

The Dynamics Of Household Livelihood Transformation In The Gold Ring Circle Bombana Regency

Irfan Ido, Usman Rianse, R. Marsuki Iswandi, Bahtiar

Abstract: This research was conducted to analyze the dynamics of the livelihood change of the head of the gold mine circumference in Bombana County. This research was conducted in North Rarowatu district of Bombana District with consideration is the center of mining Activities area managed by the community and by private companies. The population of this research is all households in North Rarowatu district totalling 1,716 households and research samples amounting to 325 households. The analysis of the data used is percentage and descriptive analysis. The results showed that: a) the management of gold mining by the public encouraged the change of livelihoods of 40 households from the agriculture and non-agricultural sectors to the gold mining sector caused by of land conversion and the attractiveness of mining sector revenues. And there are 284 households who do not change their livelihoods because they do not want to risk and do not have the skills to mine gold, b) management of gold mining business by private companies encourages the occurrence of 35 livelihood changes of household heads from gold mining sector returned to agriculture and non-agricultural sectors caused by limited access from private mining companies. And there are 5 heads of households who can work in gold mining owned by private companies.

Index Terms: Livelihood, Household, Ring Circle, Gold, Bombana Regency

1 INTRODUCTION

Regional economic development is a process whereby local governments and their communities manage existing resources and form a pattern of partnership between the local government and the private sector to create a new employment and Stimulate economic growth in the region (Arsyad, 1999). Some economic development efforts to encourage labor absorption include the management of agricultural resources and mining resources. Indonesia is a developing country that at the beginning of its economic development has a high dependence and is oriented to the agricultural sector (Todaro, 2006). Bombana Regency is part of Southeast Sulawesi province and is a regency formed from the results of the expansion of Buton District on 18 December 2003 based on LAW No. 29 year 2003. Bombana District administratively consists of 22 sub-districts, one of which is Rarowatu Utara Sub-district. The agricultural sector is a base sector that contributes supreme to the region's economy. This means that the agricultural sector is the livelihood space and the focus of community life. In addition, the continuity of people's life in Bombana Regency can also be supported by the availability of natural resources both biotic and abiotic which can be utilized to meet the needs and welfare of the community. Gold minerals are one type of natural resources (abiotic) that can be utilized to fulfill the needs, welfare and sustainability of the community in Bombana Regency. The gold minerals in Bombana County are categorized as secondary gold deposits or on a 26.5-ton reserve estimate and concentrated in ancient river deposits which are usually at relatively shallow depths (3-6 meters) (Kisman, 2011; Zulkarnain, 2010). The dynamics of the existence and management of gold mines in Bombana district of course directly impacts on the social change of gold mine circumference households, one of which has changed the structure of the livelihood system (Soerjono Soekanto 2006). The gold mine circumference in Bombana District is located in North Rarowatu district. The change in household livelihoods in research is defined as a change in the head of the household that will determine and influence the action, from the livelihood before and after the gold mining activities.

Research aims at analyzing the dynamics of the livelihood change of household head of the gold mine circumference before mining activities, gold mining is managed by the community and gold mining managed by private companies.

2. LITERATURE REVIEW

According to Mosher (1966), agriculture in the broad sense (agriculture) is a distinctive form of production, which is based on the growth process of plants and animals. Farmers manage and stimulate the growth of plants and animals in an agricultural business, where production activities are business, so spending and revenue are very important meaning. While agriculture in the narrow sense (agronomy) is the study of the application of science of land management and crop production (Kipps, 1970). The agricultural sector is intended to be agricultural people, plantations, forestry, livestock, and fisheries where the villagers depend on fulfilling their life needs (Mubyarto, 1995). According to Law No. 4 of 2009 on Mineral and coal mining are part or all of the activities in the framework of the research, management and administration of minerals or coal which include general investigation, exploration, study Construction, mining, processing and purification, transport and sales, and post-production activities. The change of livelihood or transformation of the job is a shift or change in the fundamental work that man committed to the life and resources available for improved living standards. This change of livelihoods is characterized by a change in public orientation about livelihoods. Changes in the orientation of livelihoods are interpreted as a change in community thinking that will determine and influence its actions in the days despite the determination of the symptoms of a symptom of the shift or change has occurred in the Reality in society (Fajar Hatma, 2003). Individuals in determining a choice of livelihood will choose one among rational alternatives that can provide the maximum usability for themselves as determined by the motivation related to wages and risk differences Each livelihood (Becker, 1986; Davis, 2003). Changes in livelihoods due to internal factors, external, or a combination of the two, such as: income level, ownership and

land area, as well as job opportunities (Khaafidh and Poerwono, 2013; Haris Prabowo, 2011; Davis, 2003).

3. METHOD

his research was conducted in North Rarowatu subdistrict of Bombana Regency. The determination of the research site is done purposive sampling in consideration that in Sub district Rarowatu Utara is the center of mining activities that are managed by the community and by private companies. The population of this research is all households in North Rarowatu district, amounting to 1,716 households. The sampling was done by stratified random sampling method using the formula Slovin with a precision of 95 percent (Rianse and Abdi, 2009), resulting in research samples of 325 households type and data collection techniques are as Following points: (1). Primary data is data obtained from research objects using data collection techniques through live interviews with the head of the household to which the respondent, (2). Secondary data is data obtained not from objects Research using data collection techniques through literature techniques sourced from institutions, books and other scientific literature. The analysis method used is a descriptive percentage analysis. The results of research and analysis of data are presented in the form of drawings and tables.

4. RESULT AND DISCUSSION

Livelihoods are the whole activity to exploit and utilize resources in physical, social and cultural environments that materialize as production, distribution and consumption activities. This research will discuss about the dynamics of the livelihood changes in household head due to gold mining when managed by the community and when managed by private companies.

4.1. Before Gold Mining

Before the gold mining activities in North Rarowatu Sub-district, the main livelihood of the household head in the gold mining circumference region is dominant in the agriculture sector. There are 268 people or 82.46 percent working in the agriculture sector, while 57 people or 17.54 percent work in non-agricultural sectors.

Table 4.1 Livelihood at Before Mining Activity

Main Livelihood	Before Mining Activity	
	Person	Persen
Agriculture	268	82,46
Farmers	154	47,38
Paddy Rice Farmers	20	6,15
Fish farmers	52	16,00
Fisherman	41	12,62
Breeder	1	0,31
Non Agriculture	57	17,54
Trader	22	6,77
Entrepreneur	17	5,23
Driver	4	1,23
Labor	3	0,92
Others	11	3,38
Non Gold Mining	325	100,00
Gold Mining	-	-

Source: Results of Data Analysis, 2019

In the agriculture sector, the dominant main livelihood is the farmer, where there are 154 people or 47.38 percent of the farmers scattered in Marga Jaya village, Aneka Marga

Village, Hukaea Village, and Wumbubangka village which is a non coastal area. Furthermore, the main livelihood as farmer pond of 52 people or 16.00 percent and fishermen livelihoods of 41 people or 12.62 percent spread over coastal areas include: Tunas Baru village, Lantowua Village, Watumentade village and Tembe village. The dominant livelihood of household head in the agriculture sector showed that sociological households in North Rarowatu district before the existence of gold mining were agricultural households instead of miners. The overview of livelihood domination in the agricultural sector shows North Rarowatu district including rural areas where the community relies heavily on agriculture in fulfilling its life needs (Pujiastuti, 2009). In the non-agricultural sector, there are 57 people or 17.54 percent who work in the dominant work as a trader and entrepreneur (12.00 percent) spread in the Marga Jaya village, Tembe village and Aneka Marga village. Aneka Marga village which is the capital of North Rarowatu District

4.2. Gold Mining is managed by the Society

People's mining is an activity that consists of the use of adequate tools to extract mineral resources (Hentschel et al., 2002; Banchirigah and Hilson, 2010). Gold mining by the public from September 2008 to March 17, 2009. The appeal of the gold mining economy encouraged tens of thousands of local residents and migrants to manage gold mines after obtaining a mining Entry Permit card (KIMP) from Bombana County Government (Bolay, 2014; Reuters, 2015; Dillon et al., 2012). There are a total of 63,800 registered people have KIMP as a gold miner. Of these, 23,930 people were miners from Bombana Regency, 35,896 miners from south East Sulawesi Province, and 4,034 were miners from outside of southeast Sulawesi province. The KIMP fee charged to the community miners varies, the cost of miners from Bombana amounted to Rp. 300.000, miners from south East Sulawesi IDR. 500.000 and miners from outside South East Sulawesi amounting to Rp. 750.000. After having a KIMP, the miners People are also charged to pay the mining retribution every month for 6 months with magnitudes also varied. Bombana miners pay Rp. 100,000 every month, while miners from outside Bombana amounting to Rp. 300.000 per month.



Figure 1. Mine Entry Permit Card (KIMP)

Source: LIPI Team Docs

Gold mining in Rarowatu North Sub-district is carried out on the river basin because the gold deposits (placer) There are many around the river and the gold management requires river water. Suparyanto (2010) stated that the location of gold mining is located in the former transmigration site of residential units (SP) 8 and SP 9 which is overall located at the Wuku-Wuku river basin and belongs to the

Wumbubangka sub-district. The mining technique used by the community is the surface mining which includes 3 (three) typologies (Augustine, 2010). Firstly, mining and gold turnover will be done by individuals by means of artisanal using a dulang made of wood and a frying pan made of metal. The artisanal performed on a river body (Fig. 2).



Figure 2. Typology: Panning Technique

Source: Bombana Regency Environmental Agency, 2009
Second, mining is done by the group (3-5 people) by digging the form of wells/trench and gold turnover with the mini Sluicibox and the alignment with the equipment used are hoe, crowbar and shovel as a digging tool. Mini sluiciboxes and Dulang are made of wood and wok made of metal. The make-up of the river, a paritan on the riverbank to acquire mini sluicibox and gold panning bait (Fig. 3)



Figure 3. Typology: Excavation Technique (Well / Ditch)

Source: Bombana Regency Environmental Agency, 2009
Thirdly, mining by the group (5-10 people) by way of spray mines, gold gains will be with Sluicibox, longtoms and gold panning with water pump equipment, water hoses and monitors, sluice boxes, and longtoms. Spraying with high pressure water to obtain sluice box bait, longtoms and Pendulangan. Conceptually, this third type of mining typology is a common mining technique and is ideal for use in the process of exploitative gold rush (Fig. 4)



Figure 4. Typology: Spraying Technique
Source: Bombana Regency Environmental Agency, 2009

The existence of gold mining by the community implicates the changes in the main livelihood of the household head of 40 people or 12.31 percent of agriculture and non-agricultural sectors to the mining sector. Agricultural sector livelihoods are changing more than non-farms. Changes in the livelihoods of the head of the household can be said to be a rational choice with the motivation of the appeal of greater income levels and reduced/loss of agricultural land (Becker, 1986; Revelation, 2007; Khaafidh and Poerwono, 2013; Haris Prabowo, 2011; Davis, 2003). Changes in the livelihood of the household head of agricultural households as much as 36 people or 9.85 percent and non-agricultural households are only 9 people or 2.77 percent. The change in agricultural sector livelihoods is dominated by the livelihoods of farmers as many as 15 people or 4.62 percent are caused by the view that the gold mine for farmers is an opportunity to achieve a better livelihood, where Can provide an income that is far from food outcomes (Cartier and Burge, 2011; Soemarwoto and Ellen, 2009, Zulkifli, 2013). Changes in the livelihoods of non-agricultural heads of households are dominated by entrepreneurs of 5 people or 1.54 percent. The change of livelihood to gold mining was 40 people or 12.3 percent), and 1 person changed from Labour to farmer.

Table 4.2 Livelihood at Gold Mining is managed by Society

Main Livelihood	Mining by Society	
	Person	Persen
Agriculture	236	72,62
Farmers	139	42,77
Paddy Rice Farmers	19	5,85
Fish farmers	44	13,54
Fisherman	32	9,85
Breeder	2	0,62
Non Agriculture	49	15,08
Trader	21	6,46
Entrepreneur	12	3,69
Driver	2	0,92
Labor	3	0,62
Others	11	3,38
Non Gold Mining	285	87,69
Gold Mining	40	12,31

Source: Results of Data Analysis, 2019

Gold mining by the public shows the existence of the phenomenon "Gold Rush" has occurred and affects the economic change in the context of livelihoods in Bombana Regency in a fairly large scale. According to data that takes care of mining entry Permit (KMIP), the Bombana community of 23,930 people who become miners gold or 22 percent of the population of the year 2008 (109,883 people). The phenomenon of "Gold Rush" had occurred in New South Wales and Victoria in 1851, the discovery of a rich gold mine led to the Eastern Australians experiencing a socioeconomic revolution. Socio-economic change from agriculture, livestock and wool industry to gold mining. Gold minerals are the main drivers of a successful revolution in society, "Gold Revolution" is greater than "Wool Revolution" (Ratna, 2010). However, there are 285 households that are not affected by the "Gold Rush" phenomenon because they are integrated with the culture of livelihood in the non-mining sector. So they consider it very risky to make a livelihood transformation into the mining sector. It shows that when the strong appeal of

gold mining in North Rarowatu district, there are many households that remain in their livelihoods. The condition is because the head of the household has no mining skills, and also because it does not want to take risks that can threaten the sustainability of his life (Ress, 1990; Scott, 1982).

4.3. Gold mining is managed by private companies

The community's gold mining activities were closed by the Bombana County government on 17 March 2009. Since then, gold mining management was carried out by private companies after receiving business license for mining production from Bombana Regency government. Until the year 2014, there are 19 private companies in North Rarowatu district that have been granted Mining business license (IUP) by Bombana Regency Government. The 19 IUP consists of 10 IUP exploration covering an area of 6,285.68 hectares (35.81%) and 9 IUP production covering an area of 11,268.93 hectares (64.19%) With a total area of 17,554.61 hectares of mining area. The company which owns IUP production with the largest IUP is PT. Bahtera Sultra Mining with an area of 3,020.87 hectares of IUP. Meanwhile, the company that owns the lowest IUP is PT. Anugrah Alam Buana Indonesia with an area of 109.19 hectares. For IUP Exploration, the company that owns the widest IUP is PT. Cahaya Gemilang Sentosa with an area of 2,221.31 hectares. Meanwhile, the company that has the lowest exploration IUP is PT. Niagatama Makmursemada with an area of 2.74 hectares. The private company's gold mining technique is Spraying Techniqu, the same as spray techniques on gold mining managed by the community. The difference is that the mineral excavation activities use the machine type excavators, spraying activities using a larger water pump (fig. 5).



Figure 5. Typology: Spraying Technique

Source: Bombana Regency Environmental Agency, 2009

When mining extraction is handed in the corporate grasp, it triggers the change of livelihoods of 35 gold miners. Out of the 35 people above, there are 30 people who decide to return their livelihood before gold mining such as farmers, farmer and fishermen. 5 other people decided to change to a new livelihood such as: self-employed, merchants, farmers and farmer farms. Extraction of gold mining in corporate power, only 5 people or 1.54 percent who have access to gold mining managed by private companies owner of Mining Business License (IUP) production operations. The phenomenon of limitations of local community access to gold mineral resources occurs in North Rarowatu sub-district. Where there is a shift of property rights of natural resources from the private group (community) to private individuals (private sector) that implicates the limitation of local community access and leads to social conflict

Table 4.3 Livelihood at Mining by Private Companies

Main Livelihood	Mining by Private Companies	
	Person	Persen
Agriculture	263	80,92
Farmers	150	46,15
Paddy Rice Farmers	20	6,15
Fish farmers	53	16,31
Fisherman	38	11,69
Breeder	2	0,62
Non Agriculture	57	17,54
Trader	23	7,08
Entrepreneur	17	5,23
Driver	3	0,92
Labor	3	0,92
Others	11	3,38
Non Gold Mining	320	98,46
Gold Mining	5	1.54

Source: Results of Data Analysis, 2019

The limitations of local community access to the management of gold mineral resources in Bombana District are influenced by the paradigm or perspective of social injustice focused on distributional challenges (Redi Ahmad, 2017). The paradigm refers to the fact that there is a social injustice especially on the challenge of distribution of natural resources in Bombana Regency. The social injustice was influenced by the mastery and possession of the gold mining of capitalism in Bombana County. The entry of corporations conducting massive gold mineral exploitation resulted in limited local community access to the management of gold mineral resources. As a business entity, the corporate perspective of exploiting the golden mineral resources is affected by the paradigm of concern about rising costs referring to gold minerals as commodities have economic value only for the profit Maximum profit oriented

5. CONCLUSION

The existence of gold mining management encourages the occurrence of major livelihood changes from the head of household:

- The management of gold mining by the Community encourages the change in the livelihoods of 40 households from agriculture and non-agricultural sectors to the gold mining sector caused by land conversion and the attraction of income Mining sector. And there are 284 heads of households who do not change their livelihoods because they do not want to risk and do not have gold mining skills.
- The management of gold mining business by private companies encouraged the change of livelihoods of 35 households from gold mining sector returned to agriculture and non-agricultural sectors caused by limited access from Private mining companies. And there are 5 heads of households who can work in gold mining owned by private companies.

REFERENCES

- Agustinus, 2010, Strategi Pengembangan Wilayah Pertambangan Rakyat di Bombana: Dampak Penambangan Emas di Bombana: Tipologi dan Dampaknya. Tim Kajian Tambang LIPI. Jakarta.
- Arsyad, Lincolin. (1999). Pengantar perencanaan dan pembangunan ekonomi daerah. BPFE Yogyakarta.
- Banchirigah, S.M. and Hilson, G. (2010), "De-agrarianization, re-agrarianization and local economic

- development: re-orientating livelihoods in African artisanal mining communities”, Policy Sciences, Vol. 43 No. 2, pp. 157-180.
- [4] Becker, S G. 1962. “Irrational Behavior and Economic Theory”. The Journal of Political Economy Vol. 70, No. 1 (Feb., 1962). University of Chicago Press, Chicago. Diakses tanggal 25 Juli 2019.
- [5] Bolay, M. (2014), “When miners become ‘foreigners’: competing categorizations within gold mining spaces in Guinea”, Resources Policy, Vol. 40 No. C, pp. 117-127.
- [6] Cartier, L.E. dan M. Burge, 2011. Agriculture and Artisanal Gold Mining in Sierra Leone: Alternatives or Complements? Journal of International Development, Vol. 23:1080-1099.
- [7] Davis, J. R. 2003. The Rural Non-Farm Economy, Livelihoods and Their Diversification: Issues and Options. NRI Report No: 2753.
- [8] Dillon, A., Bardasi, E., Beegle, K. and Semeels, P. (2012), “Explaining variation in child labor statistics”, Journal of Development Economics, Vol. 98 No. 1, pp. 136-147.
- [9] Bolay, M. (2014), “When miners become ‘foreigners’: competing categorizations within gold mining spaces in Guinea”, Resources Policy, Vol. 40 No. C, pp. 117-127.
- [10] Fajar Hatma, 2003. Transformasi Tenaga Kerja Pedesaan. Surakarta
- [11] Hentschel, T., Hruschka, F. and Priester, M. (2002), “Global report on artisanal and small scale mining”, IIED and WBCSD MMSD, London.
- [12] Khaafidh, M dan Poerwono, D (2013). Faktor-faktor yang Mempengaruhi Keputusan Tenaga Kerja untuk Berkerja di Kegiatan Pertanian (Studi Kasus : Kabupaten Rembang). Fakultas Ekonomika dan Bisnis Universitas Diponegoro, Semarang.
- [13] Kipps, M., 1970. Production of Field Crops. New Dehli: Tata Mc. Graw Hill Publ. Co. Ltd
- [14] Kisman. (2011). Keterdapatn Mineralisasi Emas Yang Berasosiasi Dengan Sinabar Di Kecamatan Rarowatu Kabupaten Bombana Provinsi Sulawesi Tenggara. Buletin Sumber Daya Geologi, 06 (02)
- [15] Mosher, A.T. 1985. Menggerakkan dan Membangun Pertanian. Yasaguna, Jakarta.
- [16] Mubyarto. 1995. Pengantar Ekonomi Pertanian. Jakarta :LP3ES.
- [17] Mulyadi. 2001. Aknggerakkan dan Membangun Pertanian. Yasaguna, Jakarta.
- [18] Popkin, Samuel L.1986, Petani Rasional. Jakarta: Yayasan Padamu Negeri.
- [19] Prabowo, Haris dan Poerwono Dwi setia. Analisis Faktor Yang Mempengaruhi Keputusan Tenaga Kerja Desa Untuk Bekerja di Kegiatan Non Pertanian 104 (Studi Kasus: Kabupaten Pekalongan). 2011. Jurnal Universitas Diponegoro.
- [20] Pudjiastuti TN. 2010, Strategi Pengembangan Wilayah Pertambangan Rakyat di Bombana: Dampak Kegiatan Penambangan Emas terhadap Sosial Budaya dan Ekonomi Masyarakat di Bombana. Tim Kajian Tambang LIPI. Jakarta.
- [21] Ratna, 2010. Faktor-Faktor Terjadinya Pemberontakan Eureka di Ballarat Australia Tahun 1851-1854. [skripsi]. Fakultas Ilmu Pengetahuan Budaya Program Studi Ilmu Sejarah. UI. Jakarta
- [22] Rees, J. 1990, Natural Resources: Allocation, Economics and Policy, London: Routledge
- [23] Redi Ahmad, 2017. Hukum Penyelesaian Sengketa Pertambangan Mineral dan Batu Bara. Hal. 23. Penerbit Sinar Grafika. Cetakan Pertama Januari 2017. Jakarta.
- [24] Rianse, U dan Abdi. 2009. Metode Penelitian Sosial dan Ekonomi Teori dan Aplikasi. Alfabeta, Bandung.
- [25] Reuters (2015), “How secret gold mines are tearing the Ivory Coast apart”, New York, NY, May 7, available at: <http://nypost.com/2015/05/07/how-secret-gold-mines-are-tearing-the-ivory-coast-apart/> (accessed November 13, 2019).
- [26] Scott, James. 1982. Moral Ekonomi Petani: Pergolakan dan Subsistensi di Asia Tenggara . Jakarta: LP3ES.
- [27] Soekanto, Soerjono, 2006. Sosiologi Suatu Pengantar. Jakarta: PT Raja Grafindo Persada
- [28] Soemarwoto, R. dan R. Ellen, 2010. Gold Mining and Changing Perception of Risk in West Java. Human Organization Vol 65 No. 3 2010, hal. 233-241.
- [29] Todaro, Michael. P. dan Stephen C. Smith. 2006. Pembangunan Ekonomi. Edisi Kesembilan Jilid I. Penerbit Erlangga, Jakarta.
- [30] Zulkarnain, Iskandar, dkk., 2010. Strategi Pengembangan Wilayah Pertambangan Rakyat di Bombana, Sulawesi Tenggara. Lembaga Ilmu Pengetahuan Indonesia (LIPI), Jakarta.
- [31] Zulkifli, 2013. Analisis Dampak Sosial, Ekonomi, Budaya dan Kesehatan Masyarakat Akibat Penambangan Emas di Kecamatan Sawang Aceh Selatan. Jurnal Ekonomika, Vol 4(17): 8-15.