

## Rationality Actions of KJA (Floating Net Cage) Workers After the Tubo Sulfur Disaster in Nagari Koto Malintang, Tanjung Raya District, Agam Regency

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### Abstract

The tubo sulfur disaster resulted in material and non-material losses for the people in Nagari Koto Malintang. The tubo sulfur disaster occurs every year so that people have to find new jobs so that their daily needs can be met. The purpose of this study was to analyze the rationality of KJA workers (floating net cages) after the tubo sulfur disaster in Nagari Koto Malintang, Tanjung Raya District, Agam Regency. The theory used in this study is the theory of rationality action put forward by Max Weber. This research was conducted in Nagari Koto Malintang, Tanjung Raya District, Agam Regency. This study used a qualitative research method with a descriptive research type. Withdrawal of informants was carried out using a purposive sampling technique, with the informants being people who live around Nagari Koto Malintang, Tanjung Raya District, Agam Regency. The data collection method in this study begins with document studies, interviews, and non-participant observations. Data analysis used the Milles and Huberman model which was carried out in several stages, namely data collection, data reduction, data presentation, and drawing conclusions. The results of this study indicate that the people of Nagari Koto Malintang, Tanjung Raya District, Agam Regency, who experienced disaster pressure in the form of tubo sulfur, took actions to maintain the household economy, called rationality actions. The rationality of floating net cage workers is the act of clearing agricultural land, the actions of service workers as an act of rationality which includes working as a public transportation driver, travel driver and as a farmhand, and the act of taking advantage of those closest to them.

**Keywords:** Tubo Sulfur Disaster, Actions of Rationality, KJA Workers (Floating Net Cage)



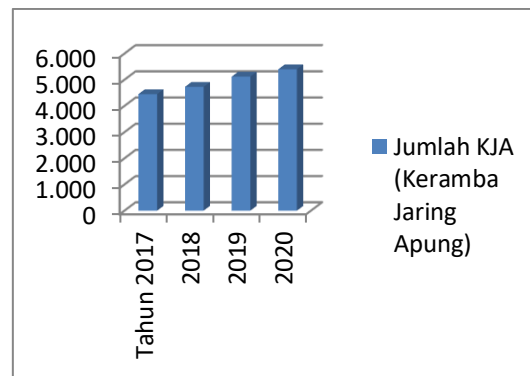
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### INTRODUCTION

West Sumatra has 12 regencies and 7 cities and one of the regencies in West Sumatra which has extensive waters is in Agam Regency (BPS Sumatra Barat 2021). Agam Regency has 16 sub-districts where the community depends on the fisheries sector, one of which is in Tanjung Raya District to be precise at Lake Maninjau. Physically, Lake Maninjau is still natural and has not been polished by human hands. However, the development of a fishery business known as cages, caused Lake Maninjau to experience a change in the nature of the water in the lake. The problem that is currently plaguing Lake Maninjau is the contamination of the lake water. The water of Lake Maninjau, which used to be clear and fresh, has now turned brownish green and smells good. This has received serious attention not only from the district governments, but also from the provincial and central governments (Firdaus, 2010).

Lake Maninjau is one of the most important lakes in West Sumatra. For the community, the lake is a source of life for the local community (Anggraini, 2019). The community takes advantage of the fisheries sector with an area that has the shores of Lake Maninjau, many

people try to catch fish freely in the lake, because Lake Maninjau is not owned by individuals or groups but is shared property, so anyone is allowed to catch fish in Lake Maninjau (Anggraini, 2019). Therefore, many people make floating net cages to cultivate fish which will be managed by the local community either for sale or production. Thus causing an increase in the number of floating net cages which are increasing easily every year. The more the number of cages in the lake, the more polluted the lake will be (Anggraini, 2019). The number of floating net cages can be seen from the following figure:



**Figure 1. Number of floating net cages in Nagari Koto Malintang per year**

Source: Department of Fisheries and Maritime Affairs of Agam Regency, 2020

Based on Figure 1, it can be seen from the large number of floating net cages from 2017 to 2020 causing fish feed residue and fish waste to accumulate at the bottom of the lake, causing sedimentation and degradation of water quality. Installing floating net cages that are too tight makes the fish unable to move freely. As a result, when tubo sulfur occurs, the fish in the cages become trapped and die due to lack of oxygen (Aermadepa, 2021).

The high amount of organic material waste that enters the lake from leftover feed from fish farming which is carried out with floating net cages causes a decrease in water quality, so that when a Tubo darek (land) wind occurs, decreased oxygen levels in the lake cause fish to die (Anggraini, 2019). One of the main contributors to pollution in Lake Maninjau is the uncontrolled existence of floating net cages (KJA). One of the fisheries sectors in the Lake Maninjau area is precisely in Nagari Koto Malintang.

The Nagari Koto Malintang community in the fisheries sector uses Lake Maninjau as an economic boost in the household. Besides that, the community is also trying to cultivate fish in floating net cages (KJA) around the edge of the lake. One of the main livelihoods of the entire community's livelihood in Nagari Koto Malintang is cage labor. In the floating net cages in Nagari Koto Malintang, there is social stratification between skippers and cage workers. The skipper is a person who has the resources or capital, while the laborer is a person who works for the skipper and does not have capital. Cages workers are people who donate their services to work for the skipper who owns the KJA by getting a wage (Purwandari, 2014).

The activities carried out by cage workers in Koto Malintang village include planting fish seeds, spreading or feeding fish, guarding ponds, checking the condition of cages, crossing services, and being harvesters and porters. This work is sometimes done by workers alone, depending on who they work for. Every day the cage workers stay in the huts built around the cages and can return home according to the time agreed with the skipper or the owner of the cage.

The types of fish cultivated in the Lake Maninjau KJA include majalaya carp, tilapia, and catfish. But the most dominant fish cultivation is tilapia because the growth and quality of tilapia is easy to cultivate in fresh water such as in Lake Maninjau. Based on observations, the

number of floating net cages has reached 5,400 plots. This can be seen from the following table:

**Table 1. Data of Nagari Koto Malintang Floating Net Cage Recapitulation**

No	Jorong Name	Total KJA	KJA Owner	KJA Workers
1	Rambai	1.762 Squares	40 People	14 People
2	Ambacang	1.012 Squares	16 People	12 People
3	Pauh Taruko	676 Squares	23 People	4 People
4	Tanjung Alai	1.460 Squares	37 People	8 People
5	Muko-Muko	490 Squares	17 People	9 People
Total		5.400 Squares	133 People	47 People

Source: Nagari Koto Malintang data 2020

Based on Table 1, it can be explained that there are five jorongs, namely Jorong Rambai, Ambacang, Pauh Taruko, Tanjung Alai, and Muko-Muko. The five jorongs have a total of 5,400 plots of cages with 133 cage owners, while for cage workers there are 47 people. However, floating net cages experienced catastrophic pressure in the form of tubo sulfur which caused the death of fish in the Lake Maninjau area.

## **RESEARCH METHODS**

### **Approach and Type of Research**

This study uses a qualitative approach, which seeks to reveal and understand the realities in the field in accordance with the real conditions in the field. According to Bogdan and Taylor (Moleong, 2010). states that qualitative research is defined as research that produces descriptive data in the form of written or unwritten words that can be observed and directed at an individual and holistic background. The qualitative research approach is an in-depth, complex approach. The use of a qualitative approach can reveal sharp and in-depth problems and researchers can obtain accurate data and obtain as much information as possible through research questions..

The reasons for using a qualitative research approach in this study are first, this research is on one variable because it does not test the hypothesis. Second, this research is in the paradigm of social behavior which analyzes the actions of workers in fulfilling their daily needs. Third, this study uses the concept of rationality action developed by Weber which explains the rationality of cage workers after the tubo sulfur disaster.

This study uses a descriptive research type, namely a type of research that guides researchers to explore or photograph social situations that will be thoroughly, broadly and in-depth examined (Sugiyono, 2011). In this type of descriptive research, the data collected takes the form of words or pictures instead of numbers. The written research results contain excerpts from the data to illustrate and provide evidence of presentation. The data includes interview transcripts, field notes, photography, videotapes, personal documents, memos and other official recordings (Emzir, 2012).

The reason for using descriptive research type in this research is First, the concept used in this research is formulated using how. Second, the qualitative approach used is included in the constructivism paradigm because according to Weber it assesses human behavior fundamentally. This constructivism paradigm places the researcher on an equal footing and as much as possible enters into the subject, trying to understand something with the understanding of the subject to be studied in Nagari Koto Malintang, Tanjung Raya District, Agam Regency.

### Research Informants

Research informants are people who provide information either about themselves or other people about an event or thing to researchers. Informants are people who are selected to provide information to researchers either about problems or provide information about themselves that will be needed by a researcher. The selection of informants used a purposive sampling method in which the selection of informants was done with a deliberate mechanism. Before conducting the research, the researchers set certain criteria that must be fulfilled by the person who will be used as a source of information, because the object to be studied by the researcher is clear. Based on predetermined criteria, the researcher already knows the identities of the people who are used as research informants before the research is conducted (Afrizal, 2014). The informants in this study are:

1. Cages workers who have faced the tubo sulfur disaster every year in Nagari Koto Malintang, Tanjung Raya District, Agam Regency.
2. Owner of floating net cages affected after the tubo sulfur disaster in Nagari Koto Malintang, Tanjung Raya District, Agam Regency.

Based on the explanation above, the informants in the research conducted can be seen in table 2 below:

**Table 2. Number of Research Informants**

No	Name	Age	Job
1	Indra Yanto	46 Year	Cage workers
2	Suprianto	38 Year	Cage workers
3	Iwan	45 Year	Cage workers
4	Efrizal	56 Year	Cage workers
5	Rusdi	52 Year	Cage workers
6	Derman	33 Year	Cage workers
7	Yonedi	57 Year	Cage workers
8	Faizal	72 Year	Cage Owner
9	Irnus	53 Year	Cage Owner

Source: Primary Data 2022

Based on Table 2, it shows that there were 9 informants in this study, of which 2 people worked as cage owners and 7 people worked as cage workers. Some of these informants, if classified based on age, the oldest is 72 years old who works as a cage owner while the smallest age is 33 years who works as a cage worker. After conducting interviews with people who work as cage owners and cage workers, he does or looks for side jobs to meet their daily needs after the tubo sulfur disaster.

### Data Type

In accordance with the research problem formulated and the objectives to be achieved, then something that is collected in this research is in the form of primary data and secondary data.

### Primary Data

This is research data obtained directly by the original data source researcher and not through intermediaries and obtained through an interview process. Primary data can be in the form of subject opinions (people) individually or in groups, the results of observations of an object or (physical), events or activities and test results (Sangadji, Etta Mamang, 2010). The data is collected from people who work as floating net cage workers. Primary data in this

study were obtained using observation and in-depth interviews. The form of data obtained is in the form of data on the occurrence of tubo sulfur disasters by year and month, the amount of income of cage workers per month, rational actions to be taken by cage workers after the tubo sulfur disaster.

### **Secondary Data**

Secondary data is data obtained or collected by people by conducting research from existing sources. This data can be obtained from libraries or reports from previous researchers (Martono, 2011).

### **Method of Collecting Data**

In this study, the method of document study, interviews and observation (observation).

1. Document Study. Document studies are carried out by collecting written materials such as news in the media, meeting minutes, correspondence and reports to find the necessary information (Afrizal, 2008). Documents are usually in the form of writing, drawings, or monumental works of a person. Written documents include diaries, life histories, stories, biographies, regulations and policies. Documents in the form of images, such as photographs, live images, sketches and others. Documents in the form of works, for example, works of art which can be in the form of pictures, sculptures, films, and others. Document study is a complement to the use of observation and interview methods in qualitative research (Sugiyono, 2012).
2. Interview. An interview is a conversation with a specific purpose that is carried out by two parties, namely the interviewer and the interviewee as an informant and provides answers to the questions given by the interviewer (Moleong, 2010). The interviews were conducted in depth (in-depth interviews), using an unstructured interview guide, but still focused according to the research objectives. Through interviews, the authors collect data face-to-face with informants, who can express broad, in-depth and free answers related to research objectives. In-depth interviews in this study were carried out by meeting informants to meet face to face directly conducting interviews with people who work as cage workers to obtain the data the researcher wanted in accordance with the research objectives. This in-depth interview was conducted with cage workers in Nagari Koto Malintang, Tanjung Raya District, Agam Regency. Before conducting interviews with predetermined informants, the researcher prepared an interview guide which contained questions related to phenomena that occurred in the field. Based on the interview process to be conducted, the researcher obtained the results of the interview transcripts in the form of the number of tubo sulfur disasters per year, as well as the amount of income per month for cage workers, rational actions to be taken by cage workers after the tubo sulfur disaster.
3. Observation. Observation is the collection of data through direct observation of the object that we will examine. According to Creswell (Herdiansyah, 2013) observation is a process of extracting data that is carried out directly by researchers (not by research assistants or other people) by making detailed observations of humans as objects of observation and their environment in research settings. Observations in this study used non-participant observation, namely observations that make researchers as spectators or disease towards symptoms or events that are the topic of research (Emzir, 2012). The reason researchers use non-participant observation is that researchers are not directly involved in the activities carried out by research informants. Researchers only make observations of a phenomenon that occurs in the field, in the form of hours of going to the lake, and daily



activities carried out before going to the lake and returning from the lake, transportation used such as small boats (biduak), rafts.

## **RESEARCH RESULTS AND DISCUSSION**

Rationale actions of cage workers in meeting their daily needs after the Tubo Sulfur disaster such as the act of clearing agricultural land, the act of opening a driver service, and the act of utilizing kinship and neighborly relations. Sulfur tubo that occurs is a problem every year and it can be seen in May that the most outbreaks of tubo sulfur occur in Nagari Koto Malintang. Based on the problems above, researchers are interested in researching the rationality of KJA workers (floating net cages) after the tubo sulfur disaster in Nagari Koto Malintang, Tanjung Raya District, Agam Regency.

The result of this sulfur tubo is due to the development of KJA in stagnant waters such as lakes, in general never paying attention to the carrying capacity of the waters, especially in terms of the ability of these waters to provide oxygen, both for the respiration process of the biota being kept and for the process of degradation of fish feces and leftover feed. The mass mortality of fish is the result of a complex process as a result of the accumulation of organic matter both at the bottom of the water and the water column (Lukman et al., 2013). Sulfur tubo that may occur in Lake Maninjau if there are no external factors such as wind, is not a process of moving the mass of water from the bottom layer to the surface due to currents (up welling), but rather a process of reversing the mass of water as a result of changes in temperature in the water column, which generally occurs in temperate lakes (turn over) (Lukman et al., 2013).

The disaster that occurred in the Nagari Koto Malintang area resulted in dead fish so that the community, especially cage workers, lost their livelihoods and reduced their income. Based on the results of preliminary observations made by researchers, the income of cage workers is Rp. 2,000,000-Rp. 4,500,000 per month (Observations for January 2022). Because of this, it is necessary to have a hard time from the community itself to bring up the strength of strong relationships, mutual cooperation between communities so that the disasters they face end quickly and there are actions to overcome these disasters (Irwan et al., 2019).

The tubo sulfur disaster occurred for about a week. Therefore, causing cage workers to lose their main livelihood. Based on the results of field observations, it took about 7 months to restore the water which was clean before it was contaminated with sulfur tubo. During these 7 months, including around 3 months to wait for the normalization of lake water and it takes about 4 months for the fish seeds to grow big and ready to be harvested.

### **The Act of Opening Agricultural Land**

Land is one of the most needed resources for human life and other creatures (Wijayanto et al., 2021). The increase in population has increased the need for land, so that the quality and quantity of land will decrease (Wijayanto et al., 2021). Therefore, land use requires full attention so that its sustainability can be controlled (Wijayanto et al., 2021).

As a result of the tubo sulfur itself, it has paralyzed the livelihoods of some people in Nagari Koto Malintang. To meet their daily needs, like it or not, people have to look for new jobs because of this, many residents open vacant land to use it properly. The available land is used to grow various types of plants such as chillies and other crops. For more details, see the following table:

**Table 3. Action Indicators for Opening Agricultural Land**

No	Indicator	Description
1	Plant several types of plants	KJA workers tried to clear plantation land for planting several types of

		plants, namely chilies, tomatoes, shallots, garlic, and mustard greens.
2	Harvest time	The harvest time for these types of plants varies, namely chilies around 70-75 days, tomatoes around 90 days, shallots around 55-70 days, garlic around 90-120 days, and mustard greens around 40-70 days.
3	Income earned after harvest	The income earned after harvest ranges from 10-20 sacks and market prices which sometimes go up and sometimes go down

Source: 2022 Research Informants

Based on table 3 shows that one of the rationality actions taken by the community is to open agricultural land. Many people themselves choose to plant several types of these plants because the period from nursery to harvest does not take much time compared to other plants. This action is a rational action taken by cage workers after the tubo sulfur disaster as conveyed by one of the research informants named Mr. Indra Yanto (46 years): "After the tubo sulfur disaster occurred, you tried to find a new job, there was land a little behind at home, father is trying to grow vegetables, chilies, the main thing is that they can be sold. Luckily, my father still had savings when he worked as a cage worker, so he could buy some for plant seeds and fertilizer, son. Now which one is quick, the important thing is enough to eat, right, as long as it's halal, son, instead of waiting for this tubo, your family won't eat at home later." (6 June 2022).

Based on the results of the interviews, it shows that the act of clearing agricultural land is an action that can be taken by the community to meet their daily needs after the Tubo Sulfur disaster. The plants planted are chilies, tomatoes, shallots, garlic, mustard greens. People plant these plants because many people really need these plants and the time from planting to harvest is not long. The time to wait for the plant is about 2 months to 4 months. This was also expressed by one of the informants named Mr. Iwan (45 years), he said: "What you have been doing for a while is that, son, going home early in the morning, clearing fields near the intersection, the land at the intersection belongs to someone It's near your house son, so you can use the land to open fields. Father, try planting mustard greens, tomatoes and what else can be planted, while waiting for this tubo disaster to go away son. Who knows there is sustenance here son. to do the calculations with the one who owned the land yesterday, already had a promise to share the results in the form of crops, son." (June 6, 2022).

Based on the results of the interviews above, it can be concluded that most of the people who work as cage laborers in Nagari Koto Malintang cleared vacant land to make fields for several crops as a side job while waiting for the lake water to recover due to the tubo sulfur disaster. The strategic marketing concept always focuses on ways to participate in competition where people can effectively position themselves against their competitors. The ability to provide more value to customers is a keyword that is developed more optimally. Marketing strategy is a marketing effort that emphasizes how to sell products as effectively as possible (Priangani, 2013). The people of Nagari Koto Malintang are trying to market their agricultural products to people who want to buy their garden products. This was disclosed by informants named Mr. Indra Yanto and Iwan, he said: "For selling methods, usually later your friend will immediately pick up the harvest from his field son, you just need to call. Maybe it's your friend who sells it to the market, son. If that's a matter, I leave it to your friend again son, and sometimes you put your harvest to small stalls that sell vegetables, son.

The results of these interviews show that people who fulfill their daily needs by planting on agricultural land, which will later sell their garden products to those closest to them and who are used to buying their garden products and sometimes putting the harvest to stalls selling vegetables . This can be seen from the following table:

**Table 4. Indicators of Expanding Local Marketing**

No	Indicator	Description
1	Buyers come directly to the garden to buy crops	Buyers who buy crops in the garden are customers who will buy the crops which will later be sold to the market
2	Putting some of the harvest to small stalls	After harvesting from the garden, it will be placed in small stalls to be sold to people who need these plants.

Source: 2022 Research Informants

Based on Table 4, it shows that the rationality actions taken by the community are by expanding local marketing where the community opens agricultural land to plant several crops after that it will expand the marketing of crops to customers and place them in small stalls to make it easier for them to harvest their crops. run out and sell fast. The people put their harvest from one stall to another stall that can receive the harvest.

### **Actions of Service Workers as Actions of Rationality**

Work is an activity carried out by someone to complete or do something that produces tools to fulfill needs such as goods or services and obtain payment or wages. The tubo sulfur disaster resulted in the paralysis of the livelihoods of some residents in Nagari Koto Malintang, therefore the affected residents took several actions, namely working as public transportation drivers, travel drivers and as farm laborers in other people's fields. The actions of service workers are referred to as rational actions because this work is done to meet the needs of daily life after a disaster. These service workers work with other people who will be paid daily by those who have cars or rice fields.

Angkot drivers are an alternative livelihood when the tubo sulfur disaster occurs, many people turn to become drivers because of family demands for survival, Mr. Suprianto (38 years) interviewed by researchers: In the past, he had a car but no one brought his car, yesterday you asked 'instead of no one bringing his car, it's better for me to bring the car bro, later on the results will be shared bro' like that yesterday, son." (7 June 2022)

Based on the results of interviews with Mr. Suprianto (38 years) it can be concluded that many of the people affected by the tubo sulfur disaster became public transportation drivers to meet their daily needs, they became transport drivers for school children, people who wanted to go to the market, and others. They did the work while waiting for the tubo sulfur disaster to recover. For more details, see the following table:

**Table 5. Indicators of Working as a Bus Driver**

No	Indicator	Description
1	Travel route	As for the travel route from Maninjau to Lubuk Basung. For the fare from Muko-Muko to Maninjau, you will be charged 5,000 for school children and 7,000 for adults. Likewise from Muko-Muko to Lubuk Basung.
2	Income	The income earned by angkot drivers ranges from 200,000 - 400,000 per day depending on how many people use angkot to go as a means of transportation.

Source: 2022 Research Informants

Based on table 5, it shows that what the post-disaster community did was find a new job, one of which was as a public transportation driver. Working as a bus driver is done to meet the needs of daily life. The wages from working as a driver are daily which will be given by the angkot owner in the range of 80,000 – 100,000 to people who work as angkot drivers per day. Other work carried out by the people of Nagari Koto Malintang as a travel driver is also an alternative choice to meet their daily needs after the Tubo Sulfur disaster occurred as expressed by one of the research informants named Mr. Derman (33 years): "You have been working now since the disaster. what happened, there was an Avanza car belonging to the



boss of the cage, the boss asked you to become a travel driver to take and pick up passengers from Maninjau-Bukittinggi, and vice versa, instead of being unemployed, right son. (June 7, 2022)

Based on the research informant Mr. Derman (33 years) it can be concluded that the people affected by the tubo sulfur disaster did or looked for work to make ends meet and it turned out that the cage boss where Mr. Derman worked still cared about the fate of his workers by providing new jobs after the tubo sulfur disaster that befell cage workers. For more details, see the following table:

**Table 6. Indicators of Working as a Travel Driver**

No	Indicator	Description
1	Travel route	Itineraries travel from Maninjau- Bukittinggi at a rate of 35,000 per person. The travel driver will pick up the rental according to the address that has been given and likewise if picking up or delivering packages (goods) will be charged a rate of 20,000-30,000. In a day the travel driver can turn around to pick up the rent, it can be 2-3 times a day depending on the number of rentals.
2	Income	The income earned per day ranges from 250,000 – 700,000 depending on the number of rentals that are delivered and picked up

Source: 2022 Research Informants

Table 6 shows that the community is looking for new jobs to meet their daily needs after the Tubo Sulfur disaster. People who work as travel drivers will be given daily wages ranging from 150,000-200,000 per day by the cage boss who lent his car to the cage workers earlier. That's how the cage workers meet their daily needs.

Other work done by the community is to become farm labourers. Laborers are people who work for other people or an institution (company), to receive wages in a working relationship Supomo (1991). Labor is different from workers, the understanding of workers refers to processes and is independent. The worker could have worked for himself and paid himself too. Examples of these workers include farmers, fishermen, doctors, in the process of which workers obtain additional value from the process of creating additional value that they create themselves (Adniah & Putra, 2018).

A farm worker is someone who is engaged in agriculture mainly by managing land with the aim of growing and maintaining plants (such as rice, corn, fruits and others) with the hope of getting results from these plants for their own use or selling them to others (Adniah & Putra, 2018). This was disclosed by an informant named Mr. Yonedi (57 years), he said: "After the Tubo Sulfur disaster, at first you were confused about looking for a job, you looked for work and you started asking people around here, it turns out that Alhamdulillah there is a job for my father to be a farm laborer in someone else's rice field. even though the job is not every day but it can be for you to buy daily necessities. that's what you do for your family." (June 6, 2022)

Based on the results of the interview with the father, it can be concluded that the community is looking for a new job which is to meet the needs of daily life, one of which is to become a farm laborer in other people's fields. The community is looking for a new job because of the impact of the tubo sulfur disaster which made their main livelihood temporarily impossible to do until they wait for the lake water to recover. For more details, see the following table:

**Table 7. Indicators of Working as Farm Laborers**

No	Indicator	Description
1	Working Time	Farm workers in the fields work from 08.00-13.00 to plant rice. If the time to harvest rice takes quite a long time from morning to evening.

2	Wages	Farm workers in the fields will give a daily wage of 70,000 and this work is not done every day.
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Source: 2022 Research Informants

Table 7 shows that the community works as farm laborers to meet their daily needs after the Tubo Sulfur disaster occurred. These farm workers usually don't work every day, working when planting rice and harvesting rice and when needed by the owner of the fields. Workers working in the fields will later receive a daily salary of around 70,000 per day.

#### Actions Utilizing the Trust of the Closest Person

After the tubo sulfur disaster that hit the community in Nagari Koto Malintang, the livelihoods of the people on the lake were lost for several months, especially for the work of floating net cage workers. Therefore, people who work as cage laborers must think about finding ways to meet their daily needs. The good relationship between workers and cage owners should have an important role in community relations, the person who helps us who can go first is the person who has a good relationship with us. That is what workers and cage owners do as stated by one of the informants named Mr. Rusdi (52 years), he said: "When the tubo sulfur disaster occurred, to survive everyday you borrowed it from your boss who is near your house, You borrow 2 million a month son, to buy rice, fish and other needs, later if there are any leftovers, for other expenses for you and your family. Later, when you go to work and your salary is deducted after payday, that's your agreement with the cage boss, son. Turn it on like that, son, if we are good, God willing, it will not be in vain." (June 8, 2022).

Based on the results of an interview with one of the informants, it showed that there was a good relationship between the workers and the cage owner, which was when the cage workers did not have a job after the Tubo Sulfur disaster, in that situation the cage workers could borrow money from the cage owner with an agreement that the loan would be paid after The worker had returned to work again, which was the goal to meet the needs of daily life. This was also expressed by another informant named Mr Efrizal (56 years), he said: "When the tubo sulfur disaster occurred, to survive on a daily basis you borrowed money from the cage boss, you used the money to buy daily needs and you borrow 1.8 million son, you return the money after you go to work, your salary is 4 million a month, so tomorrow after your salary you deduct 1-2 million per month, the important thing is that your needs are met and the debt is paid off." (June 8, 2022).

Based on these interviews, it can be concluded that the action chosen by cage workers after the Tubo Sulfur disaster is to borrow money from neighbors (bosses) who are around the house or people with whom we have more closeness. The money is used to buy daily needs, such as buying rice, side dishes, and other needs. For more details, see the following table:

**Table 8. Indicators of Actions Using Nearby People**

No	Indicator	Description
1	Long time to borrow money	The length of time for cage workers to borrow money from cage owners for 7 months while waiting for the lake water to recover after the tubo sulfur disaster.
2	Agreement before borrowing money	The agreement between the worker and the owner of the animal husbandry is that after the worker returns to work and his salary will be deducted every month for 7 months.

Source: 2022 Research Informants

## CONCLUSION

The cage workers affected by the tubo sulfur disaster will not change their livelihoods, but they will borrow money from the cage owners during the process of recovering the lake

water. Before the cage workers borrow money from the cage owner, there must be an agreement between them so that the cage owner can lend money to the worker. This action is carried out by cage workers to meet the needs of their daily life.

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