. Each is discussed below. The average annual rates of growth for other sectors were as follows:

- information and communications (11.3 per cent)
- the retail sector and basic mineral refining (both 10.1 per cent)
- fisheries (9.9 per cent)
- financial services (9.4 per cent)
- food and beverage manufacturing (9.2 per cent)
- restaurant and hospitality (9.2 per cent)
- health and related services (9 per cent)
- electricity generation (9 per cent)

Agriculture, forestry, and fisheries

In 2019 the agriculture, forestry, and fisheries sectors accounted for nearly 21.3 per cent of the provincial economy.

Rice

Rice is one of the major commodities, with South Sulawesi the nation's fourth largest production centre after the three larger provinces in Java. The province's rice is not only marketed across eastern Indonesia but also the western parts, including Java – the nation's largest rice producer and consumer. In 2019, the province contributed 9.3 per cent (5.0 million tonnes) of the national rice crop. The key rice bowl in the province is in the central-east region (producing 43.9 per cent), led by the Bone district (15.3 per cent), Wajo (12.3 per cent) and Sidrap (10.2 per cent).

Coffee

Coffee is another key export crop. Indonesia is the world's fourth biggest coffee producer. South Sulawesi is the seventh largest producer nationally and the largest in eastern Indonesia. Two-thirds of its crop is Arabica coffee and the remaining third is Robusta. In 2019 the major coffee growing area was in the district of Enrekang, in the north of the

central-east region (producing 27 per cent), together with two districts in Torajaland that together produce a further 25 per cent.

Cocoa

Cocoa also is a key export crop. Indonesia is the world's third largest cocoa producer, with South Sulawesi producing 15 per cent of Indonesia's total production. The six provinces of Sulawesi produce 59 per cent of the national total. The leading cocoa producing area is Greater Luwu where 47.6 per cent of the province's cocoa is produced, mainly in Luwu (20.7 percent of province total) and North Luwu (20.8 percent). The central-east is the second largest producing area with 30.7 per cent. Small-scale farmers cultivate the majority of cocoa, contributing nearly 97 per cent of total national production, with the rest coming from state-owned and private plantations.⁸

Beef

South Sulawesi has the third largest beef cattle herd in the country, after East Java and Central Java. In 2019, the province had 1.4 million head, about 8 per cent of the total national herd. The sector has experienced strong growth just shy of 10 per cent since 2016. The centre of cattle production is the central-east region (48.5 per cent) led by the Bone district (30.9 per cent). Discussions are underway between the South Sulawesi Provincial Government and the Australian Government to explore opportunities for collaboration. Any developments will come under the Indonesia-Australia Red Meat and Cattle Initiative – a joint initiative set up to improve the supply chain of red meat and cattle and promote a stable trade and investment environment.

Seaweed

Seaweed is a fast-growing commodity and a potential major export earner for South Sulawesi. According to The World Bank, Indonesia is the second largest seaweed producer in the world, producing around 25 per cent of the global total.⁹ Seaweed is widely used as food and medicine and forms an important ingredient in the food, cosmetics, and pharmaceuticals industries. As global demand grows for seaweed and seaweed products, and as prices increase, many villagers have taken up seaweed farming full-time.¹⁰ South Sulawesi alone contributes about 18 per cent of global red seaweed production, which supports the primary livelihood of 40,000 households.¹¹

2019 data indicates that South Sulawesi is the largest producer of seaweed in Indonesia contributing 25.5 per cent of the national total, while collectively the six provinces of Sulawesi contribute 48 per cent of national production. Yet, the vast majority of red seaweed is not processed or refined in South Sulawesi, but exported for processing elsewhere. As a result, farmers remain impoverished, playing a limited role in the global value chain. Within South Sulawesi the largest producer region is Takalar (33.4 per cent) located at the southern border of Makassar. A further 10.2 per cent is located to the north of Makassar at Pangkep. Along the Gulf of Bone major producers include Wajo (14.5 per cent) and Luwu (11.9 per cent). Learn more about seaweed production in Indonesia by reading the AIC report: [Seaweed Nation: Indonesia's new growth sector](#).

Mining

The mining and quarrying sector is a modest contributor to South Sulawesi's economy. In 2019 it made up 4.6 per cent of the provincial economy, well below the national average of 7.3 per cent. The hydrocarbon sector (oil/gas/coal), constitutes 5.1 per cent of the national economy, yet constitutes only 0.5 percent of the South Sulawesi economy. While the hydrocarbon sector is small, it is of note that the Wajo district is home to Indonesia's first

gas-fired power station, managed by PT Energi Sengkang. The prime investor is the Australian-listed company Energy World Corp Ltd. Related investments include the Sengkang Gas Field and a wider Sengkang Liquid Natural Gas (LNG) Project. This also includes a port terminal on the eastern coast of Wajo. The gas project in Wajo began in the mid-1990s and has continued to expand most recently through the development of the Sengkang LNG Project. For the Australian company, this Wajo-based project represents its core business while smaller investments exist in Australia and the Philippines.

The metals and quarrying sub-sector made up 4.1 per cent of the South Sulawesi economy in 2019, considerably higher than in Indonesia overall (2.1 per cent). Quarrying for cement production is an important component of this sub-sector, most notably in the Pangkajene and Kepulauan (Pangkep) regency – along the Makassar-Parepare railway line. Here cement production facilities constitute up to 50 per cent of the regency's economy. There are three cement factories based between Makassar and Parepare. Two are locally owned – one private company, called Bosowa, and a state-owned enterprise, called Tonasa. The third is PT Conch which is owned by a Chinese company. These companies are involved in raw material mining, cement production, logistics, and distribution of sacks of cement.

There is an abundant reserve of nickel and cobalt in Sulawesi to produce lithium-ion batteries used to power up devices and support Indonesia's aspiration to become an electric vehicle hub for Asia and beyond.¹² Production is planned for 2022. The dominant centre of mining is in East Luwu where almost 54 per cent of the local economy comes from mining. This is predominantly nickel mining. An important new investment project, which processes nickel, PT Huadi Nickel-Alloy Indonesia (a joint venture between Chinese and Indonesian investors), commenced initial operation in the Bantaeng district at the start of 2019. It uses nickel imported from mines in Southeast Sulawesi. With curbs on exports planned, and exports linked to construction of smelters, mining companies have rushed to set up processing units. Several overseas firms such as China's Tsingshan Holding Group and PT Vale Indonesia, a unit of the Brazilian mining giant, are planning battery-grade nickel facilities.¹³

Infrastructure

Infrastructure is the third key driver of the South Sulawesi economy. It is an expanding sector set to have a transformational impact on the province and advance its position as the hub for eastern Indonesia. Most of the designated "nationally strategic" development projects in eastern Indonesia are concentrated in South Sulawesi province. Across Sulawesi there are 27 major projects currently planned, compared to just 13 in total earmarked for the provinces of Papua and Maluku.¹⁴

The central government is investing in the construction of a new port in Makassar, which will serve as a major seaport for eastern Indonesia. Once open, this will be the key container terminal for Makassar, while the existing terminal will focus more on people. The new port will be located relatively close to the southern end of the new Makassar-Parepare train line and not too far from Hasanuddin Airport. New industrial sites are also being planned.

Indonesia's first wind power plants were built in 2018 in Jeneponto and Sidenreng Rappang (Sidrap) together with the construction of three large dams (Paselloreng, Karalloe and Pamukkulu).

Hasanuddin Airport in Makassar is undergoing a four stage development plan spanning until 2044 to expand its capacity to 40 million passengers annually, up from 13.5 million in 2018.¹⁵

The new railway line connecting the port towns of Makassar and Parepare is also currently under construction. It will eventually become part of a trans-Sulawesi railway line, spanning from the south to the north of the island.

COVID-19

South Sulawesi, like the rest of the world, is grappling with the impact of the COVID-19 pandemic, including the associated lockdowns and the subsequent impact on economies. The province's growth has slowed significantly, to 3.07 per cent, compared to 6.58 percent at the same time last year.¹⁶

The implementation of working from home and online learning, at the same time, saw the communications and IT sector grow by up to 9.79 per cent. However, there have been contractions in 13 other sectors, including manufacturing, construction and wholesale and retail trade.¹⁷

Very preliminary data for the first quarter of 2020 also suggests realised levels of investment have fallen by 63 per cent from the same time in 2019, reflecting the very early impacts of the COVID-19 crisis.¹⁸

At the time of publication, the Governor of South Sulawesi Nurdin Abdullah was hopeful that shopping malls could reopen shortly with health protocols in place. He emphasised the importance of the economy and jobs, even as the number of positive cases of COVID-19 continues to grow.¹⁹

Note on sources

All statistics unless otherwise stated are sourced from the below reports from the Indonesian Bureau of Statistics' (Badan Pusat Statistik, BPS) national and South Sulawesi offices.

Badan Pusat Statistik, [Statistik Indonesia](#): Statistical Yearbook of Indonesia 2020.

Badan Pusat Statistik Provinsi Sulawesi Selatan, [Provinsi Sulawesi Selatan Dalam Angka](#): South Sulawesi Province in Figures 2020.

-
- ¹ Antara News, 'President Jokowi sets five priorities for his second term', [Antara News](#), 20 October 2019.
- ² Zaman, M.B., Vanany, I., & Awaluddin, D.K., 2015, Connectivity analysis of port in Eastern Indonesia, *Procedia Earth and Planetary Science*, 14, pp. 118-127.
- ³ Indonesian Bureau of Statistics, [South Sulawesi Province in Numbers](#).
- ⁴ South Sulawesi Office of the [State Audit Agency](#) (BPK).
- ⁵ Maupa, H., Sulaiman, S., & Perdana, H., 'Improvement strategy of export performance in South Sulawesi', *Jurnal Ekonomi dan Manajemen*, Vol. 8, No. 1, April 2019.
- ⁶ Listiyorini, E., Indonesia's nickel ban shows resource nationalism on the march', [Bloomberg](#), 2 September 2019.
- ⁷ Maupa, H., Sulaiman, S., & Perdana, H., 2019.
- ⁸ Nisurahmah, A., Nuryartono, N. & Novianti, T., 2017, 'Relation analysis of international cocoa prices and Indonesian cocoa farmers' price after export tax policy on cocoa beans', *International Journal of Developing and Emerging Economies*, Vol. 5, No. 4., December 2017, p. 1.
- ⁹ World Bank Group, 'Seaweed Aquaculture for Food Security, Income Generation and Environmental Health in Tropical Developing Countries', World Bank Group, Washington, 2016.
- ¹⁰ Hajramurni, A., 'Farmers rake in profits from seaweed', [The Jakarta Post](#), July 23 2018.
- ¹¹ [Deloitte](#), 'Lifting 40,000 seaweed farmers out of poverty', 2019.
- ¹² Silviana, Cindy and Suroyo, Gayatri, 'Indonesian plans incentives to boost electric vehicle industry', [Reuters](#), 1 August 2019.
- ¹³ Listiyorini, E., 2019.
- ¹⁴ Emilianus Yakob Sese Tolo, 2019, 'Weighing Jokowi's infrastructure projects in Eastern Indonesia', [New Mandala](#), 28 March
- ¹⁵ Angkasa Pura, 'Appoints Wijaya Karya, Angkasa Pura Airports Begins The Development Of Sultan Hasanuddin International Airport', [Angkasa Pura](#), 20 February 2019.
- ¹⁶ Ronalyw, 'Pertumbuhan Ekonomi Sulsel Terendah', [Berita Makassar](#), 8 May 2020
- ¹⁷ Ibid.
- ¹⁸ [Bisnis.com](#), 5 May 2020.
- ¹⁹ [Makassar Tribune](#), 'Update Corona Sulsel. Pasien Positif Masih Bertambah, Gubernur Isyarkan Beri Izin Mal Buka Lagi', 16 May 2020.