

Regional Public Water Company Business Plan for Sustainable Economic in Makassar City, Indonesia

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Abstract

Water is an essential need for humans, especially to meet daily needs. As many as 63.64% of the population of Makassar City choose a regional public company the fulfilment water needs in Makassar City. The total water demand of Makassar City residents in 2025 is 2,819 litres per second. The research was conducted using a real needs survey, a field activity carried out to record the behaviour of prospective customers and the management of state-owned enterprises. The analysis was carried out to obtain valid information related to customers' behaviour, potential customers, and management of the Makassar City drinking water public company. Good corporate governance is a process and structure used by corporate organs to improve business success and corporate accountability. They are increasing the company's contribution to improving the regional economy in Makassar City in a sustainable manner. The company's business management by prioritizing business ethics and implementing work ethics within the company is intended so that every member of the company can behave, behave, interact and carry out work processes both inside and outside the company. Every organ in the company, namely the owners of capital, the supervisory board, and the board of directors can interact with each other and manage the company as well as possible while taking into account the interests of various parties and adhering to the principles of good corporate governance and compliance with applicable laws and regulations.

Keywords: Business plan; Regional public company; Regional economic sustainability.

1. Introduction

Every organ in the company, namely the owners of capital, the supervisory board, and the board of directors can interact with each other and manage the company as well as possible while taking into account the interests of various parties and adhering to the principles of good corporate governance and compliance with applicable laws and regulations. Article 33

of the 1945 constitution of the Republic of Indonesia states that the earth, water, and natural resources contained therein are controlled by the state to be used as much as possible for the prosperity of the people. This article is the philosophical basis for determining how to manage natural resources (Nasution, 2017), including water resources, in the life of the state. The main right to enjoy the benefits of water resources is the Indonesian people. This is also to the declaration of the United Nations committee on economic (Esteves, 2008), cultural, and social rights which states that water is not only an economic commodity but also a social and cultural good and that access to water is a human right. Based on Government Regulation No. 14 of 1987 concerning the decentralization of central government responsibilities, it is stated that the responsibility to provide clean water supply lies with the local government (Maddatuang et al, 2021).

As a manifestation, the provision of most of the clean water needs in Indonesia is carried out by regional public drinking water companies by Makassar City Regional Regulation No. 7 of 2019, which is found in every Province, District, and City throughout Indonesia. The regional public drinking water company of Makassar City is a regional company (Sahid et al, 2020) as a means of providing clean water which is supervised and monitored by the regional executive and legislative officials. The regional public drinking water company of Makassar City as a regional company is given the responsibility to develop and manage a clean water supply system and serve all consumer groups at affordable prices (Fattah & Rahman, 2013).

The regional public drinking water company of Makassar City as one of the regional companies responsible for providing clean water every year plans a strategic work program (Fichter & Tiemann, 2020) in fulfilling its function as a public service by having 2 orientations, namely social orientation, and business orientation (Permana et al, 2015). The regional public drinking water company of Makassar City strives to continue to exist in providing the best service to its customers, in line with national policies (Surya et al, 2020), the development of Makassar City and its surroundings in particular, and South Sulawesi Province to support economic growth (Tiasmalom et al, 2021). It is realized that the available resource capacity and production system capabilities are still limited and need to be continuously improved, for this reason; it must be managed with good and professional management to continuously meet the needs of clean water for the community and increase customer satisfaction to reach a metropolitan city.

Work programs, budgets, and integrated strategic planning can be used by the management as a reference for making investment development decisions and providing the best service to the community (AP et al, 2019). Strategic planning is built and developed systematically in the form of a business plan as a charge in accelerating economic growth during the Covid-19 period (Karim et al, 2021). The company's development plan is compiled in an official document that serves as a guide for the direction to achieve the goals of the company's vision and mission (Rahman et al, 2018). The targets to be achieved are planned systematically in the short, medium, and long term. It is hoped that with the Makassar City drinking water company business plan (Santoso & Larasati, 2020), the company's management has a reference in the context of asset management and company development to improve its services to the wider community. Thus, the Makassar City public drinking water (Djaing et

al, 2020) company can find strategies and programs based on an analysis of opportunities, and challenges and are professionally proactive in carrying out the company's main tasks.

The establishment of the Company aims to: First, provide clean water and/or drinking water services (Kirono et al, 2014) to meet the needs of the community on an ongoing basis by prioritizing the equitable distribution of services taking into account the affordability of the community based on good corporate governance (Nasir et al, 2020). Second, providing benefits for regional economic development (Zainal et al, 2018) by increasing regional original income (Furlong & Bakker, 2010). The development program (Wardono et al, 2019) that has been outlined in the business plan is expected to be useful as a reference by the management in the decision-making process (Tajuddin, 2021) and its follow-up so that customer satisfaction can be fulfilled and services to the community can be improved (Pulubuhu & Alhaqqi, 2019). Production resources and human resources have been identified so systematically that the preparation of a schedule of needs can be measured following the planned schedule. The development of the business world today (Erwin et al, 2017) provides the possibility for company management to pay attention to the principles of work motivation for employees through a key performance indicator system based (Tjandraatmadja et al, 2013) on the work performance of company employees.

2. Literature Review

Astronomically, Makassar City is located between 119024'17'38" East Longitude and 508'6'19" South Latitude, based on its geographical position, Makassar City has boundaries: North - Maros Regency; South – Gowa Regency; West – Makassar Strait; East – Maros Regency. The area of Makassar City is recorded at 175.77 km² which includes 15 Sub-districts, administratively Makassar City consists of 15 Sub-districts (Matalatta, 2021), namely; The Sub-districts of Mariso, Mamajang, Tamalate, Rappocini, Makassar, Ujung Pandang, Wajo, Bontoala, Ujung Tanah, Sangkarrang Islands, Tallo, Panakkukang, Manggala, Biringkanaya, and Tamalanrea. With the recorded number of wards as many as 153 wards, 996 community units, and 4,978 neighbourhood units.

In the following, it can be seen that the contribution and dividends of regional public companies in Makassar City in supporting the sustainability of economic growth from 2014 – 2019.

Table 1: Dividends from Regional Public Companies to the Makassar City Government

Year	Profit (IDR)	Local revenue contribution (IDR)	Dividend (IDR)
2014	24,020,184,446.51	5,000,000,000	-
2015	47,622,973,849.00	5,700,000,000	-
2016	64,043,873,413.00	6,000,000,000	-
2017	75,620,119,371.00	-	35,224,130,377.15
2018	40,490,733,785.00	-	41,591,065,653.50
2019	38,036,447,453.47	-	9,920,229,777.00
Amount		16,700,000,000.00	86,735,425,807.65
Total		103,435,425,807.65	

Source: Regional public drinking water company Makassar City, 2021.

Based on the minutes of the handover of the Makassar City Government's non-cash capital participation to the Makassar City drinking water company for the 2016 fiscal year, Number: 900/96/BPKA/XII/2016 and Number: 013/B.3D/XII/2016, Handover from the Government Makassar City non-cash capital investment of IDR 235,845,582,414.00 to local water companies in Makassar City. Details of capital as of December 31, 2019, as follows:

Table 2: Sources of Non-cash Equity Participation

No.	Source of capital	Total (IDR)
1	Makassar City government	253,453,576,798.00
2	Central government	14,611,271,563.00
3	Regional government participation whose status has not been determined	156,638,802,326.00
4	Donation	1,022,961,943.00
Total		425,726,612,630.00

Source: Regional public drinking water company Makassar City, 2021.

The performance of the regional public drinking water company in Makassar City is assessed based on the assessment guidelines according to the Decree of the Minister of Home Affairs Number 47 of 1999 dated May 31, 1999. This performance assessment is divided into three parts, namely financial performance, operational performance, and administrative performance (Strothotte & Wüstenhagen, 2005). The Makassar City Government is very enthusiastic to be at the forefront of South Sulawesi as the Capital of the Province. The economic growth rate of Makassar City should be proud of because it has exceeded the target and exceeded the economic growth rate of South Sulawesi Province. The active role of the government in developing the industrial and private sectors is one of the determining factors for the high pace of the economy. The Makassar City Government always provides full support in providing the best service for growth in all sectors to be at the forefront.

The city of Makassar is very sure that to achieve the vision it takes a mission that becomes a pattern of work in government, the city of Makassar strives to always be a clean, comfortable and sustainable city, with participation from all urban segments, in this case, is the stockholders (government, legislature, and society) must always work hand in hand to create a clean Makassar city and social environment. The convenient concept is the accumulation of the resulting output. One of the orientations is how to optimize the role of economic potential such as regional public (Nohong, 2018) drinking water companies to have a positive impact on economic growth to encourage an increase in local revenue in Makassar City. Economic growth and strengthening must be integrated with all economic networks in supporting national economic growth (Dyanasari et al, 2021). Strengthening the economic concept must cover the basic needs of the community in a fundamental way that is fully systemized in an integrated regional economic network circle (Astuti, 2015) with the basic needs including the availability of clean water, electricity, and other things that support the economic improvement of Makassar City.

3. Methods

This research was carried out in all areas of Makassar City in 14 Sub-districts; the sample criteria in this study were that the community as potential customers, both domestic and non-domestic, had not yet received a direct connection to drinking water. The data collection method uses the simple cluster sample method, with respondents from 4 service areas of the Makassar City public drinking water Company to survey the needs of prospective customers, and the method used is the Slovin formula (Ariola, 2006).

$$n = 1 + \frac{N}{1+N^2}$$

n = Total of samples

N = Total population

e = Fault tolerance limit (error margin)

The number of samples of respondents to research the needs of prospective customers is as follows:

- a. Service area I = 109 respondents
- b. Service area II = 110 respondents
- c. Service area III = 110 respondents
- d. Service area IV = 110 respondents

Number of respondents for research needs of prospective customers and prospective customers:

$$n = 1 + \frac{N}{1+N^2}$$

n = Total of samples

N = 174,593 prospect person

e = 5 %

$$n = \frac{1 + \frac{.5}{.5 \times 5\%^2}}{1 + \frac{.5}{.5 \times 5\%^2}}$$

$$n = \frac{7 + \frac{P.}{1+(7 \times 0,0)}}{1+(7 \times 0,0)}$$

n = 439 respondents

The gender distribution of the population interviewed was 56.5% female or 226 respondents, while 43.5% male or 173 respondents spread across 14 mainland Sub-districts of Makassar City.

4. Results and Discussion

Broadly speaking, the performance assessment of the Makassar City public drinking water company is carried out by an independent external examiner, covering the achievement of service coverage, achievements in quality, quantity, continuity, and affordability. Financial reports are one of the most important sources of information for a company in measuring the

sustainability of its economic performance. Financial statements are used to find out about the financial condition of a company which will later be used as a basis for decision-making. Financial statements are required by all companies, both profit-oriented and non-profit-oriented companies. Financial statements can also be used to assess the performance of a company in a certain period. The assessment of the financial performance of the Makassar City public drinking water company is carried out concerning the Ministry of Home Affairs Number 47 of 1999.

Performance appraisal on the financial aspect of the audit results by independent external auditors can support the sustainability of economic growth in Makassar City as shown in the following table:

Table 3: Financial Aspect Performance Appraisal

No.	Aspect	Performance (weight and value) in billion (IDR)			
		2016	2017	2018	2019
	Financial aspect				
1	Profit to earning assets ratio	23.79	24.82	14.62	12.62
2	Profit to sales ratio	27.65	32.54	17.19	16.35
3	The ratio of current assets to current liabilities	4.19	3.10	2.60	3.60
4	Long-term debt to total debt ratio	-	-	-	-
5	The ratio of total assets to total debt	8.88	6.62	6.54	8.09
6	The ratio of operating expenses to operating income	0.77	0.82	0.86	0.86
7	The ratio of operating profit before depreciation expense to principal and interest due	-	-	-	2.77
8	The ratio of productive assets to sales of water	1.25	1.38	1.22	1.35
9	Debt collection period	33.92	35.85	34.19	36.53
10	Billing effectiveness	98.29	98.36	97.61	92.55
	Value of financial performance	35.25	35.25	33.00	33.00

Source: Author's findings, 2021.

The revenue achievement of regional public drinking water companies in Makassar City until December 2019 was IDR 319,725,229,504, as presented in the following table:

Table 4: Earnings as of December 2019

Description	Income until December 2019 (IDR)
Water	298,828,187,706
Non-water	13,011,595,816
Etc.	7,885,445,982
Total	319,725,229,504

Source: Author's findings, 2021.

Water revenue is income from the sale of water, while non-water income is income from new connection fees, fines, seals, and reopening. Other income is the result of other income in the form of demand deposit/savings interest and deposit interest income. While the realization of operational costs up to December 2019 as a whole was IDR 268,215,388,364 as shown in table 4 below:

Table 5: Cost as of December 2019

Description	Fees until December 2019 (IDR)
Direct operating costs:	
1. Source	4,908,999,455
2. Processing	114,242,177,688
3. Transmission & distribution	73,855,899,987
Indirect costs of business:	
1. General	75,208,311,234
Total	268,215,388,364

Source: Author's findings, 2021.

Achievement of profit realization from 2016, 2017, 2018, and 2019 is presented in the following table:

Table 6: Profit (Loss) as of December 2019

Description	2016 (IDR)	2017 (IDR)	2018 (IDR)	2019 (IDR)
Operating revenues:				
1. Water Revenue	287,422,093	293,696,684	301,018,570	298,828,188
2. Non-water income	17,316,319	11,438,128	12,335,105	13,011,596
Total revenue	304,738,412	305,134,812	313,353,675	311,839,784
Direct operating expenses:				
1. Load of water source	3,469,629	3,622,740	3,642,316	4,908,999
2. Water treatment load	106,226,372	115,726,902	114,398,670	114,242,178
3. Transmission & distribution load	58,119,307	66,097,231	80,559,618	73,855,900
Total direct operating expenses	167,815,308	185,446,873	198,600,604	193,007,077
Gross profit (loss) of business:				
1. General & administrative expenses	66,435,925	69,426,456	70,693,625	75,208,311
2. Loan interest expense	2,201,531	-	-	-
Total profit (loss)	68,637,456	69,426,456	70,693,625	75,208,311
Net profit (loss):				
1. Other income	17,841,744	51,136,468	10,255,415	7,885,446
2. Miscellaneous expenses	(792,163)	(801,353)	(439,256)	(512,176)

Total other income & expenses	17,049,581	50,335,115	9,816,160	7,373,270
Profit (loss) before tax:	85,335,229	100,560,598	53,875,605	50,997,666
1. Estimated tax	(21,291,356)	(24,940,479)	(13,384,872)	(12,961,218)
Profit (loss) after tax	64,043,873	75,620,119	40,490,734	38,036,447

Source: Author's findings, 2021.

Total Assets obtained by regional public drinking water companies in Makassar City from 2016, 2017, 2018, and 2019, as presented in the following table:

Table 7: 2016 – 2019 balance sheet

Description	2016 in thousand (IDR)	2017 in thousand (IDR)	2018 in thousand (IDR)	2019 in thousand (IDR)
Assets:				
1. Current assets	178,240,011	202,319,677	165,831,018	163,113,095
2. Fixed assets	596,227,959	644,139,807	672,254,445	740,396,170
3. Accumulated depreciation	(415,727,313)	(441,337,028)	(469,594,003)	(499,441,490)
4. Total fixed assets	180,500,646	202,802,779	202,660,441	40,954,679
5. Other assets	31,168,943	52,244,115	98,070,161	26,958,885
Total fixed assets	570,410,246	660,169,350	669,222,062	471,981,339
Liabilities:				
1. Current liabilities	42,540,000	65,169,950	63,826,092	53,259,067
2. Long-term liabilities	-	-	-	-
3. Equity	335,285,128	366,074,564	353,700,449	377,767,593
Total liabilities	377,825,128	431,244,514	417,526,541	431,026,660

Source: Author's findings, 2021.

Operational aspects of several indicators, which will be improved, are service coverage from 72 in 2019 to 90 in 2025. The reduction in water loss is targeted at the level of 33% because from 2016 to 2018 there was a decrease in NRW from 49% in 2016, 48% in 2017, and 47% in 2018. Customer service will be further improved with a one-day service program for resolving complaints and a maximum of 6 working days for new subscriptions. This can be seen in the results of performance assessments for the last three years, namely customer service including meter calibration and installation speed for new prospective customers.

The need for funds to optimize, rehabilitate, and develop a regional public water company in Makassar City requires a total cost of IDR 810,221,000,000. The funding is sourced from the budget of the regional public drinking water company in Makassar City, amounting to IDR 710,621,000,000, and in 2023 will receive financial assistance from the Central Government through the state budget of IDR 99,600,000,000 for the construction of a drinking water

supply system in the Barombong area. Details of the source of funds for each fiscal year of the Makassar City public drinking water company can be seen in the following table:

Table 8: Financing the optimization, rehabilitation, and development of public water companies in Makassar City, 2020 – 2025

Sources of funding	Projected year in billion (IDR)						Total
	2020	2021	2022	2023	2024	2025	
The public drinking water company	96.565	66.674	68.673	211.769	110.436	156.505	710.621
State budget	-	-	-	99.600	-	-	99.600
Total	96.565	66.674	68.773	311.369	110.436	156.502	810.221

Source: Author's findings, 2021.

The allocation of funding plan is allocated to the program needed for 5 years (2020 – 2025) in; (1) program of activities in the technical and operational fields; (2) program of activities in the field of organization and management; (3) activity programs in the field of human resource development; (4) program of activities in the field of finance and financial analysis, and (5) program of activities in the field of service, marketing, and communication. Financial analysis is an activity of assessing investment projections, operating, maintenance, administrative and general costs, on all revenues, whether financially feasible or not, taking into account the assumptions that have been agreed upon.

The basic assumption is a collection of several variables, both macro-micro and technical-non-technical that significantly affect the analysis of financial projections. Regional public drinking water companies in Makassar City in analysing financial projections for 2020-2025 use financial projection calculations, namely by calculating several financial indicators, operating and capital costs, income, and inflation rates. The data is needed to establish the basic assumptions. First, the macro aspect, includes; 1) local and regional economic growth rates; 2) the population growth rate in Makassar City for the 2020-2025 period is assumed to be 1.2% per year; 3) per capita income level; 4) Makassar City regional minimum wage in 2020 is IDR 3,191,572 per month and is assumed to increase by 5% per year.; 5) the inflation rate used in the financial projections for the procurement of goods and services as well as other routine operating costs is assumed to be in the range of 2.5% to 10% per year, and 6) applicable tax regulations. Second, the micro aspects include; 1) household water consumption; 2) non-household water consumption; 3) the average rate for households; 4) the average water tariff for non-households, and 5) unbilled water level.

The drinking water supply system development program planned by the regional public drinking water company of Makassar City is in the context of improving services to the community. The program planned by the regional public drinking water company of Makassar City is directed to support the sustainability program of national economic growth. Broadly speaking, the proposed program is an optimization program for the rehabilitation of the existing drinking water supply system and development. It is planned for investment in

handling optimization-rehabilitation and development, the investment value required until 2025 is IDR The 709,176,000,000 programs for optimization-rehabilitation of drinking water supply systems and developments planned by the Makassar City public water supply companies above cover the entire service area of Makassar City's public drinking water companies which currently serve 174,593 active customers as of December 31, 2019, and the addition of new connections until 2025 as many as 78,415 direct connections.

5. Conclusion

Performance targets in this case are defined as target performance targets, both strategic targets, program targets, and activity targets equipped with indicators. Target performance targets indicate the level of specific performance targets achieved by the regional public drinking water company of Makassar City which includes programs and activities within a predetermined period. In the preparation of performance targets at both the activity and program levels, these criteria are based on the following criteria: First, the targets describe the quantitative figures and units achieved from each target performance indicator. Second, target setting is relevant to the performance indicators, logical, and based on clear baseline data. Presidential Regulation Number 59 of 2017 concerning the Implementation of Sustainable Development Goals has mandated the target of sustainable development goals (SDGs), namely the provision of access to safe drinking water for all communities by 2030.

In supporting the fulfilment of this target, the regional public drinking water company of Makassar City has developed the concept of a drinking water security plan as a policy and program for safe drinking water according to the definition of SDGs. The availability of water in Indonesia reaches 3.9 trillion m³ per year, but only 691.3 million m³ per year can be utilized, currently available at 17.69%. Of the water that can be utilized, only about 25.3% has been utilized, mainly around 80.5% to meet irrigation needs, while the rest is for domestic, urban, and industrial needs. This shows that there is still a large amount of water that has not been utilized. The supply of raw water is increasingly limited due to decreased discharge from water sources and the high rate of sedimentation in water reservoirs, such as dams, retention basins, lakes, and lakes. On the other hand, the demand for raw water is getting higher due to the rapid population growth and industrial development, the development of human activities, and the inefficient pattern of water use.

References

6. AP, A. L. S., Liu, Y., & Asano, J. (2019). Influence of Usage Alteration to the Spatial Occupancy of Urban Areas Case Study: Street Vendors on AP Pettarani Street Tamalate Sub-District, Makassar, Indonesia. *Urban and Regional Planning Review*, 6, 64-83. <https://doi.org/10.14398/urpr.6.64>
7. Ariola, M. (2006). *Principles and Methods of Research*. Rex Bookstore Inc., Sampaloc.
8. Asmeri, R., Alvionita, T., & Gunardi, A. (2017). CSR disclosures in the mining industry: Empirical evidence from listed mining firms in Indonesia. *Indonesian Journal of sustainability accounting and Management*, 1(1), 16-22. <https://doi.org/10.28992/ijSAM.v1i1.23>

9. Astuti, T. (2015). The role of manufacturing industrial activity in the environmental pollution in South Sulawesi. *Journal of Economics and Behavioral Studies*, 7(2 (J)), 116-123. [https://doi.org/10.22610/jebs.v7i2\(J\).569](https://doi.org/10.22610/jebs.v7i2(J).569)
10. Djaing, H., Sangkala, M. R., & Yani, A. A. (2020). Public Satisfaction on Water Utility Services in Makassar Urban Community. *Journal of Governance*, 5(1), 1-19. <http://dx.doi.org/10.31506/jog.v5i1.7722>
11. Dyanasari, D., Siswadi, B., Hindarti, S., Askafi, E., & Mulyaningtiyas, R. D. (2021). Improving the strategy to create a profitable and sustainable business in the era of economic competition in Indonesia. *Linguistics and Culture Review*, 5(S4), 2287-2298. <https://doi.org/10.21744/lingcure.v5nS4.1973>
12. Erwin, E., Bintoro, A., & Rusita, R. (2017). Keragaman Vegetasi Di Blok Pemanfaatan Hutan Pendidikan Konservasi Terpadu (HPKT) TAHURA Wan Abdul Rachman, Provinsi Lampung. *Jurnal Sylva Lestari*, 5(3), 1-11. <https://doi.org/10.23960/jsl3595-103>
13. Esteves, A. M. (2008). Evaluating community investments in the mining sector using multi-criteria decision analysis to integrate SIA with business planning. *Environmental impact assessment review*, 28(4-5), 338-348. <https://doi.org/10.1016/j.eiar.2007.09.003>
14. Fattah, S., & Rahman, A. (2013). Analysis of regional economic development in the regency/municipality at South Sulawesi province in Indonesia. *Journal of Economics and Sustainable Development*, 4(1), 1-9.
15. Fichter, K., & Tiemann, I. (2020). Impacts of promoting sustainable entrepreneurship in generic business plan competitions. *Journal of Cleaner Production*, 267, 122076. <https://doi.org/10.1016/j.jclepro.2020.122076>
16. Furlong, K., & Bakker, K. (2010). The contradictions in 'alternative' service delivery: governance, business models, and sustainability in municipal water supply. *Environment and Planning C: Government and Policy*, 28(2), 349-368. <https://doi.org/10.1068/c09122>
17. Karim, A., Musa, C. I., Sahabuddin, R., & Azis, M. (2021). The Increase of Rural Economy at Baraka Sub-District through Village Funds. *The Winners*, 22(1), 89-95. <https://doi.org/10.21512/tw.v22i1.7013>
18. Kirono, D. G., Larson, S., Tjandraatmadja, G., Leitch, A., Neumann, L., Maheepala, S., ... & Selintung, M. (2014). Adapting to climate change through urban water management: a participatory case study in Indonesia. *Regional Environmental Change*, 14(1), 355-367.
19. Maddatuang, B., Syukur, A., Indar, S. H., & Karim, A. (2021). The rural economic growth in south Sulawesi drives the national Sustainable Development Goals. *International Journal of Management (IJM)*, 12(3), 2021. DOI: 10.34218/IJM.12.3.2021.002
20. Matalatta, S. (2021). Environmental Damage Impact on Economic Losses in Sulawesi-South Society. *Saudi J Econ Fin*, 5(2), 51-55. DOI: 10.36348/sjef.2021.v05i02.003
21. Mukhtaruddin, M., Ubaidillah, U., Dewi, K., Hakiki, A., & Nopriyanto, N. (2019). Good corporate governance, corporate social responsibility, firm value, and financial performance as moderating variable. *Indonesian Journal of Sustainability Accounting and Management*, 3(1), 55-64. <https://doi.org/10.28992/ijsam.v3i1.74>

22. Nasution, A. (2017). The government decentralization program in Indonesia. In *Central and local government relations in Asia*. Edward Elgar Publishing. <https://doi.org/10.4337/9781786436870.00017>
23. Nazir, M., Murdifin, I., Putra, A. H. P. K., Hamzah, N., & Murfat, M. Z. (2020). Analysis of economic development based on environment resources in the mining sector. *The Journal of Asian Finance, Economics and Business*, 7(6), 133-143. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.133>
24. [Nohong, M.](#) (2018), "The moderating effect of efficiency and non-market capability in relationship between government involvement and resources to performance of water supply companies (PDAM) in Sulawesi, Indonesia", *International Journal of Law and Management*, Vol. 60 No. 2, pp. 402-412. <https://doi.org/10.1108/IJLMA-11-2016-0117>
25. Permana, A. S., Towolioe, S., Abd Aziz, N., & Ho, C. S. (2015). Sustainable solid waste management practices and perceived cleanliness in a low-income city. *Habitat International*, 49, 197-205. <https://doi.org/10.1016/j.habitatint.2015.05.028>
26. Pulubuhu, D. A. T., & Alhaqqi, M. S. (2019, October). Planned behaviour theory for the science agency: the role of youth for sustainable waste management. In *IOP Conference Series: Earth and Environmental Science* (Vol. 343, No. 1, p. 012101). IOP Publishing.
27. Rahman, H. Z., Berawi, M. A., Susantono, B., Miraj, P., Petroceany, J. S., & Maya, R. (2018). Investigation of an operation and maintenance framework in the railway industry: a case study of the makassar-parepare. *International Journal of Technology*, 9(3). <https://doi.org/10.14716/ijtech.v9i3.813>
28. Sahid, A., Amirullah, I., Rahman, A. A., Senaman, A., & Yusriadi, Y. (2020). The role of the government in supporting the duties of local governments in Makassar City. *International Journal of Scientific and Technology Research*, 9(3), 3774-3777.
29. Santoso, P. Y., & Larasati, A. (2020). IMPLEMENTASI CORPORATE SOCIAL RESPONSIBILITY (CSR) DALAM MEMPERTAHANKAN KEBERLANJUTAN OPERASIONAL PERUSAHAAN. *Jurnal Pustaka Komunikasi*, 3(2), 241-250. <https://doi.org/10.32509/pustakom.v3i2.1127>
30. [Strothotte, T.G.](#), & [Wüstenhagen, R.](#) (2005), "Structure of Sustainable Economic Value in Social Entrepreneurial Enterprises", [Vinig, G.T.](#) and [Van Der Voort, R.C.W.](#) (Ed.) *The Emergence of Entrepreneurial Economics (Research on Technological Innovation, Management and Policy, Vol. 9)*, Emerald Group Publishing Limited, Bingley, pp. 129-140. [https://doi.org/10.1016/S0737-1071\(05\)09008-6](https://doi.org/10.1016/S0737-1071(05)09008-6)
31. Surya, B., Syafri, S., Sahban, H., & Sakti, H. H. (2020). Natural resource conservation based on community economic empowerment: Perspectives on watershed management and slum settlements in Makassar City, South Sulawesi, Indonesia. *Land*, 9(4), 104. <https://doi.org/10.3390/land9040104>
32. Tajuddin, I. (2021). The Influence of Inflation, Domestic Investment and Foreign Investment on Economic Growth. *Point Of View Research Economic Development*, 2(2), 68-79.
33. Tiasmalomo, R., Rukmana, D., & Putra, R. A. (2021). Sustainability analysis of ornamental plants farming in Makassar. *Ornamental Horticulture*, 27, 589-598. <https://doi.org/10.1590/2447-536X.v27i4.2352>

34. Tjandraatmadja, G., Kirono, D., Neumann, L., Larson, S., Stone-Jovicich, S., Barkey, R., ... & Selintung, M. (2013, December). Assessing urban water security and climate change adaptation in Makassar, Indonesia. In *Proceedings of the International Congress on Modelling and Simulation (MODSIM13), Adelaide, Australia* (pp. 2235-2241).
35. Wardono, B., Muhartono, R., Hikmayani, Y., Apriliani, T., & Hikmah, H. (2019). Analisis Prospektif Peran Aktor dalam Strategi Formulasi Pembangunan Perikanan di Kabupaten Natuna. *Jurnal Sosial Ekonomi Kelautan dan Perikanan*, 14(2), 179-195. <http://dx.doi.org/10.15578/jsekp.v14i2.8241>
36. Zainal, H., Parinsi, K., Hasan, M., Said, F., & Akib, H. (2018). The influence of strategic assets and market orientation to the performance of family business in Makassar City, Indonesia. *Academy of Strategic Management Journal*, 17(6).