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Local Wisdom Values Of Traditional Gold Panning In Logas Village Kuantan Singingi

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Abstract

Traditional gold panning activities in Kuantan Singingi have been going on since the Dutch era until now. These activities are generally carried out by women. Traditional gold panning means gold mining carried out manually by individuals using pan. The interesting thing about this activity is that panning has been going on for a long time and is passed down from one generation to the next. This traditional gold mining activity is an alternative livelihood system. Traditional gold panning activities need to be maintained because this activity functions as a form of community resilience for survival. There are concerns that traditional gold panning activities will be eroded by the current of modernization and globalization such as the development of modern gold mining and the spread of gold mining activities without permits. Since the last 20 years, data in the field has shown the emergence of illegal gold mining. This behavior shows the erosion of ecocentism. Traditional gold panning activities need to be maintained which refers to ecocentrism environmental ethics. The aim of this research is to analyze local wisdom practices in gold panning that can support environmental conservation. This research data collection used observation techniques and in-depth interviews. Next, it is analyzed descriptively and qualitatively. The results of the research are that the forms of local wisdom in traditional gold panning activities are using pan made from wooden buttresses, shallow surface excavation, panning locations without rent, panning locations open to local residents and outsiders, and the gold recovery process using manual skills without using mercury, gears and machines. It is necessary to formulate written regulations approved by the government regarding sustainable traditional gold panning so that this activity is a form of community resilience in living a sustainable life.

Keywords: Traditional Gold Panning, Tray, Wisdom Values, Livelihood Strategies and Ecocentrism.

1. Introduction

Kuantan Singingi is famous for producing gold mines since the Dutch era. The gold mining location is located in Logas, Kuantan Singingi Regency. Even though official gold mining has existed since the Dutch era, traditional gold panning activities still exist and are still ongoing today. Traditional gold panning activities using trays are still carried out today. Gold panning means gold mining activities carried out traditionally using trays made from wooden buttresses. So, the main tool for traditional gold mining is a dulang (pan). The process of separating gold from sand involves the skill of the panner's hands by moving the pan through the flow of a river or puddle of water. The final process for sorting gold does not use mercury. The term panning does not exist in mining regulations. The terminology of gold panning basically refers to the term used by local people which means traditional, very small-scale gold mining activities manually using pans. Gold panning activities are carried out individually and the results of panning are also individual. Although panning activities are carried out individually, panning activities for gold are carried out in groups of three to five people. Traditional gold panning activities are not only carried out in the Logas area of Singingi and Singingi Hilir Districts but are also carried out by people in the Sentajo Raya area, Benai District and Gunung Toar District. Gold mining activities by prospectors are generally carried out by women. This activity is an alternative livelihood system. The main source of income for miners is as a rice farmer or rubber farmer.

The characteristics of traditional gold panning are done manually using a tray. Other characteristics include carrying out excavation activities on the surface of soil/sand/small rocks, the process of sifting and separating materials using trays which is carried out in small river flows. Traditional gold panning activity using hand skills to separate sand, black sand and gold grains. Apart from using river currents, gold separation skills can also be carried out in areas of standing water. Another characteristic of traditional gold panning activities is that the gold separation process does not use mercury or machines but uses hand movement skills. If you look at the characteristics of traditional gold panning activities mentioned above, it can be said that gold mining is environmentally friendly.

Traditional gold panning activities carried out by women began in the Dutch era and still exist today in Kuantan Singingi as an alternative livelihood system. This activity needs to be maintained amidst the spread of modern gold mining or illegal gold mining. Forms of local wisdom from traditional gold panning need to be understood and analyzed to support natural resource conservation. It is necessary to design regulations at both regional and central government levels that regulate traditional gold panning so that this activity can take place as a sustainable traditional gold panning activity.

In the history of gold prospecting using gold pans, according to Grayson (2006), gold pans are included in a diverse group of gold recovery processes that are moved directly by hand without handles, gears or other mechanics. The forms and names of traditional gold mining or livelihood tools differ from one country to another. For example, from South Central America it is called batea, from Southeast Asia it is called dulang, from Mongolia it is called bucket, from Krygzystan it is called lotok, from Russia it is called rubber mat. Gold washing with the traditional gold mining equipment mentioned above is all through a mercury-free, no wheels, and no other mechanics.

Even though traditional gold panning activities are essentially environmentally friendly because they use manuals and simple tools, the activities have begun to change from traditional ones to using machines, from shallow digging to deep digging, from recovering gold with hand movements to using mercury. has damaged the environment. Research results show that traditional gold mining activities cause reduced biodiversity, soil damage and loss of vegetation (Hagos, et.al 2016). Aziz's research (2014) concluded that community mining in Paningkaban village, Banyumas district, causes environmental impacts on the extraction of ore and the gold processing process which results in the formation of acid mine drainage, the possibility of landslides on side rock piles, mercury pollution of the surrounding environment and the occurrence of sludge. river. Silting is produced by the final grinding process which produces tilling. Meanwhile, research by Rahayu, et.al (2024) concluded that illegal mining is a latent problem that has not been resolved since the reform period until now in Bangka Belitung. This has a broad impact on environmental, social and financial losses. Indications of failure in mining management due to ineffective legal regulations by the government.

Small-scale gold mining is gold mining carried out by individual miners or small businesses with limited capital investment and production. This mining activity is an unlimited production system. Small-scale gold mining activities generally operate informally and exploit marginal gold reserves located in remote areas with difficult access, such as in protected forests and even in conservation areas. Most small-scale gold mining activities take place illegally. Given the remote location, mining activities are difficult for the government to monitor (KLHK, 2017). Traditional gold panning or mining in Logas Village has different characteristics from small-scale gold mining. Traditional gold mining in Logas Village has a special characteristic, namely that it is carried out individually, while small-scale gold mining or gold mining, which is called community mining, is generally carried out in groups or through cooperatives and requires capital. Traditional gold mining in Logas village is not carried out in groups and can be said to have no capital at all except the costs of buying trays.

The concept of livelihood strategy leads to the meaning of livelihood strategy rather than means of living strategy (Dharmawan, 2007). Livelihood strategies are tactics and actions developed by individuals or groups in order to maintain their lives while still paying attention to the existence of social infrastructure, social structure and the prevailing cultural value system. Sources of livelihood are various resources that can be used by individuals or household members to maintain survival. Ellis (2000), mentions five forms of livelihood assets, namely natural capital, physical capital, human capital, financial capital, and social capital.

Traditional gold mining essentially is environmentally friendly, however, because gold recovery uses mercury or mining activities that carry out deep excavations or in the process of digging and washing gold using machines, traditional gold mining in this form is not environmentally sound. Research Hussain, et. al (2016) concluded that mining activities can increase air pollution, damage roads, cause agricultural problems, and cause health problems. In addition, Haalboom (2011) concluded that gold mining in Suriname does not involve equal participation of indigenous communities, resulting in obstacles to conservation and development efforts. The rules regarding traditional gold mining are not only about mining locations but also consider the involvement of stackholders. Jonkman and De Theije's research (2022)concludes that mining areas are characterized by social integration between competing stakeholder agendas, technological differences trigger social conflict, social conditions of gold mining political organizations through symbolism and state material infrastructure. Furthermore, Hagos, et. al (2016) stated that traditional gold mining using panning techniques is a source of income, livelihood and employment for many landless and unemployed citizens in Ethiopia. The results of their research emphasize environmentally friendly panning techniques and gold mining as a source of livelihood for the population. Greyson (2006) emphasizes the characteristics and shape of trays in North America, namely circular, flat floors surrounded by outward sloping walls. The pan or gold panning tool is pushed by the panner's two hands and hand movements in the gold sorting process which only relies on the tool. This activity shows that mining activities do not damage the environment. The proof is that mining activities do not create deep depressions or holes. Afolayan, et.al (2021) concluded that artisanal mining in Nigeria that uses barite can lead to accumulation of lead and barium which can trigger chronic diseases in humans over a long period of time.

2. Research Methods

This type of research is qualitative research. The research location is in Logas Village, Kuantan Singingi Regency. Data was collected through observation techniques and in-depth interviews with stakeholders, namely traditional gold panners and community leaders. Data were analyzed descriptively and qualitatively.

3. Results and Discussions

1. Traditional Gold Panning or Mining Tools.

The tool used in traditional gold panning is a very simple tool, namely a tray. The tray used is circular or oval, flat and slightly concave with a tray edge thickness of two to three centimeters. The tray is without a handle. So, the panner immediately holds the edge of the pan with both hands when carrying out the panning process. The characteristics of traditional gold panning are using pan tools, not using mercury, surface excavation of approximately 5 to 10 cm. In general, gold panners do not use personal protective equipment and a small number of panners wear hats and gloves. The shape of the tray used by miners in Logas Village can be seen in Figure 1.



Figure 1. Traditional Tray Shape



Figure 2. Panning activities result in abrasion

2. The essence of traditional gold panning: Ecocentrism vs Anthropocentrism

In essence, traditional gold panning in Logas Village is environmentally friendly gold mining. There are three things that make traditional gold mining categorized as environmentally friendly. First, use traditional tools, namely trays made of wood. Second, the characteristics of gold panning activities are excavation. Third, the mining and processing process is manual, namely using manual skills, not using mercury. Based on this description, panning still prioritizes environmental sustainability. Traditional gold panning activities carried out by gold panners are activities that are classified as ecocentrism.

Ecocentrism theory is a theory or concept that views the environment as an ecosystem as a whole, not the environment as a source for meeting human interests and needs. Besides that, ecocentrism aims to achieve a sustainable life. This theory holds that all life is sustained by geological and non-living processes, so humans must expand moral considerations to their widest point to define an ecosystem. From an ecocentric perspective, every creature has a purpose to help maintain and grow all ecosystems on the planet. (Keraf, 2010). Even though traditional gold panning still continues today, there is a phenomenon that prospectors not only carry out surface excavation in the process of searching for gold but have also started scraping small river cliffs which are feared to damage the river cliff environment (see figure 2).

Based on phenomena or facts in the field, there is a need for regulations to be made by the government. Recently (a decade) there have been phenomena or facts in the field which show that miners no longer obey the unwritten rules implicit in the characteristics of traditional gold panning, namely the activity in rivers, the excavation is surface excavation or on islands. sand or delta in small rivers or on people's land that has a small amount of standing water needed to turn the tray. This phenomenon shows that gold panners have begun to behave in anthropocentrism. Anthropocentrism is a concept or view that places humans at the center of everything in the universe. In this context, humans are considered the most important creatures and have the highest power over nature and other creatures. Anthropocentrism is the view that humans are the center of everything and have higher value than other entities in nature. In the context of environmental ethics, the anthropocentric view focuses on human welfare and interests. This theory argues that humans have the right to use and utilize natural resources according to their needs and desires, without having to pay attention to the impact on other living creatures or the environment as a whole.

3. Local Wisdom Values in Traditional Gold Panning

There are several values of traditional mining wisdom carried out by the community. This means that mining activities continue to control the negative impacts that may occur. The virtues of always paying attention to environmental sustainability by traditional miners with mining practices are as follows.

a. Life philosophy.

One of the life philosophies of the Kuantan Singingi Malay people is "jangan tamak" (don't be greedy). These philosophical values are also applied to gold miners in searching for gold for life. They took enough gold for their daily survival. One of the Singingi traditional leaders stated: people should not behave greedily, including in panning for gold, look for enough and do not damage river banks (interview with Datuk Godang on March 3 2024).

b. The tray is made from wooden buttresses.

The main tool of a traditional gold panner is called a "dulang". The tray is made from wooden buttresses. Wooden buttresses are part of the base of wood that sticks out above the ground in a flat and thin shape with a width ranging from 50-150 cm (depending on the size of the tree). Not all trees have buttresses. The wooden supports used to make trays are lalan trees, palajau trees, natua trees, banio trees and meranti trees. The best wood for making trays is lalan and palajau tree buttresses. The durability of trays made from lalan and palajau wood can last four to five years. The current price of wooden trays (in 2024) is around Rp. 600,000-Rp. 900,000. The thickness of the wooden tray ranges from 2.5-3.5 cm. one of the miners said: wooden trays are light and are also used to

dredge sand and soil that will be processed in the gold prospecting process. In addition, wooden trays are durable and do not sink easily. (interview with Mrs. Aminah on March 5 2024)

- c. Dulang as a tool for digging and recovering gold Not everyone is skilled at panning for gold. If a person is not skilled at panning then he will not get gold in panning. The gold panning process begins by taking a mixture of rocks and sand from the river using a pan tool. After taking the stone and sand materials. Next, the panner spins the pan in the river until he finds gold grains.
- d. Local knowledge of miners

The location for gold panning is in small rivers. Miners carry out activities on the edge and in the middle of the river. The gold recovery process is carried out directly in the area using the skill of moving the hands of the gold panners who have local knowledge, namely that if it rains at night, the gold panning proceeds will be more than on normal days. One of the prospectors said: if it rains at night, we will quickly come to the location in the morning because the gold yield is more than if it didn't rain at night. (interview with Mrs. Siti, March 2024)

- e. The panning location is open access and rent-free The social value of traditional gold panning in Logas Village is that the panning location can be accessed by other village residents. The places for gold panning in Logas Village are on the Singingi river and small rivers as well as on people's land around the river that has not been used by the owner. The landowner allows his land as a panning site without rent. "Income as a gold panner is only for survival," said one land owner (interview with Mr. Ongah on 24 January 2024). There is a social value from land owners towards traditional gold panners. The owner of the land used as a panning site does not ask for rent. "We allow miners to earn a living on our land". Permitting access to panning is a social value given by land owners to miners.
- f. Traditional gold panning: surface excavation

Another wisdom in traditional gold panning in Logas is that the process of taking material (sand, stone, soil) is only dug at a shallow surface. Shallow excavation does not damage the environment because only the surface is (between 5-10 cm). excavated Surface excavations carried out by prospectors at river sites or riverbanks will quickly recover as usual. This is different from gold mining, which involves digging holes quite deep, around one meter or more. Deep excavation activities will damage the environment. The research results of Hagos, et. al. (2016) in Ethiopia said that traditional gold mining had a negative impact, namely soil damage and loss of vegetation. The local wisdom values of gold panning in the Logas area are still maintained, but some have

changed or are starting to fade. These changes are due to developments in science and technology. In summary, the local wisdom values contained in gold panning activities in Logas are presented in table 1.

Table 1. Forms and Values of Traditional Gold Panning Wisdom

No	Forms of Wisdom	The Value of Wisdom	Status
a.	Philosophy: don't	Conservation	Do not
	be greedy	value	change
b.	Tray made from	Does not produce	Slightly
	wooden	waste	changed, a
	buttresses		small part
	(organic)		uses plastic
			trays
c.	Dulang as a tool	Saves energy and	Do not
	for digging and	produces no waste	change
	recovering gold		
d.	Local knowledge	Source of	Do not
	of miners	livelihood	change
e.	Open access and	Social value	Do not
	rent-free panning		change
	location		

Table 1 shows that most forms of wisdom in panning for gold have not changed. However, some wisdom, such as using coconut shells as containers for black sand, has been replaced with plastic buckets and pitalo leaves as wrapping for gold granules have been used in plastic wrap (Himawan, et. al. 2024).

Several studies on local wisdom conclude that forms of community local wisdom can support the conservation and utilization of natural resources. Research by Kurniasari and Reswati (2011) concluded that whale hunting norms are hundreds of years old. This wisdom is a strong blend of tradition and Catholic teachings. The wisdom that emerges not only maintains the sustainability and balance of the marine ecosystem but also maintains balance in relationships with fellow citizens. This natural balance is threatened when the Regional Government issues permits for gold mining. Apart from that, Angin and Sunimbar (2020) concluded that local community wisdom had a positive impact on growing community awareness in preserving forests and managing water springs, preventing deforestation and avoiding water shortages in Watowara Village, Florest Regency, East Nusa Tenggara.

4. Conclusion

Gold panning activities in Logas village are environmentally friendly gold mining activities. These activities are generally carried out by women and function as a form of resilience for the sustainability of community life. Forms of local wisdom in traditional gold panning activities in Logas Village are based on the philosophy of "don't be greedy" so that panning activities are only for survival. Another form of wisdom is the use of trays made of wood (organic). Traditional gold mining in its operations, the main tool uses trays both in the process and in processing which does not produce waste. Miners have local knowledge that if it rains at night the panning results will be more than on a normal day. The panning location is open access and rent-free. These forms of wisdom are still practiced today. It is necessary to formulate written regulations approved by the government regarding sustainable traditional gold panning so that this activity is a form of community resilience for survival.

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