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#### The Role of Mining Materials in Group C Against Community Welfare In *Ngawi* Regency

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# Abstract

Natural resources in the mining sector are one of the natural resources in Indonesia. The sector produces various types of mining commodities that have different economic values. Ngawi Regency is one of the regions in East Java Province which has potential in the mining sector. One of the potential of the mine is group C excavation material. Since the construction of toll roads in the Ngawi Regency area, demand for mining products in the form of class C excavation materials as materials for toll road construction has increased rapidly. This has encouraged the growth of mining businesses in the region. Mining activities or businesses in addition to having a positive impact, such as the absorption of labor, also cause various negative impacts that affect the welfare of the community. Employment in the mining sector is indeed wide open which then causes people to switch from various sectors of employment to employment in the mining sector. The shift of employment to the mining sector has an impact on rising levels of income. However, this does not significantly affect the level of community welfare.

*Keywords:* Mining, Labor, Community Welfare

# Abstrak

Sumber daya alam sektor pertambangan merupakan salah satu hasil kekayaan alam di Indonesia. Sektor tersebut menghasilkan berbagai jenis komoditas hasil tambang yang memiliki nilai ekonomis berbeda-beda. Wilayah Kabupaten Ngawi termasuk salah satu wilayah di Provinsi Jawa Timur yang memiliki potensi di sektor pertambangan. Salah satu potensi tambang tersebut adalah bahan galian golongan C. Sejak berlangsungnya pembangunan jalan tol di wilayah Kabupaten Ngawi permintaan hasil tambang berupa bahan galian golongan C sebagai bahan material pembangunan jalan tol meningkat pesat. Hal ini mendorong tumbuhnya usaha pertambangan di wilayah tersebut. Kegiatan atau usaha pertambangan selain membawa dampak positif seperti penyerapan tenaga kerja juga menimbulkan berbagai dampak negatif yang berpengaruh terhadap kesejahteraan masyarakat. Lapangan pekerjaan di sektor tambang memang terbuka lebar yang kemudian menyebabkan masyarakat beralih dari berbagai sektor lapangan pekerjaan ke lapangan pekerjaan di sektor tambang. Beralihnya lapangan pekerjaan ke sektor tambang tersebut membawa dampak naiknya tingkat pendapatan. Akan tetapi hal tersebut tidak secara signifikan mempengaruhi tingkat kesejahteraan masyarakat.

Kata Kunci : Pertambangan, Tenaga Kerja, Kesejahteraan Masyarakat

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#### **INTRODUCTION**

The mining sector's natural resources are one of the natural resources in Indonesia. Natural resources generated from the sector are classified as one of the natural resources that cannot be renewed. Siahaan (2004) states that natural energy such as oil, natural gas, minerals and minerals have nonrenewable properties, or cannot be renewed. Therefore, the utilization of these resources must be managed properly, so as to ensure the survival of human life in the future.

Natural resources from the mining sector produce various types of minerals which have different economic values. As stated in Act Number 11 of 1967 concerning Basic Conditions of Mining in the explanation section of Article 3 that quarrying material is classified into several groups, among others: Group of strategic excavation materials or class A (petroleum, asphalt and others); The group of vital minerals or class B means guaranteeing the livelihood of many people (gold, iron, iron sand, etc.); Material class which is not included in groups A and B are: excavation C which is indirectly requires an international market (nitrate, asbestos, river stone, sand, trash, soil, etc.)

East Java is one of the provinces in Indonesia which has potential in the mining sector. One of the mining potentials is mining products classified as class C quarries. The *Ngawi* Regency region which is also included in the East Java Province contributes quite large amounts to various types of non-metallic minerals including excavation of class C. Potential of class C excavated materials is *Ngawi* soil which is 74%. Of the total mining output of the sector in East Java. Furthermore, other types of non-metallic minerals in the form of sand and stone contribute greatly, reaching 93% of the total mining output of the sector in East Java.

The ongoing construction of toll roads in the Ngawi Regency area has caused the need for mining material in the form of grade C materials to increase. This has triggered the growth of C mining excavation business in the region. The growth of mining business has caused employment in the mining sector to be wide open. Many residents then shifted from various sectors of employment to employment in the mining sector. The difference in employment in the mining sector does not necessarily improve the welfare of the community. This is because in addition to having a positive impact mining activity also have negative effects. One of the negative impacts affecting people's welfare is the impact of mining on the environment around the mine area.

#### LITERATURE REVIEW

Natural resources are one source of human life on earth, every aspect of human life needs it to survive. Natural resources provide every need that humans want. Almost every need for both clothing, food, and boards all come from natural resources. Natural resources and the environment constitute an inseparable unity and become a place of life and a provider of needs for humans, in which there are not only biological elements (biotic) but also non-biological (abiotic) elements.

Development is closely related to natural resources; each development process requires natural resources as input for development activities. Asril (2014) stated that mineral resources as one of the natural assets owned by Indonesia if managed properly will contribute to the country's economic development. Natural resources also have a vital role, because natural resources play role in supporting national а development. Furthermore, according to Putri (2015) abundant biological and nonliving natural resources can become basic capital in national development. Natural resources play a role in the development process, every development activity requires raw materials obtained from natural resources. Fauzi (2006) states that all biological and non-biological resources are used by humans as a source of food, raw materials and energy.

Every activity of utilizing natural resources certainly requires labor that is in accordance with certain skills or skills. According to Salim (2010) economic understanding that focuses on the growth of output as a function of factors of consisting of production natural resources, labor, capital, skills, and technology. Inappropriate allocation of natural resources (misallocation) because of the excess production factors (labor, capital) can be allocated to other economic activities that are more productive. Salim (2007) states that mining business consists of the efforts of general investigation, exploration, exploitation, processing and sales. This illustrates how the process of mining activities through various stages requires a lot of labor.

The use of natural resources certainly has a direct impact on the environment. This happens because every process of utilizing natural resources is in an environmental ecosystem. Good management is needed for the utilization of natural resources in the mining sector. The use of natural resources through mining which has a direct impact on welfare must be achieved, not only positive impacts but must anticipate the negative impacts. Some negative aspects of the mining sector according to Salim (2007)include environmental destruction, declining quality of life of local people and destruction of the ecology of the islands. Various negative impacts from the mining sector must be anticipated to ensure the welfare of the community and the preservation of natural resources in the future.

According to the Central Bureau of Statistics (BPS) in 2014 mining is an activity of extracting valuable and economical minerals from the earth's crust, both mechanically and manually, on the surface of the earth, beneath the surface of the earth and below the water surface. The results of this activity include oil and gas, coal, iron sand, tin ore, nickel ore, bauxite ore, copper ore, gold ore, silver and manganese ore.

Mining is closely related to the structure of the regional economy. The mining sector is one of the sectors that contribute to the regional economy. This is illustrated how the sector is one component in the structure of Gross Regional Domestic Product (GRDP). Bank Indonesia (2015) defines the Gross Regional Domestic Product (GRDP) as one of the important indicators to determine the economic conditions in an area within a certain period. Furthermore Jannah, Soelistijo and Widayati (2016) mentioned that one of the indicators used in measuring the success of an area's economic development is the Gross Regional Domestic Product (GRDP).

The mining sector also acts as one of the contributors to Regional Original Revenue (PAD). The sector contributes regional income through taxes and retribution. According to Law Number 34 of 2000 concerning Regional Taxes and Levies which are included as one of the elements of regional taxes, namely the tax on the extraction of class C materials. Minerals Not Metals and Rocks.

# Mineral Mining Group C PDRB Mining and Excavation Sector Employment

**Conceptual Framework for Research** 

# Environmental Impact Due to Mining Activities of Group C Mining

**Community Welfare Level** 

### METHOD

The research method used in this research descriptive quantitative research is method. Descriptive quantitative research is a scientific research that begins with collecting data, clarifying data, and analyzing data and then presenting it which aims to get a picture of the role of mining in the welfare of society. According to Creswell descriptive (2014)quantitative research is a scenario of researchers to collect quantitative data types which are then supported by qualitative data types. Furthermore, according to Sugiyono (2005)the descriptive if method is a method used to describe or analyze a research result but is not used to make broader conclusions.

The types of data used in this study include primary data and secondary data. Primary data is data obtained directly from the field or object of research. The primary data in this study was obtained by distributing questionnaires and indepth interviews with the object of research, namely the mine workers and the community who were directly affected by mining activities and other parties involved in mining activities. While secondary data in this study were obtained from indirect sources, such as sources (books, reading magazines. newspapers, online news), published research products (journals, dissertations, articles). theses. theses. prevailing regulations and laws relating to the role of mining in the welfare of society, including data on documents obtained in the process of collecting data in the field (document analysis).

Data analysis is a stage of organizing data obtained from research objects during the process of the research series that is processed so that it can be a source of information that can be understood. The data analysis technique used in this study is descriptive analysis. Descriptive analysis is a form of analysis of research data to see a general conclusion from the results of the study based on a sample. Hutauruk (2016) descriptive analysis can provide an explanation/general description and conditions of the object under study. Cresswell (2014) Descriptive analysis includes the depiction of research results from a variable in the form of mean (mean), standard deviation and the distance between the lowest number and the highest number. The variables used are as follows:

1. Variable level of welfare based on the socio-economic conditions of community. Using a welfare level indicator measurement variable from the Central Statistics Agency (BPS) in the 2015 National Socio-Economic Survey (Susenas) in Ngawi District. Information regarding the socioeconomic conditions of the community that have been collected through Susenas is used as a basis for obtain various indicators of people's welfare achievements. These indicators include: school participation rates for education, morbidity, utilization of health facilities, health insurance, and immunization for the health sector, and childbirth helpers; age of first family marriage. planning participation, and the average number of children born for fertility and family planning; condition of residence, water source for drinking, cooking, bathing and washing for housing, ownership of mobile phones, internet access in the use of information technology, government assistance or programs for the welfare of the community and the largest income of households according to the business field. Furthermore, each variable is presented in the form of tables, graphs or diagrams with percentage units.

2. Variable level of community welfare based on environmental quality. Using indicators obtained directly from the research location. This indicator was obtained through observation while working in the Ngawi District Government. Then each indicator is given the choice of answers according to the questions in the questionnaire which are then presented in the form of descriptive statistics tables. The results of data collection techniques through in-depth interviews are used to strengthen the results of data collection through questionnaires or questionnaires.

#### ANALYSIS AND DISCUSSION

Ngawi Regency is located in the western region of East Java Province, directly adjacent to Central Java Province. Geographically, Ngawi Regency is located at position 110010 '- 111040' East Longitude and 7o21 '- 7o31' South Latitude. The boundaries of Ngawi are as follows: North: Regency a. Grobogan Regency and Blora Regency (Central Java), Bojonegoro Regency (East Java); b. Timur: Madiun Regency (East Java); c. South: Madiun Regency and Magetan Regency (East Java); d. West: Karanganyar Regency and Sragen Regency (Central Java).

Administratively, the district of *Ngawi* is divided into 19 sub-districts, 213 villages and 4 sub-districts. The area of

*Ngawi* Regency is 1,295.98 km2, of which around 39% or around 504.76 km2 is paddy fields. The topography of *Ngawi* Regency is in the form of highlands and flat land. The type of soil is dominated by grumusol soil with gray and black colors. Four districts were recorded in the highlands at the foot of Mount *Lawu*. The remaining fifteen sub-districts are flat land. *Ngawi* Regency has many rivers. Large and small rivers surround the entire *Ngawi* region. There are two major rivers that pass through *Ngawi*, namely the Bengawan Solo River and the *Madiun* River (*Badan Pusat Statistik*, 2016).

According to data obtained from Ngawi District in Figures 2016, the total population of Ngawi Regency at the end of 2015 was 949,911 people spread in 19 Districts. With details of 467,424 inhabitants being male and a total of 482,487 inhabitants are female residents, with a sex ratio of 97% meaning that every 100-female population there are around 97 male population. Compared to 2014 the population of *Ngawi* Regency increased by 17,236 people or increased by 1.92%. The Subdistrict area with the largest population is Paron Sub-district with 90,510 inhabitants, followed by Ngawi Sub-district with 86,850 people, while the Sub-district with the smallest population is *Kasreman* District with 26,545 people.

Until 2015 the economy of *Ngawi* Regency was still dominated by the agricultural sector. The contribution of this sector to total *GRDP* up to 2015 was around 36.9%. This sector is indeed a leading sector for *Ngawi* Regency. This is because the vast area of agriculture in *Ngawi* Regency reaches 72% of the total area in *Ngawi* Regency. However, the contribution of this sector to GRDP from year to year has decreased despite the fact that production has experienced growth. Other sectors that contributed significantly to the economy in Ngawi Regency were the trade sector. In the past 5 years this sector has contributed more than 25% of the total GRDP. Furthermore, the mining and quarrying sector in 2014 showed a very significant to 2015 increase. During this period the contribution of the mining and mining sector to GDP increased from 1.37% to reach 9.01%. This is due to the increase in business fields in the sector that are affected by the increasing demand for mining products classified as excavated in class C to meet the toll road construction material (Kabupaten Ngawi in Angka, 2016).

Karanggupito Village is one of the villages in Kendal District, Ngawi Regency. The topography of this village is included in the highlands, with an altitude reaching 655 meters above sea level (masl). Administratively, this village is limited by a number of other villages, among others in the north bordering the village of Naravudan, Jogorogo Sub-district, in the west by the Gunung Lawu Forest, on the south side by Karangrejo Village, Kendal Sub-district, while on the east side, Sidorejo Village, Kendal District. The distance to the sub-district capital is 6 km, while the distance to the district capital reaches 46 km. Karanggupito Village is divided into 3 hamlets including Duwet Hamlet, Malang Hamlet and Wonokerto Hamlet.

According to Wikipedia (2012) the area of *Karanggupito* Village is 1,447,260 Ha. The existing land area is divided into several designations, including public facilities, settlements, agriculture, plantations and others. The area of land allocated for settlements is 161,118 Ha. The area of land allocated for plantation agriculture is 398,523 Ha. The land area for rice fields and plantations is 11,6150 Ha. The area of production and protection forest area is 889,240 Ha. Public cemetery area 1,190 Ha. While the land area for office facilities, schools, sports fields and water sources is 5,062 Ha.

According to population data obtained from the Karanggupito Village office in 2017 the population of Karanggupito Village was 5,871 inhabitants, with 2,924 inhabitants of population 2,947 male and female residents. This population is spread to households. Furthermore, 1.352 the population occupies 3 hamlets including Malang Hamlet, Duwet Hamlet and Wonokerto Hamlet. The most population resides in Wonokerto Hamlet, which is closest to the Regency Road access.

The types of livelihoods of the people of *Karanggupito* Village are very diverse. The livelihoods of the population include farmers, traders, stone breakers, rock collectors, miners, truck drivers and civil servants. Most of the population works in the mining sector, nearly 60% of the population depend on this sector. The mining sector is the dominant livelihood because almost every family member in the village works in the mining sector. The mining sector has a positive impact on the economic life of citizens, with the presence of mines in addition to working directly in the mining area, a large number of people open stalls for sale.

*Kasreman* Village is a village located in *Kasreman* District, *Ngawi* Regency. The *Kasreman* Village area is

divided into 3 hamlets namely Pucung Hamlet, Kasreman I Hamlet and Kasreman II Hamlet. Kasreman Village is included in the lowland topography with an altitude of 56 meters above sea level (masl). Administratively, this village is limited by several areas of the village and the adjoining sub-district area, namely the northern border with Gunungsari Village, Kasreman Sub-district, south by the Karangmalang Village, Kasreman Subdistrict, adjacent to the Geneng Subdistrict and the Village bordering on the east. Legokulon Sub-District of Kasreman. The distance from the village to the capital of the sub-district is 5 km while the distance from the village to the district capital reaches 27 km. The Kasreman Sub*district* is connected directly to the district capital through the provincial road access that connects the City of Ngawi with the Caruban District of Madiun Regency.

According to data obtained from the Kasreman Village office in 2017 the area of the village reached 1,058.16 hectares. The land area is mostly intended for agricultural land, covering an area of 492.1 Ha and another area of 42.9 Ha for residential areas and the remaining area of 98 Ha is dry land consisting of moor and teak tree gardens. The majority characteristics of land types are classified as dry hilly land, most of the dry land is planted with teak trees that can be harvested for a period of at least 10 to 15 years. Some hilly land is also planted with maize and cassava plants that do not need so much water.

Furthermore, concerning population data, as the data obtained from the *Kasreman* Village office in 2017 the number of villagers in 2015 was 5,186 people consisting of 2,330 male residents and the remaining 2,856 were female residents. The majority of the population make a living as farmers while other livelihoods are as traders, miners and civil servants.

There are at least 13 mining entrepreneurs in the form of Limited Liability Companies (PT), CVs and individuals who have applied for mining permits. Of the 13 mining entrepreneurs who applied for permits, there was only one mining entrepreneur who had completed the mining permit procedure. There are even some mining entrepreneurs who do not have permits already carrying out mining activities. This is driven by the increasing demand for class C excavations as input for toll road development. Many mining entrepreneurs cut corners by conducting mining activities without permission. Mining entrepreneurs are competing to make as many profits as possible by opening mining land and immediately selling mining products to toll road construction managers.

The emergence of unlicensed mines can trigger various losses and the problems. With existence of unlicensed mines or illegal mining the system of supervision and control from the government is very limited, thus triggering various environmental problems and conflicts in the community. As reported in the online media www.sinarngawi.com dated November 16, 2015. In the online media there were demonstrations reported by mine workers both mine workers and dump truck drivers. They deteriorated the Ngawi Regency DPRD office and then parked the dump truck on the protocol roads, even dozens of dump trucks filled the entire area of Ngawi Square and caused congestion. This demonstration occurred because previously there was a closure and sealing of unlicensed mines which became their main livelihood. This incident prompted mine workers to carry out mass demonstrations. In addition, some time ago the Non-Governmental Organization (NGO) in the name of the Nusantara Inscription Movement of the Cakra Bumi Ngawi Regional Youth Movement, filed a suit of public accountability to the elements of the Ngawi District Government and law enforcement elements in Ngawi Regency. In the lawsuit they demanded to take firm action against the mining entrepreneur who violated the reclamation commitment and cracked down on illegal mining entrepreneurs.

*Karanggupito* Village has a large area of mining C mining. The area is scattered in the hills of *Duwet* and *Malang*, with group C mining area reaching 189.50 Ha. Some of these areas are divided into 8 mining area points. In addition, many former mining areas that have been converted function as settlements and agricultural land. According to the local village head, indeed some residents sold their land to be used as mines which were later converted into settlements and agricultural land.

Mining activities in *Karanggupito* Village produce various types of class C quarrying materials. The mining products include andesite, *urug* and other mining materials that can be used as construction materials. Residents who live in the vicinity of the mining area mostly work in the area, besides working directly in the mine there are also residents who open stalls and shops on the road to the mining area. Mining activities in *Karanggupito* Village use traditional mining techniques. Villagers have agreed that the mining process must use manual tools without using heavy equipment or modern equipment. This is intended to prevent environmental damage. In addition to the use of traditional tools for taking large amounts of indirect mining material but can be adjusted little by little. This was done in order to be able to support the people who worked in the mine for a longer time. The mining tradition in this traditional way has been maintained until now.

*Kasreman* Village is one of the villages that has limestone areas and there are many arid drylands. The mining entrepreneurs buy the land which is then converted to function as productive land. This can be seen from the presence of mining businesses spread across several hamlets in *Kasreman* Village. This hamlet area includes, among others, *Kasreman* 1 and *Kasreman* 2 Hamlet, post-mining land mostly used for paddy fields and gardens.

the number Of of mining businesses, there is one of the largest mining business areas located in *Kasreman* I Village. In the area there are 83.60 hectares of mining areas that produce sandstone and *urug* soil. This mining area is owned by a mining PT. company, namely Flash Entertainment. The presence of a mining business in this hamlet has increased the economy of the surrounding community. This is evidenced by the large number of residents who previously worked as farmers turned as miners. In addition to working directly in the mining area, many people open food stalls and businesses grocery store around access roads to mining sites.

Mining activities in Kasreman Village have been using heavy equipment or sophisticated equipment. This is possible because the mining business owner in the village is a company, namely PT. Flash Entertainment. The heavy equipment used is medium dough and big dingy. The use of heavy equipment is very helpful for mine extraction activities, because using heavy mining equipment can be faster and more efficient. However, the use of heavy equipment is also very risky to the environment. With the use of heavy equipment, the extraction of excavated products tends to leave horizontal excavation marks and this causes vulnerability to landslides. This was conveyed by the local Village Chief, who was worried about the impact of the former excavation using heavy equipment.

Descriptive analysis in this study presents two variables or indicators that affect the level of welfare of the population of mine workers. The first indicator presents the distribution of the conditions of socio-economic the respondents or residents working in the mining sector. Indicators regarding socioeconomic conditions need to be included because they directly influence the level of community welfare. These socioeconomic conditions include age, gender, population status, level of education, marital status, number of family dependents, preemployment in the mining sector, additional income obtained from the mining sector, conditions of residence, level of public health and property wealth owned.

The second indicator is the environmental impact due to mining

activities. This is because the level of community welfare is also influenced by environmental conditions that support their lives. Environmental damage caused by mining activities can cause losses and even natural disasters that greatly affect the welfare of the community. Indicators of environmental damage due to mining activities are described through the influence of mining activities on floods, the influence of mining activities on landslides, water source conditions, river water conditions, soil fertility, traffic comfort conditions, road conditions, air noise levels. pollution levels. compensation given and the amount of compensation.

#### **Based on Socioeconomic Conditions**

The results of the distribution of the level of community welfare based on socioeconomic conditions in both *Karanggupito* and *Kasreman* Villages are as follows: (a) the population who work mostly in the mining sector is between 40-50 years old; (b) the people who work at least in the mining sector are people over the age of 50; (c) the majority of respondents' education levels in both villages are graduated from elementary school/equivalent; (d) most of the population of mine workers are married; (e) the population of mining workers has the highest number of family dependents of more than 4 people; (f) most of the respondents in the two villages previously worked as laborers, in addition some respondents also worked in the paddy farming sector; (g) respondents in both villages worked in the mining sector for more than 12 months; (h) the average income level of resident in *Karanggupito* and Kasreman Villages after working in the mining sector; (i) a large portion does not have a risk guarantee for work in the mining sector; (j) the condition of the house where the respondent lives both in Karanggupito and Kasreman Villages still occupies the inheritance house, most of the respondents live in homes with the condition of the building walls in the form of wooden walls and bamboo and the condition of the floor of the house is still in the form of land; (k) the condition of the level of health of the majority of respondents did not yet have health insurance and the existence of selftreatment behavior if sick and increasing the number of people with respiratory diseases after mining activities; (l) based on the assets owned by the majority of respondents do not have a communication the of device in form mobile phones/cellphones, of most the respondents have а means of transportation in the form of motorbikes by way of second purchase or a gift.

# **Based on Environmental Impacts**

The results of the distribution of the level of community welfare based on environmental impacts due to mining activities in both Karanggupito and Kasreman Villages are as follows: (a) the majority of respondents in both villages are of the opinion that mining activities can cause flooding; (b) most respondents in both villages mentioned that mining activities could cause landslides; (c) the majority of respondents in the two villages mentioned that mining activities could cause a reduction in the water debit at the spring source; (d) the majority of respondents in both villages mentioned that mining activities could cause river water to become polluted or turbid; (e)

the majority of respondents in both villages mentioned that mining activities could lead to reduced soil fertility; (f) the majority of respondents in both villages mentioned that mining activities could cause traffic activity to be uncomfortable; (g) the majority of respondents in both villages mentioned that mining activities could cause road conditions to be severely damaged; (h) that the majority of respondents in both villages mentioned activities that mining could cause increased air pollution; (i) the majority of respondents in both villages mentioned that mining activities could cause very disturbing noise impacts; most (i) respondents in both villages did not receive compensation for the negative impacts of mining activities;

# CONCLUSION

Based on the results of the analysis and discussion in this study, it shows that the existence of mining activities in both the Karanggupito and Kasreman Villages has caused community welfare to decline. The decline in the level of community welfare occurs due to the negative impact of mining activities. The status of employment in the mining sector is indeed wide open which then causes people to switch from various sectors of employment to employment in the mining sector. The shift of employment to the mining sector has an impact on rising levels of income, but this also does not significantly affect the level of community welfare.

The opening of employment in the mining sector has caused the level of employment in the sector to increase. Many residents who previously worked in various types of work then moved to work in the mining sector. This also has an impact on increasing people's income. The income level of residents in *Kasreman* and Karanggupito Villages after working in the mining sector tends to increase. Before working in the mining sector, almost 50% of the population of mine workers had an income level of less than 1 (one) million rupiah, then after working in the mining sector there were no residents who had income below 1 (one) million rupiah.

The increasing level of income of residents of the mine workers does not have much impact on the residential facilities occupied. Mine workers in both *Karanggupito* and *Kasreman* Villages occupy residential facilities that are still under the criteria of a healthy home. This is evidenced by the majority of residential houses of mine workers with the condition of the floor of the house still in the form of a dirt floor and the condition of the walls of the building in the form of wooden walls.

Most residents of mine workers in both Karanggupito and Kasreman Villages use health facilities and medicines at relatively low cost to overcome their health problems. This can be seen from the use of the Puskesmas facilities or the Auxiliary Health Center if the wife gives birth and her own treatment behavior (drug store or stall) if she is sick. This also proves that increased income levels do not significantly affect the level of population health. Even the existence of mining activities causes the number of people with respiratory diseases to increase. Many residents of mining workers experience respiratory problems after mining activities occur. Respiratory disease affects many people who live around the mining area.

In addition to the above, almost all residents of mine workers do not have a guarantee of occupational risk. They do not have a guarantee of occupational risk, especially in the form of health insurance. This is a burden for them because in the event of a work accident or health disorder during work they will find it difficult to get health care. They must seek treatment at their own expense if they experience illness and certainly make it difficult for them to get good quality health care.

#### REFERENCE

- Ahmad Averus & Andi Pitono. 2013. Pengaruh Implementasi Kebijakan Pertambangan Terhadap Efektivitas Penanganan Kualitas Lingkungan Hidup pada Dinas Pekerjaan Umum, Energi dan Sumber Daya Mineral Kota Palu. Pascasariana Institut Pemerintahan Dalam Negeri (IPDN)
- Aryo Prawoto Wibowo & Aldin Ardian. (2014). Analisis Manfaat Sosial Ekonomi Usaha Pertambangan PT. XYZ Batu Gamping di Kabupaten Bandung Barat, Provinsi Iawa Barat. Iurnal Program Studi Rekayasa Pertambangan, Institut Teknologi Bandung (ITB)
- Asril. 2014. Dampak Pertambangan Galian C Terhadap Kehidupan Masyarakat Kecamatan Koto Kampar Hulu Kabupaten Kampar. Jurnal Kewirausahaan, Vol. 13, No. 1, Januari-Juni 2014
- Anonim. 2013. Data dan Informasi Kinerja Pembangunan Tahun 2004 – 2012. Badan Perencanaan

Pembangunan Nasional (BAPPENAS) dan Badan Pusat Statistik (BPS)

- Anonim. 2015. ESDM Dalam Angka Pencapaian Tahun 2015. Jakarta : Kementerian Energi dan Sumber Daya Mineral
- Anonim. 2014. Himpunan Pemerhati Lingkungan Indonesia. di akses 2 Februari 2017 http://www.hpli.org/tambang.ph p/
- Anonim. 2016. Kabupaten Ngawi dalam Angka 2015. Badan Perencanaan & Pembangunan Daerah Kabupaten Ngawi
- Anonim. 2015. Masterplan Jalan Tol Paket Solo-Ngawi-Ketosono 2015. PT. Waskita Karya & PT. SNJ
- Anonim. 2015. Peraturan Gubernur Jawa Timur Nomor 16 Tahun 2015 Tentang Pedoman Pemberian Ijin Bidang Energi Sumber Daya Mineral di Jawa Timur
- Anonim. 2011. Peraturan Daerah Kabupaten Ngawi Nomor 10 Tahun 2011 tentang Rencana Tata Ruang Wilayah (RTRW) Kabupaten Ngawi.
- Anonim. 2011. Peraturan Daerah Kabupaten Ngawi Nomor 29 Tahun 2011 tentang Pajak Mineral Bukan Logam dan Batuan
- Anonim. 2015. Surat Keputusan Bupati Ngawi Nomor 188/08.12/404,012/2015

Tentang Pembentukan Tim Verifikasi Penerbitan Rekomendasi Izin Pertambangan Kabupaten Ngawi

Anonim. 2015. Undang-undang Dasar Negara Republik Indonesia Amandemen Kelima

- Anonim. 2009. Undang-undang Republik Indonesia Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup
- Anonim. 2000. Undang-undang Republik Indonesia Nomor 34 Tahun 2000 Tentang Pajak dan Retribusi Daerah
- Anonim. 2009. Undang-undang Republik Indonesia Nomor 9 Tahun 2009 tentang Pertambangan Mineral dan Batubara
- Anonim. 2009. Undang-undang Republik Indonesia Nomor 11 Tahun 1967 tentang Ketentuan Pokok-Pokok Pertambangan
- Anonim. 2009. Undang-undang Republik Indonesia Nomor 23 Tahun 2014 tentang Pemerintahan Daerah
- Barber, Charles victor, Suraya Afif & Agus Purnomo. 1997. Meluruskan Arah Pelestarian Keanekaragaman Hayati dan Pembangunan di Indonesia. Jakarta: Yayasan Obor Indonesia
- Creswell, John W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th Edition). London: Sage Publications Ltd.
- Djajadilaga, Mauliyani. 2010. Indeks Kualitas Lingkungan Hidup 2009. Jakarta : Asisten Deputi Urusan Data dan Informasi Kementerian Lingkungan Hidup
- Fauzi, Akhmad. 2006. Ekonomi Sumber Daya Alam dan Lingkungan (Teori dan Aplikasi). Jakarta : PT. Gramedia Pustaka Utama
- Hennink M, Inge Hutter, and Ajay Bailey. 2011. Qualitative Research Methods. London: Sage Publications Ltd.

- Hidayat, Wahyu. 2015. Analisis Dampak Pertambangan Terhadap Pengembangan Wilayah di Kabupaten Luwu Timur Provinsi Sulawesi Selatan. Bogor: Tesis Program Pascasarjana Institut Pertanian Bogor
- Husaini Usman dan Purnomo. 2008. Metodologi Penelitian Sosial. Jakarta: PT Bumi Aksara.
- Jannah, Fathul, Ukar Wijaya Soelistijo & Sri Widayati. 2016. Analisis Peran PT. Aneka Tambang Tbk. Unit Bisnis Pertambangan Emas (UBPE) Pongkor Dalam Mendukung Perekonomian Provinsi Jawa Barat. Prosiding Teknik Pertambangan, Fakultas Teknik, Universitas Islam Bandung
- Kantun, S. 2013. Hakikat dan Prosedur Penelitian Pengembangan. Diakses 5 Oktober 2016, http://library.unej.ac.id/client/se arch/asset/468.
- Keraf, A. Sonny. 2010. Etika Lingkungan Hidup. Jakarta : PT. Kompas Media Nusantara
- Kustituanto, Bambang & Rudy Badrudin. 1994. Statistika 1 (Deskriptif). Jakarta: Gunadarma
- M. Mangunjaya, Fachruddin. 2005. Konservasi Alam Dalam Islam. Jakarta: Yayasan Obor Indonesia
- Mikdad, Ukar Wijaya Soelistijo & Sri Widayati. 2015. Analisis Peran Sektor Pertambangan Bahan Galian Industri (BGI) dalam Upaya Mendukung Perekonomian Provinsi Jawa Barat. Bandung : Karya Ilmiah Universitas Islam Bandung

- Nasution, Rozaini. 2003. Teknik Sampling. Medan : Digital Library Universitas Sumatera Utara
- Nursimah. 2014. Kajian Model Hukum Penyelenggaraan Tanggung Jawab Sosial dan Lingkungan Perusahaan Pertambangan Upava Meningkatkan Sebagai Masyarakat Kesejahteraan Kabupaten Banyuasin. Musi Prosiding Snapp2014 Sosial. Ekonomi dan Humaniora, Fakultas Hukum Universitas Muhammadiyah Malang
- Nuryati & Faradila, Agustin. 2015. Statistik Pertambangan Bahan Galian Indonesia (The Indonesia Quarrying Statistic). Jakarta : Katalog Badan Pusat Statistik 6201004
- Putri, Indah Octavia. 2015. Implementasi Kegiatan Pertambangan dan Pengaruhnya pada Kesejahteraan Masyarakat Desa Bantar Karet. Bogor: Sains Komunikasi dan Pengembangan Masyarakat, Fakultas Ekologi Manusia, Institut Pertanian Bogor.
- Rahmadian, Faris & Arva Hadi Dharmawan. 2014. Ideologi Aktor dan Persepsi Masyarakat Terhadap Dampak Pertambangan Pasir di Pedesaan Gunung Galunggung. Bogor: Jurnal Sosiologi Pedesaan Vol.02 No.02 Institut Pertanian Bogor
- Rahmawaty. 2013. Dampak Pertambangan Emas Terhadap Kehidupan Sosial Ekonomi Masyarakat Desa Tulabolo Timur Kecamatan Suwawa Timur, Kabupaten Bone Bolango.

Program Pascasarjana Universitas Negeri Gorontalo

- Richey, RC & JD Klein. 2005. Developmental Research Methods: Creating Knowledge from Instructional Design and Development Practice. Journal of Computing in Higher Education, vol. 16, no. 2, pp. 23–38.
- Risal, Samuel, DB. Paronoan & Suarta Djaja. 2013. Analisis Dampak Kebijakan Pertambangan Terhadap Kehidupan Sosial Ekonomi Masyarakat di Kelurahan Makroman. Iurnal Universitas Administrasi Mulawarman 1 (1) : 117-131
- Salim, Emil. 2010. Pembangunan Berkelanjutan (Peran dan Kontribusi). Jakarta: KPG (Kepustakaan Populer Gramedia)
- Salim, H.S. 2007. Hukum Pertambangan di Indonesia. Jakarta: PT. Raja Grafindo Persada
- Siahaan, N.H.T. 2004. Hukum Lingkungan dan Ekologi Pembangunan. Jakarta : Erlangga
- Silalahi, Ulbert. 2011. Studi Tentang Ilmu Administrasi (Konsep, Teori dan Dimensi). Bandung : Sinar Baru Algensindo
- Soekanto, Soerjono. 2009. Sosiologi Suatu Pengantar. Jakarta : Rajawali Pers
- Sugiyono. 2012. Memahami Penelitian Kualitatif. Bandung : CV Alfabeta.
- Suryadi & Permanasari, Dian. 2013. Sistem Terintegrasi Neraca Lingkungan Ekonomi Indonesia 2008 – 2012. Jakarta : Katalog Badan Pusat Statistik 9504001
- Syarif, Afif. 2014. Enviromental Law Enforcement Affairs Excavation C Mining Permi In The District

Muaro Jambi. Jurnal FH Univ. Jambi. Vol. 16 No.1 Hal 01-10

Yuwono, Margo. 2012. Peran, Dampak Investasi dan Kebijakan Sektor Pertambangan Terhadap Perekonomian Nasional dan Regional. Bogor: Disertasi Program Pascasarjana Institut Pertanian Bogor.