

The socio-economic characteristics of industrial areas in West Sumbawa, Indonesia

Ibrahim^{1*}, I Zitri¹ and I N Pratama¹

¹ Universitas Muhammadiyah Mataram, Mataram, Indonesia

*Corresponding author email: ibrahimali.geo@gmail.com

Abstract

Industrial estates, in particular, should not only be managed with a focus on extraction and profit but should also pay attention to the socio-economic impacts of the community. The purpose of this research is to analyze the socio-economic characteristics of industry in West Sumbawa Regency, Indonesia. This research uses quantitative research with a survey method. Respondent data collection using Google link. The analysis used frequency and cross-tabulation. The results of this study show that the characteristics of the industrial area community are highest reaching 40 percent in the Maluk sub-district. The highest number of family members reached 57.8 percent in Maluk District. Highest education reaches 46.7 percent in Maluk Sub-district. The highest income was 60 percent in the Jereweh sub-district. The industrial area has a low level of community income. An alternative strategy is needed to support the surrounding economy as a result of the direct impact of the industrial area.

Keywords

Socio-economic characteristics, Industrial estates, West Sumbawa

Introduction

The West Sumbawa district located in West Nusa Tenggara is one of the areas with great potential in developing industry, whether on a micro, small, and medium scale. As one of the pillars of the regional economy, industry plays an important role in driving economic growth and improving the quality of life of the community. However, in its management socio-economic aspects often do not receive sufficient attention, even though this is the key to the industry's sustainability.

The government of West Sumbawa Regency prioritizes the principles of legal certainty and openness in investment regulations, ensuring consistency and transparency of information for investors. The government is committed to accountability and provides fair treatment for all investors, regardless of national origin. The administration is committed to accountability and provides equitable treatment for all investors, regardless of country of origin. In addition to efficiency in resource management, KSB emphasizes fairness in benefit distribution and a sustainable approach that considers

Published:

October 20, 2024

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

Selection and Peer-review under the responsibility of the 5th BIS-HSS 2023 Committee

environmental impacts. With a vision of economic independence and environmental insight, KSB seeks to develop industries that are competitive, environmentally friendly, and provide long-term benefits to its communities.

West Sumbawa Regency has a long-term vision that describes the region's aspirations to achieve progress and prosperity for all its citizens. Based on this vision, it is formulated with an emphasis on "The Realization of West Sumbawa Regency in Economic Independence through Sustainable and Competitive Investment with Excellent Services." In other words, Kabupaten Sumbawa Barat has the ambition to become a region that is not only economically independent but also able to compete at the regional and national levels through sustainable investment strategies. Key elements of this Vision include thinking about how capital investment should be carried out with strong principles: fast, precise, easy, cheap, transparent, accountable, and equitable. These principles, as noted in Perbup No. 13 of 2022, aim to ensure that any investment initiative or policy will generate maximum impact for the community and local economy, while ensuring that the whole process is conducted with integrity and transparency.

Furthermore, this Vision emphasizes the importance of service excellence in every aspect of investing. This means that all stakeholders, including investors, citizens, and the government, must be provided with clear information, and receive adequate facilities, and high-quality services at every stage of the investment process. As such, Kabupaten Sumbawa Barat portrays itself as a progressive region, with the foresight to create a conducive business environment, which will ultimately drive sustainable economic growth, independence, and prosperity for all its citizens.

Investment is a vital instrument in driving the economy of a region. In this context, the main objective of investment goes beyond mere capital investment. One of the main focuses is to identify and fulfill people's basic needs, such as food, clothing, housing, education, and health. This means that investment can help improve people's quality of life. In addition, investment also aims to help regions achieve economic independence. Through targeted investment, regions can optimize their resources, both natural and human resources, to produce products or services that have added value. With economic independence, regions will not only depend on assistance from the central government or other external resources.

Seeing this condition, the existence of investment has an influence on welfare. Infrastructure development is believed to be able to move the real sector, absorb labor, increase public consumption, government, and trigger production activities. Economic growth, employment opportunities are often associated with investment as the main driver to create a prosperous society. Community welfare and employment opportunities have a relationship, employment opportunities describe the role of the community in achieving development goals, namely community welfare. This condition requires an assessment of the impact of investment on the welfare of the surrounding community.

As is known, West Sumbawa Regency as a Regency that has abundant natural resources is certainly a field for investors to invest. However, it has an impact on the surrounding environment. The research proves that the negative impact on the environment so that efforts are needed to minimize the negative impact through energy consumption efficiency, natural resource consumption. Similarly, other research outlines that the existence of Natural Resources in an effort to support human welfare. The Government's main priority is environmental protection efforts to support the life of living things. This concept can certainly be developed in West Sumbawa Regency which has abundant natural resources by producing utilization for the welfare of sustainable development in the community, especially the industrial area and KSB in general.

The West Sumbawa Regency area, although known for its mining industry, especially gold mining, has not been able to fully have a positive impact on poverty alleviation in the area. With the potential for abundant natural resources, it is hoped that this industry will be able to make a significant contribution to the local economy and improve the quality of life of the community. However, reality shows that the poverty rate in KSB still has not shown a significant decline despite the existence of the gold mining industry. A more detailed picture of the dynamics of the poverty rate in Kabupaten Sumbawa Barat from year to year, can be seen in [Table 1](#).

Table 1. Number of People and Percentage of Poor in West Sumbawa Regency

Years	Poor Population (People)	Poor Population (%)
2012	21,724	17.61
2013	21,710	17.10
2014	22,710	16.87
2015	22,500	16.97
2016	22,470	16.50
2017	22,332	15.96
2018	20,363	14.17
2019	20,450	13.85
2020	20,200	13.34
2021	21,510	13.54

Data source: BPS KSB, year 2022

Industrial areas, especially the mining sector, are often assumed to be prosperous areas with high incomes given their natural potential. However, a study revealed the opposite fact, especially in the gold mining area in West Sumbawa Regency. Although this area is rich in mineral resources, paradoxically the welfare level of the surrounding community is low.

One indicator that reflects this condition is the relatively high poverty rate ([Table 1](#)). This can be seen not only from the community's low income but also from several other aspects related to their quality of life. For example, many residents in gold mining areas in West Sumbawa Regency live in houses with inadequate quality, both in terms of building materials and other supporting facilities.

In addition, community ownership of agricultural land also shows unsatisfactory figures. This indicates that many residents have lost their productive land due to the expansion

of the mining area. As a result, alternative sources of income from the agricultural sector are limited. Similar conditions are also seen in livestock ownership. Livestock, such as cattle, goats, or poultry, are often considered a form of investment or savings for rural communities. Low livestock ownership suggests that many residents do not have valuable assets for future security or when facing emergencies.

Mining industry areas are often associated with abundant natural resources and the potential for large economic returns. However, available data shows that despite this potential, it is not necessarily the case that all surrounding communities get their fair share of the wealth. This underscores the urgency of evaluating and improving existing policies in the management of the mining industry. Without proper evaluation and intervention, only a small number of individuals or entities can benefit maximally, while the majority of surrounding communities remain marginalized. In this context, socio-economic considerations are crucial. An industrial area, especially mining, must not only be managed with a focus on extraction and profit but must also pay attention to socio-economic impacts and how economic benefits can be fairly distributed among local communities.

Methods

The research objectives in conducting this research are to optimize the use of Google Forms for the industrial area community. The type of research used is qualitative and quantitative research. The subjects of this research are industrial area communities who live in the Jereweh, Maluk, and Sekongkang sub-districts of West Sumbawa Regency. Data processing was carried out in 4 stages, namely; 1) Distributing questionnaires in the form of Google Forms, 2) Assessing the results of the answers. 3) Testing validity with product moment correlation technique and reliability with Chronbach's Alpha method, and 4) interpretation of calculation results. The analysis used to test these objectives uses frequency analysis and cross-tabulation.

Results and Discussion

Socio-economic characteristics show the resources a person has for communication. It shows people's ability to choose their communication channels and partners. Industrial districts and socio-economic well-being: An investigation on the Italian province's disparities [1]. The socio-economic characteristics of industrial districts are detailed as follows:

Age

The assessment of health quality and life expectancy will be facilitated if the age grouping is based on local characteristics and wisdom. The more mature and older will be able to have a positive impact on the sustainability of life.

In contrast to the characteristics of the industrial area community (Table 2), the highest age in the adult category reached 16 respondents or 35.6 percent in Jereweh Sub-

district. In the Maluk sub-district, the highest adult category reached 18 respondents, or 40 percent. In contrast to the community in the industrial area (Table 2), the highest age in the adult category reached 16 respondents, or 35.6 percent in the Jereweh sub-district. In the Maluk sub-district, the highest adult category reached 18 respondents, or 40 percent. In contrast, in Sekongkang sub-district, the highest in the old category reached 14 respondents or 31.1 percent. The characteristics of the community in general are more attractive to people in the adult and old categories. Therefore, it is necessary to pay attention to all parties in making programs based on adults and the elderly. Given that age has a significant positive influence on community behavior, especially in industrial areas.

Are older adults wiser than college students? A comparison of two age cohorts [2], Young people feel wise and older people feel energetic: Comparing age stereotypes and self-evaluations across adulthood [3], Age as a factor in judgments of wisdom and creativity [4] and Working to Increase Stability through Exercise (WISE): screening, recruitment, and baseline characteristics [5].

Table 2. Socio-economic characteristics of industrial area communities

No	Classifications	District					
		Jereweh		Maluk		Sekongkang	
		Total	%	Total	%	Total	%
1	Ages						
	<30	12	26.7	15	33.3	12	26.7
	31-46	16	35.6	18	40.0	13	28.9
	> 47	13	28.9	12	26.7	14	31.1
2	Total number of family members						
	<2	2	4.4	1	2.2	1	2.2
	3-4	17	37.8	18	40.0	20	44.4
	>5	22	48.9	26	57.8	18	40.0
3	Education						
	No / Graduated elementary school	20	44.4	21	46.7	14	31.1
	No / Junior High School Graduation	3	6.7	7	15.6	3	6.7
	No / Graduated from high school	8	17.8	5	11.1	6	13.3
	No/ Undergraduate Degree	10	22.2	12	26.7	16	35.6
4	Income						
	< Rp. 1.000.000	27	60.0	22	48.9	7	15.6
	2.000.000-3.000.0000	8	17.8	12	26.7	21	46.7
	>4.000.000.000	6	13.3	11	24.4	11	24.4
	Total	45	100	45	100	45	100

Source: Primary Data Analysis, 2023

Number of family members

The number of family members influences the amount and size of household consumption. The number of people or heads in a household can increase the amount of household consumption. This indicates that if there are a large number of a family member if there are many family members, the number of goods consumed will also be more diverse depending on individual demand due to differences in tastes from one another, which will also affect the increase in consumption in a household.

The distribution of the number of household members (Table 2) explains that in Kecamatan Jereweh the highest was in the more than 5 family members category with 22 respondents or 48.9 percent. The same condition in the Maluku Sub-district was highest in the category of more than 5 people, with 26 respondents or 57.8 percent. Different conditions in Sekongkang Sub-district were highest in the 3-4-person category with 20 respondents or 44.4 percent. The condition certainly had an impact on households given that the number of family members had a positive and significant effect on household consumption expenditure.

Regional incidence risk of heat stroke in elderly individuals considering population, household structure, and local industrial sector [6], The family and industrial society [7], The geography of industrial districts in Italy [8], Association between UGS patterns and residents' health status: A report on residents' health in China's old industrial areas [9], Local impacts of industrial tree plantations: An empirical analysis in Indonesia across plantation types [10], Growth in family income inequality, 1970–1990: Industrial restructuring and demographic change [11], and The impact of economic restructuring in mono-industrial areas: Strategies and alternatives for the labor reconversion of the formerly redundant in the [12].

Education

Characteristics have an impact on the mindset of building the family economy. The level of economic prosperity that is considered as the minimum need of a predetermined standard of living, especially in families, and also education, has a significant influence on family welfare. The higher the level of educational attainment, the more prosperous the family will be.

The condition has an impact on the industrial area (Table 2) in the Jereweh sub-district the highest is in the category of Not/Undergraduate as many as 20 respondents or 44.4 percent. The same condition in the Maluku sub-district is highest in the category of Not / Graduate Elementary School as many 21 respondents or 46.7 percent. Different conditions in the Sekongkang sub-district have the highest level of education, with 16 respondents, or 35.6 percent having a Bachelor's degree.

The existence of industrial estates leads to positive aspiration changes when people can take advantage of industrial estates to improve their education, but it becomes a negative aspiration change when people depend on industry for their livelihoods and defeat their education.

Innovation of education and educational innovations in conditions of modern higher education institution [13], Typology of religious characteristics of social service and educational organizations and programs [14], Spatial-temporal characteristics of primary and secondary educational resources for relocated children of migrant workers: the case of Liaoning province [15], An investigation of business and industrial employment needs in relation to educational and vocational preparation in selected

areas of Illinois [16] and Industrial buying behavior of large Swedish firms: case studies of the purchase of educational services [17].

Income

The existence of an industrial estate can have an impact on the welfare of the surrounding community. Improvements in economic conditions can be seen from the increase in income, and the number of assets owned. The positive and negative impacts of the existence of the industry will cause changes in the community, both socio-economic conditions and cultural conditions. The impact of the existence of the industry can cause changes in the community, both socio-economic conditions and cultural conditions of the community around the area.

The distribution of community characteristics (Table 2) on the highest income in the category under Rp.1,000,000 reached 27 respondents or 60 percent. This condition is the same in Maluku Sub-district, with the highest in the low category reaching 22 respondents or 48.9 percent. In the Sekongkang sub-district, the highest income was in the Rp.2,000,000 - Rp.3,000,000 category, reaching 21 respondents or 46.7 percent. This condition certainly has positive and negative impacts on the existence of industrial estates in the surrounding community.

Income distribution characteristics of rural economic sectors: Implications for local development policy [18], Growth in family income inequality, 1970–1990: Industrial restructuring and demographic change [11], Can the Sorghum Planting Industry in Less-Favoured Areas Promote the Income Increase of Farmers? An Empirical Study of Survey Data from 901 Samples in Luquan County [19], Entrepreneurial quality and regional development: Characterizing SME sectors in low-income areas [20] and Income effect of rural E-commerce: empirical evidence from Taobao villages in China [21].

Conclusion

The socio-economic characteristics of mining area communities in West Sumbawa Regency include: age, number of family members, education, and income. The highest level of age distribution in the industrial area reached 40 percent in the Maluku sub-district. The highest number of family members reached 57.8 percent in the Maluku sub-district. The education level was highest at 46.7 percent in Maluku Sub-district. The highest income is 60 percent in the Jereweh sub-district. The industrial area has a low level of community income. An alternative strategy is needed to support the surrounding economy as a result of the direct impact of the industrial area.

References

- [1] C. Di Berardino, G. Mauro, D. Quaglione, and A. Sarra, "Industrial districts and socio-economic well-being: An investigation on the Italian provinces disparities," *Soc. Indic. Res.*, vol. 129, pp. 337–363, 2016.
- [2] M. Ardelet, "Are older adults wiser than college students? A comparison of two age cohorts," *J. Adult Dev.*, vol. 17, pp. 193–207, 2010.

- [3] C. E. Bowen, S. M. Spuling, A. E. Kornadt, and M. Wiest, "Young people feel wise and older people feel energetic: Comparing age stereotypes and self-evaluations across adulthood," *Eur. J. Ageing*, vol. 17, pp. 435–444, 2020.
- [4] A. J. Knight and W. V. Parr, "Age as a factor in judgments of wisdom and creativity," *NZ. J. Psychol.*, vol. 28, no. 1, p. 37, 1999.
- [5] C. N. Sciamanna et al., "Working to Increase Stability through Exercise (WISE): screening, recruitment, and baseline characteristics," *Trials*, vol. 22, pp. 1–12, 2021.
- [6] T.-C. Lien and T. Tabata, "Regional incidence risk of heat stroke in elderly individuals considering population, household structure, and local industrial sector," *Sci. Total Environ.*, vol. 853, p. 158548, 2022.
- [7] C. C. Harris, *The family and industrial society*. Routledge, 2021.
- [8] F. Sforzi and J. Bamford, "The geography of industrial districts in Italy," in *Small firms and industrial districts in Italy*, Routledge, 2016, pp. 153–173.
- [9] Y. Hou, X. Chen, Y. Liu, and D. Xu, "Association between UGS patterns and residents' health status: A report on residents' health in China's old industrial areas," *Environ. Res.*, vol. 239, p. 117199, 2023.
- [10] R. Pirard, H. Petit, and H. Baral, "Local impacts of industrial tree plantations: An empirical analysis in Indonesia across plantation types," *Land use policy*, vol. 60, pp. 242–253, 2017.
- [11] A. Chevan and R. Stokes, "Growth in family income inequality, 1970–1990: Industrial restructuring and demographic change," *Demography*, vol. 37, no. 3, pp. 365–380, 2000.
- [12] D. Chiribuca, "The impact of economic restructuring in mono-industrial areas: Strategies and alternatives for the labor reconversion of the formerly redundant in the," *Stud. Univ. Babeş-Bolyai-Sociologia*, vol. 46, no. 1–2, pp. 23–41, 1999.
- [13] H. Mykhailyshyn, O. Kondur, and L. Serman, "Innovation of education and educational innovations in conditions of modern higher education institution," 2018.
- [14] R. J. Sider and H. R. Unruh, "Typology of religious characteristics of social service and educational organizations and programs," *Nonprofit Volunt. Sect. Q.*, vol. 33, no. 1, pp. 109–134, 2004.
- [15] D. Zhang, C. Zhou, and W. Xu, "Spatial-temporal characteristics of primary and secondary educational resources for relocated children of migrant workers: the case of Liaoning province," *Complexity*, vol. 2020, pp. 1–13, 2020.
- [16] C. H. Erwin, *An investigation of business and industrial employment needs in relation to educational and vocational preparation in selected areas of Illinois*. Indiana University, 1963.
- [17] Å. Wallström, "Industrial buying behavior of large Swedish firms: case studies of the purchase of educational services." Luleå tekniska universitet, 2002.
- [18] J. C. Leatherman and D. W. Marcouiller, "Income distribution characteristics of rural economic sectors: Implications for local development policy," *Growth Change*, vol. 27, no. 4, pp. 434–459, 1996.
- [19] R. Yang and Z. Yang, "Can the Sorghum Planting Industry in Less-Favoured Areas Promote the Income Increase of Farmers? An Empirical Study of Survey Data from 901 Samples in Luquan County," *Agriculture*, vol. 12, no. 12, p. 2107, 2022.
- [20] J. Fernández-Serrano and I. Romero, "Entrepreneurial quality and regional development: Characterizing SME sectors in low income areas," *Pap. Reg. Sci.*, vol. 92, no. 3, pp. 495–513, 2013.
- [21] G. Li and J. Qin, "Income effect of rural E-commerce: empirical evidence from Taobao villages in China," *J. Rural Stud.*, vol. 96, pp. 129–140, 2022.