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## Research Article

# Socio-economic Conditions in The Illegal Gold Miners Tulabolo Village, Gorontalo-in Indonesian

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## Abstract

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**Key words:** Gold miners, socio economie, illegal mining, spradly

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## INTRODUCTION

Wealth Indonesia's natural resource is a resource that is essential for human survival. Loss of or reduction in availability of natural resources cannot be denied will have enormous implications for mankind survival. Indonesia's natural resources also become a substantial reason of a long history of Indonesian nation that colonized for centuries by Dutch and Japanese state. Various kinds of natural resources owned are minerals and coal, which is included in class of non-renewable resources. Management and control of natural resources has been built through the spirit of 1945 Constitution Article 33 with main goal is for greatest prosperity for Indonesia people. The 1945 Constitution is the cornerstone of establishment of a mining policy of Law No. 11 year 1967 on mineral and coal mining that later replaced by Anonymous<sup>1</sup>.

Concepts to exploit natural resource put Gorontalo province in Eastern part of territory of Republic of Indonesia. It also has a wide range of dynamics and polemics related to natural resources, among other dynamics of forest sector up on over-mining functions. The dynamics are still warm in coloring a wide range of discussion and debate in public sphere. The resources are busy talking on many points, but in recent decades only Bolango Bone regency, Gorontalo province which is often the central issue raised by both activists, academics, scientist, until environmentalists. Issues that frequently arise from over-function of forest, mining exploitation carried out by foreign corporations to manufacture artisanal mining area in Tulabobo-Gorontalo.

Bone Bolango district wide is approximately 1984.58 km<sup>2</sup>. The data from Department of Forestry and Mining, Gorontalo Province<sup>2</sup>. It is divided into 17 districts and 161 villages with a total population of 150 359 inhabitants. East Suwawa sub-district is one of few districts in territory of District of Bone Bolango has an area of 47.11 km<sup>2</sup> or at 2:37% of total district Bolango Bone (national land agency districts bone bolango, 2011). District of East Suwawa Atinggola directly adjacent to District in north, south by District Bone Beach, west Subdistrict Central Suwawa and in East by District Pinogu. East Suwawa sub-district is divided into 9 villages that one of village is the village of Tulabolo also become the object of discussion in this study. Tulabolo village has an area of 26% of total area of the District of East Suwawa. Its geographical Tulabolo Village area North and East, surrounded by mountains. Most of Southern region in addition there are areas of plantations and rice fields, there is also a continuous coastline directly with District Bone Beach shoreline.

Bolango Bone District has forest area which is also a protected forest park, known as Nani Wartabone (TNBNW)

with an area of approximately 188.006.34 ha of forest data from Anonymous<sup>3</sup>. It is divided into protected forests are forests that have been assigned by government to be protected and a small portion used as a limited production forest. Forests are a National park is a nature conservation area which has original ecosystem, managed by zoning system and used for purposes of research, science, education, cultivation support, tourism and recreation. The protected forests are in two districts namely: District and sub-District East Suwawa Pinogu.

Deep analysis show that actual content of natural resources in Indonesia substantially have various usage both for purposes of economic development of society and daily life as raw material. Especially the province of Gorontalo, wealth of its natural resources are very abundant certainly able to encourage economic growth, benefits of this wealth can come from a variety of sectors, for example (forests, mines and other sources). However, in order to maintain stability and sustainability of an ecosystem and biodiversity contained in it, certainly in use and its use should be restricted in accordance with needs of society, for use and utilization of natural resources excessive undeniable will result in damage and enormous impact to sustainability of resource by data from the government development planning agency of Gorontalo province, 2013<sup>4</sup>.

Purba *et al.*<sup>5</sup> tried to explain in presentation forest conversion on empirical and structural problems that natural resources cannot be seen only in one point of view only, since the usefulness of natural resources is quite complex. For example, they are used as industrial raw materials, energy resources or foodstuffs as well as in form of commodity goods such as wood, rattan, water, minerals, fish, coal and others produced a variety of sectors/agencies as an economic resource. On other hand, is a landscape of natural resources in form of stock (reserves/savings) or natural capital (natural capital), such as watersheds, lakes, protected areas, coastal, whose existence is not limited by administrative area.

Some state regulations also provide convenience to protected forest area to be converted-function into a mining area with a variety of requirements and mechanisms. The provision of facilities stipulated in Government Regulation (PP)<sup>6-8</sup> No. 2/2008, Law No.19/2004 and PP No. 24/2010. Ease of given countries to protected forest areas also apply to protected areas such as National parks. Changes in status of a national park into a protected forest to be converted not only make spatial polemics, also open space of conflict on people living around the forest. Plan spatial changes in local regulations Gorontalo province is the most current example. About 14,000 ha park Nani Wartabone

(TNBNW) converted to gold mining concession of PT. Gorontalo Minerals subsidiary Earth Resources.

Bone Bolango district at Gorontalo Province has gold mining since the Dutch era. Van Bemmelen<sup>9</sup>, in the hypothesis tries to reported the activities of exploration and exploitation of gold and copper in area Buladu by Dutch government which began in days of Dutch East Indies (18th century). Historical evidence found in this area include Three graves Netherlands in Coast Buladu who died in 1899, mining holes with rail and lorry, gold ore processing equipment such as large pots and solid tailings were found around the mine site. Also in Bone regency Bolango Tulabolo precisely in village district of East Suwawa also a mining activity that has been managed by community for decades. The mine site is within state forest or National park Nani Ex Wartabone (TNNWB) which has now been demoted to a production forest by Ministerial Decree No. SK.324/Menhut I/2010 dated May 25, 2010 (the Environment Agency and Regional Research Gorontalo Province, 2011)<sup>10</sup>.

Nani Wartabone National Park itself was originally called the Dumoga Bone National Park. The forest is an amalgamation of Wildlife Dumoga (93.500 ha), Bulawan Nature Reserve (75.200 ha) and Wildlife Bone (110,000 ha). Administratively, an area of approximately 287.115 ha is located in two districts namely in Bolaang Mongondow (North Sulawesi) and in Bone regency Bolango Gorontalo province (source: Department of Forestry and Mining District Bolango Bone<sup>11</sup>, 2013). On November 18, 1992, region established and named Park Nani Wartabone, or known as TNBNW, through a ministerial decree of forestry at time. Nani Wartabone name itself is taken from the name of Gorontalo heroes who are fighting for a territory's independence from Dutch colonial rule on January 23, 1942.

Although legally have gained official recognition from the state, but in everyday there are many illegal gold mining activity. In fact, existence of illegal gold miners in Nani Wartabone Park has been around since the 1990s. Number of illegal gold miners were recorded at Department of Forestry and Mining District Bolango Bone Gorontalo<sup>11</sup> as the 9000's. They not only come from Suwawa, Bolango Bone district, but also from neighboring regions, such as Bolaang Mongondow and Minahasa (North Sulawesi), so that process of interaction and cultural assimilation so let's occur at that location.

Decision-making at community level is more influenced by market mechanism, while the rights to natural resources and capacity of communities to control the damage was minimal. Some examples of illegal gold mining (PETI), timber theft and looting of forest extremely exaggerated show a proof of reality of what happened today. Besides the

implementation of laws and regulations are implemented using proven sectoral approach tends to result in increased exploitation, instead of controlling the damage of natural resources, as described in the book Kartodihardjo and Jhamtani<sup>12</sup>.

Natural resources utilization such as gold mines and forests will still continue for various reasons society. For example, the value of mine itself has been perceived by society in which the mine is able to foster economic development for miners themselves, not a few people who argue that natural resources such as gold mines and forests is a common pool of resources which means that mine is a shared resource that can be used at any time for benefit of economy as well as the fulfillment of public. Although many regulations governing mining and forest policy through, but this is the reality of what happened today. Insistence was one of economic factors that play a role in encouraging people to remain on utilization of artisanal mining that are illegal.

Kartodihardjo and Jhamtani<sup>12</sup> as discussed elsewhere<sup>12,13</sup>, tried to explain very clearly in view and mapping the discourse of resource problem in Indonesia, ranging from access and resources ownership. In article explained that ownership of natural resources cannot be seen as limited, since ownership is complex. On one hand, there is a part of ecosystem that can provide benefits to community at large (public benefit/cost) or it can also cause harm to community, on other side of natural resources may also be a commodity (private goods) which benefit from natural resources such only enjoyed by individuals (individuals). Therefore, there is a choice form of rights (right), commonly called the regime of rights (of property rights regimes), arranged together in a certain group of people or community (common property) or in form of individual rights (private property).

Natural resources in every land mines is one aspect become a serious problem, because of abundant natural resources have conflict of interest in all circles both for regional interests or the community interests in an effort to obtain a better income. Gold mining for community rises between groups and communities, because this will have an impact on socio-economic conditions of society as described by Basiha<sup>14</sup>.

Mining business growth has implication to social and cultural life of society. It is able to boost economic growth through revenue of miner's village. Notwithstanding the reality that people of previous mining region is the location of a potential agricultural land to continuation of life of farmers. Various aspects of people's lives become widely used land mines, as a result of this conversion shift has implications for livelihood on agriculture to non-agriculture. Thus, in reality

mining activities in livelihood of rural communities Tulabolo, District East Suwawa more implicated in any order of life of community. Based on this background, this paper will explore how the lifestyle of gold miner at Tulabobo-Gorontalo and the implication to their socio-economic conditions.

## **MATERIALS AND METHODS**

This study uses a qualitative method with model analysis approach Spradley<sup>15</sup> to explore view miners as key informants. So the end result of this Spradley model analysis which is to draw up a substantive theory or research propositions. As for research informants are community leaders, miners in village Tulabobo-Gorontalo. To get or obtain accurate data, researchers used data collection techniques through, (a) Documents relating with overview of data associated with a general overview of study sites. (b) In-depth interviews researchers do to informants who fully understand or are working as miners, because they are directly involved and experience the ins and outs of artisanal mining and (c) Participant observation (passive observation and observation moderate). Technique analyze data using qualitative methods, researchers sought to explore, understand how the complexity, views and thoughts are shared by gold miners and communities living around the mining of gold is mainly related to socioeconomic dynamics of gold miners daily.

## **RESULTS**

**Gold mining history in Tulabolo, Gorontalo province:** Gold mining in Tulabobo-Gorontalo has been started in 1972 by PT Conecoot. The company began by conducting research that activity regional survey to look at content of gold potential of area Tulabolo and immediately held drilling. In 1978 occurred the transfer of ownership of PT Conecoot to PT. Tropic, however workers are still traces of workers at PT Conecoot. In 1984 the event of a transfer back to PT Junta Pacific. This is the company that continued drilling and exploration. As time went, in 1993 employees working at mine sites around the community also feel paid a salary from the company is no longer in accordance with agreements and agreements that have been done before.

Society questioned and also protesting the wage policy, but the company makes massive layoffs. Disappointed with attitude of company to terminate the contract unilaterally, workers are people around in end to fight a way to invite the entire community to participate dig a hole that eventually became artisanal mining. In 1993 that people began mining

done by communities around the mine. The execution by local community was still done by hand, in contrast to companies that use tools. If analyzed in a micro scale, substantially the gold mining operations can be said as a strategy towards a creative economy capable of boosting the development of economic sector of small communities around the mining area Talubolo District of Suwawa East Village. Mining activities manually performed by miners in mining area, made the effort to find ore excavation. The activity is not to make a living and economic improvement. Demands of life increasingly complex create miners have no choice but to rely on mining sector, although it must be done with great effort and deny the potential danger every minute pounce on each side, but the people in village even coming from villages Another even other areas came to get a job and have this income to support his family.

### **Gold miners society condition in Tulabolo-Gorontalo:**

Community life need a relationship each other. It is indispensable in daily life, because humans are social beings who cannot live alone or are still need of others help. Socializing is very important in establishing a good relationship between human beings with one another. Lifestyle of people in general are based on a sense of unity of local life, this is caused by presence of a living bond and a common identity among the members of society, on other hand because it is bound by tradition and customs are difficult to remove by any member of public. If one member of public or groups that do not act in accordance with pattern of behavior that is unusual or perform in front of group, so it is something that is condemned by people around him.

Principally, public issue is very complex. On one hand, patterns and different is life, but every lifestyle also have similarities and differences that universal. Lifestyle very complex society is also experienced by people in village Tulabolo gold miners, Gorontalo. The reality of lives of miners who leave their homes and homelands because factor of resource location has affected them in determining the location of residing at mine site.

Kinship in form of family ties, or neighbors in area of origin is a factor to create pattern of spread of miners. The family who first discovered or obtain mined for a suitable location, tends to invite their family or people close compatriot whose relationship with them first. If already available potential locations, new family can directly build a base camp/home as well as a build drum assisted by relatives or residents compatriot, but if it does not acquire land then they will ride on family/colleague who had formerly lived in that location. It is as manifested by informants DJU (45 years)

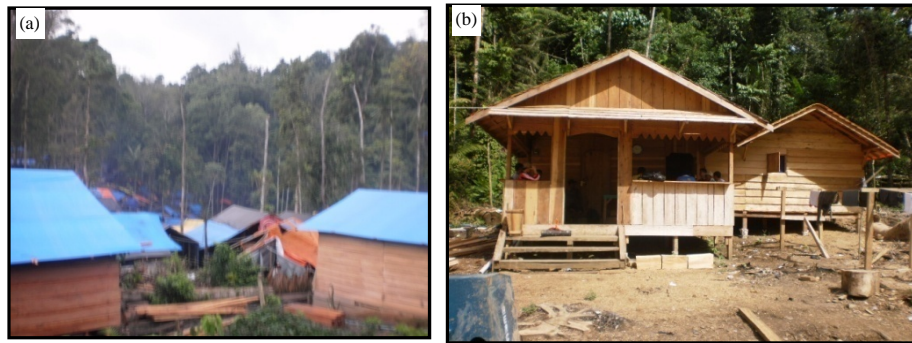


Fig. 1(a-b): Settlement pattern in Tulabolo-Gorontalo



Fig. 2(a-b): Group solidarity of gold miners at Tulabolo-Gorontalo

who Tulabolo, Suwawa East as well as the miners are "Miners in village had not, as now, previously worked as a miner is still in family environment, but so open mine, then many people who come to this place to try his luck as a miner".

Informant narrative show that mining area in Tulabolo-Gorontalo is full of potential for community to improve the pattern of daily life, because the mining area is very promising and very easy to earn income. Although this work requires power physical support and health to compete in gold mining venture. The shape of residence of gold miners (Fig. 1).

#### **Group solidarity of gold miners in Tulabolo-Gorontalo:**

Solidarity in mining community is a social capital from and feelings kinship. Social capital sturdy awakened in community miners is also a part of their ability to become part of community and built on social network in an attempt to gain access to natural resources such as mining etc.

Gold miners in Tulabolo-Gorontalo are unemployment, but economic factors and close kinship has made them join forces to become a miner for decades. Although the miners have long settled in mining areas, there is no conflict among fellow miners. As told by informants AK (49 years old) Village Head of Tulabobo-Gorontalo among others: "In general, or

where the mining area, are such a commotion and fight, be it fellow miner as well as people from outside miners mainly in race pit/quarry and in village Tulabolo is still no scene or a fight, but it does not have a relationship with gold miners, more problems outside of mining, because the principle of people working as gold miner in this village, when making a fuss and fight, then they do not earn".

Harmony in form of mutual help is one of community's efforts to address the issue of limitations, especially for those who have trouble or calamity. Therefore, it increase close kinship between families. Social relations awakened a strong solidarity in their group, so that if one member of their group at loggerheads with other group members spontaneously then they will work together to help members of group.

Deliberation is often done in their group. Habits conduct deliberations reflected in activities coordinator of group of miners who choose to be their representative in solving problems related to miners. The solidarity shown in following Fig. 2.

**Socio-economic conditions of gold miners:** Theoretically, simple settlements is defined as condition of inadequacy and powerlessness citizens to meet needs in terms of value system embraced by community. Inadequacy and powerlessness

society is a socio-economic reality that arise from the mechanism of social system and a reflection of deprivation that occurs in settlement of miners in Tulabolo-Gorontalo.

Simple settlement of gold miners are minimal infrastructure where the walls are made of wood with a tarpaulin-covered ceiling and most of ground floors and houses without adequate equipment. The inability of population is not caused by low incomes, but more due to belief that they only stay for a short while alone in area. This is caused by status of their land is state forest that belongs to government.

Low quality of human resources affect their ability to organize and regulate their settlement to become healthier and more orderly. Feeling useless when providing housing facilities that would later they leave to make them feel satisfied with state of house and settlement now. The things mentioned above eventually made a settlement of miners impressed poorly constructed without considering the possibilities that will happen later.

**Gold mining as subsistence source:** People still need the support of mining resources and mining commodities to maintain and improve their welfare. The existence of significant mining is a strategic sector in framework of development of mankind. Mineral resource is a unit of geological structure as part of ecosystem. The existence of mining resources can be in form of metals and non-metals as well as in quality and quantity. For rural communities Tulabobo-Gorontalo in general that existence of gold mining sector has a strategic position in family economic needs everyday. From the results of income they earn, people's needs can be met such as clothing, food and clothing, as presented informant SM (57 years), among others; Hasili lo mine hemotatapu lamiyatiya teyee, heohuna lio olamiyatia ngalaa hepotumula hongohuyi-hongohuyi. "Revenue earned from gold mining is very useful for a family to meet their daily needs".

In addition, society interest at large is also very concerned about the characteristics of mining reserves and independence to the backup location. The intrinsic nature of mining activities is open land, changing the landscape that has the potential to change the order of ecosystem of an area both in terms of biology, geology and physical and socio-economic structure and local culture. In this discourse, sometimes we are confronted with a sufficient condition to make a dilemma, because on one hand, mining activities whether it be gold mining and mining are managed by company are not only implicated in supporting economic development and social miners in area, but also the potential

for environmental damage, spatial in area, until the safety of miners, especially forests changing their use become a people's mining and mine is processed by company. Because the forest has a function and a role as a counterweight to ecological factors and biodiversity. In recent decades, practice of mining activities in Indonesia always have an impact on damage from the process of exploration, construction, up to production process.

Interaction between the mining industry and local communities are enormous. The mining industry is usually located in remote areas with traditional and backward society, so that it always happens differing views. In addition, modern conception of world of mining is still surrounded by traditional conception that did not have environmental standards and interact and coexist pollute the environment.

#### **Uncertainty of gold miners in Tulabolo-Gorontalo:**

Uncertainty concept is created in miner's society livelihood. Residents who depend life based productivity gold processing. The luck factor and availability of gold processing equipment including financial support becomes a major factor continuity of their activities. In certain situations a collection of small groups that do not have adequate equipment and capital will be disbanded and most of its members chose to return to his hometown, but some will choose to join group is more stable financial condition. Informants NG (39 years) as the miners from outside the village Tulabolo, said "Although the mining area is easy to earn, but such things are not as people imagine, that mined is a lot of money, but if they do not have a good relationship with others, then it is not easy to get a job in mining area, all this time I more friends with people who have the equipment as well as the mine pit, because the way easily earn income.

Dependence on is very high productivity in process makes them do not gain certainty when to work and how much income they can get in a month. Hard work today may not necessarily get the results that can increase revenue. Uncertainties such work continues periodically in their lives. A situation filled with uncertainty makes the desire to improve the facilities and infrastructure (environmental sanitation, for example) or stop logging country, for them to be unimportant, so that it can be said that concept of this uncertainty is a picture of socio-economic conditions.

**Socio-economic dynamics: Gold mining implications:** Social and economic life is very close relation to one's needs and how to meet those needs is a social behavior of public things in associated with economic interaction and society behavior. Studies on social economy cannot be separated from the ways





Fig. 3(a-b): House and mosque condition of Tulabolo-Gorontalo

that a person applied in meeting the needs of everyday life as well as the utilization of obtained income<sup>16</sup>. Before getting to know mine, previously Tulabolo more people who worked as a farmer and also partially took the rattan in forest area of the National Park Nani Wartabone (TNBNW). For community to work as an average farmer planting corn, cocoa and coffee. Agricultural products were then sold at weekly market in village Tulabolo (Saturday market). Along with change and development of gold mine, then gradually more people started leaving subsistence farmers and turned gold miners, because they consider the work as a farmer unsatisfactory and insufficient in family life.

According to informant ARU (54 years), Tulabolo and miners told that "After switching professions to become miners, many changes was happened in socio-economic life of Tulabolo. When people began to recognize Tulabolo gold mine, then a change in livelihood of farmers become citizens of gold miners. The amount of lowest income Rp. 5,000,000 and can reach tens or tens of millions of rupiah in a day, with a note that 'Holes' dug find the content of gold ore is sought. This is different from the farmers, whose results will have to wait a long time and even then not necessarily satisfactory".

Income from local gold mining in Tulabolo-Gorontalo can change face social life. Most noticeably is the settlement and changes in society Tulabolo, since the last few years has changed. The house which was previously only *berdiding pitate* or bamboo or semi-permanent many of which turned into a concrete house. Likewise, religious facilities, people who have an excess of mines and then been initiated to build places of worship. Gold mining has changed the face Tulabolo-Gorontalo, past, present and future. Phenomenon that is obtained by researchers, as shown by Fig. 3.

Miner's seriousness determine the success or failure of achievement of miners in Tulabolo-Gorontalo. There are also people who are less successful in this profession. Based on narrative SS (54 years) miners who have other business

besides miners informant expressed that: "More people are managed from these mines, namely those who really try and have sincerity, are like examples they can build a good home, can even build places of worship (mosques) in this village". Although the gold mining area can change the socio-economic conditions, Tulabolo society, but this does not necessarily guarantee a continuous pattern of their lives, because the mining area is also a threat for people in later in future, especially in physical environment and social environment.

Revenue as a gold miners addition to building houses and mosques, shown also by their ability in sending children to college in the city and outside the city of gorontalo city. This as told informant DH (53 years) my son is now in college, the fee I get out of the business as a miner. This can be seen from the large number of gold miners Children who attend school up to college, as many as 5 people child miners enrolled in Gorontalo province and one person go to college out of the area gorontalo. Many of their children who go to college is certainly very encouraging for the miners because the majority of them just graduated from elementary school, so as to be able to send his children to college cause feelings of pride and pleasure. As said by DH (53) "Even though we only finished elementary school but we are proud to be able to send our children to college" where the gold mine is in addition very helpful in improving the economic condition of the community is also very helpful miners to increase the standard of education their children so expected future children they'll get a better job.

## DISCUSSION

The impact of changes in the socio economic conditions of the people in the village Tulabolo-Gorontalo become better very visible where this is the case also in Geita Tanzania on research conducted by Kitula<sup>17</sup>, that involve the gold miners is

mainly done by the locals, he speculated that changes in socio-economic improvement of the condition is very good, but this change has a negative impact on the environment such as changes in land use, land degradation due to mining activities, environmental management is still traditional and less attention to the quality standards of work so that in the process contaminating the surrounding environment. The environmental damage should be reduced and it is expected that the public is more concerned about the environmental damage that the application is expected to society in order to better safeguard the environment so it is not contaminated and kept maintained continuity.

Changes in the same socio-economic conditions in the court-Gorontalo Tulabolo where many villagers around the site pertambangan who left their jobs as farmers because their land is converted to a gold mining site because, according to residents can improve their socio-economic life. Kambey *et al.*<sup>18</sup>, on research he did in the illegal mining sites minahasa village, he tried to show the changes in life patterns occurs if there is a new source of revenue that they think will be better than before and can improve their lives. Society will slowly switch looking for a better job to be able to meet their daily needs and improve their economic condition.

The work as illegal gold miners they do also have an impact on the uncertainty of the results obtained, as was explained by Rianse *et al.*<sup>19</sup>, in the district Bombana Southeast Sulawesi, gold mining became a source of income of the population each day. But a big influence on the amount of their income is not fixed each day as it depends on the results that they get the gold mine. In the gold mining region Tulabolo-Gorontalo dependence on refined gold mine productivity is very high among the miners did not get the assurance of working time and the amount of income each month. To overcome this problem the residents around trying to repair public facilities, such as sanitation, mosques, roads and repairing the house becomes more feasible as well as many of those who can send their children to school up to college.

To survive in the illegal mining industry is well known hard and full of challenges the gold miners in the village Tullabolo life by way of a group to help each other and keep outside distractions that will go into their mining areas. In a study as discussed elsewhere<sup>17</sup>, researchers speculate that there is a conflict of interest in the management of the mine, to be able to survive the disruption and conflict miners live in groups to each other to maintain, control and mutual help between fellow miners from interference of others. Because the magnitude of the results that may be obtained in gold

mining will feel more comfortable when it can be shared with a group or friends originating from the same area.

## CONCLUSION

The research results can be concludes below:

- Existence of illegal gold mining in Tulabolo-Gorontalo have positive or an impact to life. Its positive impact is the availability of opportunities or job opportunities in mining sector and can increase people's income every day. On other hand negative impact is a reduction in land and labor in agricultural sector, to non-farm agriculture, for mining land in village is very productive agricultural land in support of agricultural economy
- People characteristics both fellow miners and other ethnic tribe in Tulabolo-Gorontalo show they survive in order to obtain employment and income to meet family needs, enabling them to survive less than twenty years in mining
- Good solidarity level based on a kinship makes them share all the pressures and difficulties encountered in mining to other group, because the work of gold mining can improve the livelihood of people as can build homes and can finance the study of children to pursue higher level
- Solidarity as social capital creates social control among the miners, even among them show mutual control and commemorates when the group began to make a move that has the potential for conflict, because the road will create a sense of safety and desire to cooperate

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