

SHIFTING LIVELIHOODS OF FISHERMEN *HAND LINE* TUNA IN WAEURA VILLAGE, BURU ISLAND

Jul Untung Papalia ^{1*}, Suparman Abdullah ² and Sakaria ³

^{1,2,3} Faculty of Social and Political Sciences, Hasanuddin University, Makassar, Indonesia.

*Corresponding Author Email: jul.nursadi@gmail.com

DOI: [10.5281/zenodo.12545153](https://doi.org/10.5281/zenodo.12545153)

Abstract

Background: Utilization of marine and fisheries resources is that there are still many traditional fishermen who have not been able to utilize fisheries and marine resources properly. Objective: This article aims to explain the shift in fishermen's livelihoods over a period of time, which includes the beginning of the formation of tuna hand line fishermen, the period of prosperity of tuna hand line fishermen, until the end or transition to other livelihoods. Method: This research uses qualitative methods with data collection techniques of in-depth interviews, observation and documentation. The determination of informants used purposive sampling techniques and the data analysis technique used was qualitative analysis, namely data reduction, data exposure, research procedures, drawing conclusions and verification. Results: These findings reveal that the shift in livelihoods in the hand line tuna fishing community in Waeura Village is caused by several factors. First, The role of the hand line tuna fishing community in the policy making process in Waeura Village is ignored, as seen in the construction of a sea wall which hinders fishermen's access to the waters from land, especially during the wave season. Second, changes in company policy, which previously took fishermen's catches directly, now stipulate that this process must go through collectors. Third, the increase in the price of fuel oil (BBM) coincides with a decrease in the selling price of tuna. The impact of this change is a significant decrease in the overall income of tuna hand line fishermen which causes an unavoidable shift in livelihoods. Conclusion: This policy has created significant obstacles to fishing activities, resulting in degradation of water conditions which affects fisheries productivity. This deviation in policy direction is believed to be the result of a lack of Human Resources (HR) capacity within the village government, where the majority of staff have an educational background only up to Senior High School (SMA) level. Apart from that, policy changes from the private sector (companies) as well as increases in fuel oil (BBM) prices have also become significant factors in suppressing the sustainability of the livelihoods of tuna hand line fishermen.

Keywords: Shift; Livelihood; Fisherman *Hand Line* Tuna.

INTRODUCTION

As one of the countries with the second longest coastline in the world, Indonesia has very abundant marine resource potential. However, this great potential has not been able to raise the economic level of fishing communities. This can be proven by, the majority of fishing communities are still struggling in poverty, reaching 90% of the 16.2 million still below the poverty line spread across all coastal villages in Indonesia (1). This situation is ironic, if we look at Indonesia's abundant fisheries and marine resources, but the people are still economically weak. According to Satria, the poverty experienced by coastal communities is divided into 3 parts, namely structural poverty, cultural poverty and natural poverty (2).

The income of fishing communities is very dependent on several main factors, namely environmental changes, where the weather has a big impact on fishermen's income. According to Subair, et al, in the last 10 years the fishing community has felt climate change which includes sea level rise, intensity of storms and high waves, changes in fishing grounds and chaos in the fishing season (3).

Apart from climate change, operational costs are one of the most important for fishermen, especially the increase in fuel prices, where the scarcity of premium fuel types, the policy on using pertalite and the difficulty of access to buy fuel at gas stations add to the dark story of small fishermen in breaking the chain of poverty. This is because 60-70 percent of operational costs in carrying out fishing activities are fuel use, especially for tuna hand line fishermen.

Apart from that, another problem in the utilization of marine and fisheries resources is that there are still many traditional fishermen who have not been able to utilize fisheries and marine resources properly, this can be proven by the fishermen's uncertain income, whether per day, per week, per month and so on even per year which is very difficult to determine.

Therefore, in efforts to utilize marine resources, technology plays a very important role in improving the standard of living of fishing communities. BaEven Steward classifies the nature of relationships between human groups which are specifically different from other community groups due to patterns of utilization of marine products, in addition to differences in economic systems and religious belief systems (4). The challenges faced by fishing communities result in a reduction in income which can threaten the socio-economic resilience of the community, forcing them to look for other jobs to make ends meet.

As research conducted by Akmal et al, the mobilization of fishermen's livelihoods in Kelombok village, Lingga District, Lingga Regency was carried out by changing professions to become daily laborers (construction workers and cleaning workers), traders as well as gecko collectors and as providers of sea transportation services using speedboats. This phenomenon occurs due to several factors, including water pollution, inadequate fishing gear and high operational costs (5).

A similar thing happened in Waeura Village, especially in the fishing community *hand linetuna*, where the process of shifting the livelihoods of head line tuna fishermen has become a phenomenon that can be seen directly in the last 9 years.

These changes cannot be separated from the introduction of modernization and the construction of various facilities that are actually not relevant to the needs of fishermen to operate at sea, such as the construction of sea walls which block fishermen's access, the absence of fuel subsidies needed by fishermen as the main source of operations when going to sea, and the influence of companies in determining fish prices. Apart from that, the policies implemented by the village government are not pro towards hand line tuna fishermen.

The shift in the livelihoods of hand line tuna fishermen in Waeura Village can be explained through several motives that depend heavily on the resources they have. This is not only related to economic aspects, but also involves social dimensions that shape their job choices. First, there is a tendency to turn into farmers, where the family plays a crucial role in the process of inheriting agricultural land. Second, another alternative is to become a farm worker, carrying out work such as extracting eucalyptus oil, and various other daily tasks on the local community's agricultural land. This choice arises because fishermen have limited access to private agricultural land and can only rely on physical strength alone.

These diverse job choices also influence patterns of social interaction within fishing communities, where subgroups are formed within fishing communities. *hand line* tuna in Waeura village has had a negative impact on togetherness and mutual trust between fellow fishermen.

This phenomenon forms an individualistic interaction pattern that buries the identity of the hand line tuna fishing community and destroys the work system that has existed as a coastal community. Based on the description above, the shift in the livelihoods of hand line tuna fishermen in Waeura village is not only caused by a lack of attention to their needs in development but also has an impact on increasingly fierce competition between them. Therefore, it is important to study in more depth with the aim of knowing the process of shifting the livelihoods of tuna hand line fishermen in Waeura village.

PARTICIPANTS & METHODS

This research was conducted from October to November in Waeura Village, Waplau District, Buru Regency, Maluku Province. Determining the research location was carried out based on methodological considerations, namely. Waeura Village is a coastal village close to the coastline and the profession of hand line tuna fishing is one of the main livelihoods, but this profession is no longer practiced by the community. Based on field observations, there has been a shift in the livelihoods of people who previously worked as hand line tuna fishermen.

This research uses a case study approach, in which case specifications in one incident include individuals, cultural groups or a picture of life. Several characteristics of a case study approach according to Creswell and Poth (2016) are: 1. Introduction of cases in a study; 2. The case is part of a system that is bound by place and time; 3. Case studies always consider various sources of information that are part of data collection. This aims to provide a detailed and in-depth description of an event; 4. In using a case study approach, researchers spend more time describing the context or setting for a study.

Findings

Societal change is part of the dynamics of social and economic evolution, this often presents a paradox between progress and progress. The growth of the fishing population and agricultural activities in Indonesia has experienced quite significant changes, which in turn has triggered a shift in traditional livelihoods. Factors such as degradation of natural resources, economic stability and the need for more adequate output have been the main drivers in this change.

Apart from that, the shift in fishermen's livelihoods is also a major concern in discussions regarding economic and social changes in Indonesia. One of the phenomena that occurred in Waeura Village was a shift in the livelihoods of the hand line tuna fishing community, which was triggered by strong and very significant structural factors in influencing the dynamics of coastal communities.

This transformation leads to a job transition from the profession of hand line tuna fisherman to farmer and farm laborer. This shift is the result of complex interactions between structural factors including socio-economic and political conditions at the local and regional levels. Changes in economic structure, access to local markets, as well as changes in village government policies are some aspects of structural factors

that play an important role in directing the tuna hand line fishing community towards changing the profession.

As a result of adapting to these structural conditions, the tuna hand line fishing community has made strategic adjustments in choosing their profession and this is part of a response to the ongoing socio-economic dynamics in their environment.

1. Tuna Hand Line Fisherman Community Solidarity

In the initial phase, fishermen *hand line* Tuna is not fully known to the residents of Waeura Village. A small number of them try to adopt this occupation in an effort to improve the economic situation of their young and newly formed households. Three individuals from the Waeura Village community, namely Mr. Alwan Masiri, Mr. Ucu Rukua, and Mr. Hamin Masiri, decided to get involved in hand line tuna fishing work in one of the villages (Bara Village) which is about 45 km from Waeura Village. This process began when the three of them started working under the auspices of a local businessman who operated in the fishing industry and provided facilities for these workers.

This phase began between 2000 and 2005, where fishermen targeting tuna catches collectively adopted a nomadic work pattern, depending on the fluctuating location of the fish. Fish catch areas include the waters around Buru Island to the waters around Seram Island. In general, they tend to stay in one location for several months. Collaboration in groups occurs between those, who work together for the same entrepreneur, and they set up temporary shelter in the form of tents at the work site. In this work pattern, going home becomes a rare occurrence, only once or every two months.

In the context of solidarity, this phase marks the formation of very strong bonds of solidarity between fellow tuna hand line fishermen. This phenomenon is caused by routine activities that involve deep emotional interactions between them in carrying out daily activities. Solidarity in the tuna hand line fishing community is formed through interactions characterized by mutual respect, which is measured in the values of togetherness, honesty and mutual sharing. Courage is also an important factor in forming this solidarity. When one member of the community experiences difficulties, whether due to illness or other problems, all community members collectively will provide assistance willingly and sincerely. Ultimately, the formation of strong bonds between members of the tuna hand line fishing community has positive implications for their economic resilience.

Financial support, manpower, knowledge and other technical aspects are the main focus, enabling this community to experience significant improvements in the economic realm. This factor cannot be separated from the contribution of local entrepreneurs who consistently support various activities and provide optimal services, as well as supporting economic development efforts and field experience for tuna hand line fishermen. Various facilities provided by local entrepreneurs, such as boats, machines, fishing equipment, and other supporting factors, play a role in increasing the capacity and productivity of the tuna hand line fishing community as a whole.

This is in line with the theory proposed by James O. Midgley (1995), which states that there are three approaches that can be adopted to promote welfare with the aim of reducing poverty, namely through the social service approach, social work, and

philanthropy (philanthropy) (6). The existence of these three approaches in a community structure that functions optimally will make a significant contribution to the community's economic resilience. This plays an important role in guiding the next steps in efforts to increase the productivity of tuna hand line fishermen and utilize the existing potential to achieve a more prosperous standard of living. However, in this phase, the power of philanthropy is the most dominant factor in shaping the economic resilience of tuna hand line fishermen.

This phenomenon shows a paradigm in which social capital, which consists of social networks, norms and shared values, has penetrated and integrated with the cultural substrate that has taken root in society. It is important to understand that in this process, philanthropic activities are not merely individual or group actions, but are a reflection of broader social dynamics and paradigmatic shifts in the framework of society's understanding of local economic empowerment. Thus, it can be understood that philanthropy has become one of the key elements that shape economic sustainability, because it not only provides financial resources, but also strengthens the social and cultural structures that support economic development efforts in tuna hand line fishing communities.

2. Establishment of a Hand Line Tuna Fisherman Community in Waeura Village.

After observing the significant economic growth experienced by the three pioneers in tuna fishing activities, local communities became interested in adopting a similar livelihood. However, the main obstacle faced is low accessibility to high-priced fishing equipment. This is a serious obstacle for local communities. Until 2009, the government's efforts to provide boats and engines for the community became a solution, although the realization of this program often did not meet expectations.

Many aid recipients do not show significant interest in this profession, resulting in ineffective distribution. However, from here, the distribution of these boats and equipment in society became wider. Some individuals who were initially not interested in the fishing profession, but received the assistance, tended to sell or rent it to other individuals who had a greater interest in the profession. Thus, a community of hand line tuna fishermen was formed in Waeura village.

The formation of a fishing community depends on the geographical context and primary economic activities that are dominant in the community, whether located in coastal areas or not. In general, members of this community are involved in fishing activities and exploitation of other marine organisms as the main source of income to meet their living needs. In establishing the identity of a fishing community, it is important to pay attention to their daily life patterns which reflect their close connection to marine resources. Therefore, determining the status of a community as fishermen can be based on criteria such as geographical location located along the coastline or belonging to a coastal village that is economically dependent on fishing activities as the main pillar of livelihood (7).

Since the beginning, the people in Waeura Village have displayed distinctive characteristics as coastal communities, where their existence is continuously connected to the ocean because geographically they live in coastal areas. This phenomenon is reflected in daily practices, where the majority of the population is involved in fishing activities using canoes to meet their daily needs, even though most of them also work as farmers. However, the profession as a hand line tuna fisherman is a new innovation in Waeura Village.

Most of the people live below the poverty line, thus failing to consider this job as a promising option. The biggest obstacle is accessibility to fishing equipment, such as boats and engines, which are unaffordable due to their high prices, making it a new phenomenon among local communities.

The process of establishing a hand line tuna fishing community in Waeura village did not occur instantly upon receipt of government assistance alone. Rather, it is the result of an internalization process learned from the pioneers of the profession. Because economically, there has been a significant increase among them. In a relatively short time span, they were able to build a house, an achievement that generally takes 5 to 10 years for the average village community.

However, the pioneers of hand line tuna fishermen were able to build houses more quickly during their relatively new marriage period. Apart from that, they are able to provide various household facilities, such as motorbikes, TVs, refrigerators, etc. This certainly has a positive impact in encouraging people to adopt the same profession to improve their economic welfare.

3. Development of the Livelihoods of the Hand Line Tuna Fisherman Community in Waeura Village

The development of the hand line tuna fishing community in Waeura Village cannot be separated from a number of factors, one of which is a culture of cooperation that has been built gradually by three individuals who act as pioneers in this livelihood. They have been able to build a strong work culture within their group environment, where previously they actively participated in tuna fishing activities led by entrepreneurs who provided fishing equipment. The existence of a culture of philanthropy resulting from the adaptation of fishermen when they carry out nomadic activities is also an important element in strengthening the economy of the tuna hand line fishing community in Waeura Village.

Apart from that, this phase was also marked by the formation of the Astra organization which aims to strengthen the headline tuna fishing community network. The Astra group in Waeura village not only strengthens kinship relations between fishermen, but also functions as a medium for exchanging information, knowledge and practical techniques in the context of tuna fishing. The implications of this are very significant, especially in increasing fish catch production and its positive impact on local food security. This forms crucial social capital in supporting the sustainability of the tuna hand line fishing sector in Waeura village.

The kinship between members of the tuna hand line fishing community is reflected in their level of enthusiasm in supporting joint social activities, such as weddings and tahlilan for residents who have lost family members. These forms of assistance include active participation in providing personnel as well as financial donations of a certain nominal amount. The kinship dynamics that exist among fishermen create new patterns in the social structure of the Waeura village community. This phenomenon creates an additional dimension in the social life of coastal communities, which becomes intrinsically part of the community's collective identity.

The presence of the hand line tuna fishing community in Waeura Village marks the emergence of a new paradigm in local economic dynamics. The distribution of fish, which is the main food source, can now be fulfilled optimally with community intervention. Social activities around the coast become centered on service activities,

and create an economic center of gravity that gathers broad participation from the local community. In this way, the tuna hand line fishing community not only fulfills food needs, but also becomes a catalyst for the development of various economic activities in the surrounding area.

In addition, economic activity between tuna hand line fishermen and local grocery traders reflects the dynamics of interrelated social and economic relations. Fishermen tend to obtain fuel oil (BBM) supplies from local traders as a result of kinship relationships or a sense of solidarity that is rooted in society. This phenomenon shows the existence of interdependence between individuals in village communities, where economic collaboration is the main support for the sustainability of economic activities in Waeura village. In this context, fishermen feel the benefits of the availability of fuel provided by local grocery traders.

This reduces their need to access fuel from the city which is around 40 kilometers from the village, even though the price difference may be up to one thousand to two thousand per liter. The affordability and availability of this fuel provides significant economic benefits for tuna hand line fishermen, while strengthening social and economic ties within village communities. On the other hand, local grocers also gain substantial economic benefits from these relationships. Consistent fuel demand from tuna hand line fishermen is an important factor in maintaining the continuity of their business. This collaboration creates a sustainable village economic environment, where needs and benefits flow mutually between economic actors in the connected community network in Waeura village.

Apart from that, one of the direct impacts felt by the community is the scarcity of fish supplies during wedding celebrations or tahlilan events due to someone's death. Usually, the family holding the event requires a large supply of fish. Therefore, negotiations took place with the tuna hand line fishing community to meet the need for fish with various agreements determined by family. This aims to prevent the community from delays in obtaining fish supplies from other villages located around 45 kilometers away, such as in Bara village. The process of obtaining fish from the village takes a long time and does not guarantee the availability of adequate supplies. Apart from that, a family approach in the negotiation process also makes it possible to set prices that are more affordable for the community, because it takes into account the conditions of the family holding the event.

The participation of fishermen in carrying out their social functions to support the food security of village communities cannot be separated from the level of welfare they experience in their role as tuna hand line fishermen. This cycle becomes imperative in the context of social life. Referring to the National Population and Family Planning Agency (BKKBN), welfare is considered a subjective concept, where each family or individual in a community has a unique view of the factors that influence their level of welfare (8).

This subjective view is based on diverse values, goals and norms of life, which give rise to different assessments of well-being. In the context of hand line tuna fishermen, the fulfillment of domestic affairs in the family is a very important indicator in assessing welfare. For example, achieving household goals that are in accordance with the values and norms adhered to by fishing families can be considered a sign that domestic welfare has been achieved well.

Therefore, involvement in social aspects, such as participation in maintaining food security in village communities, is the second function that tuna hand line fishermen can carry out. In other words, guaranteed domestic welfare can enable tuna hand line fishermen to be actively involved in efforts to maintain the social and economic sustainability of the Waeura village community.

4. Shift in the Livelihoods of the Hand Line Tuna Fisherman Community in Waeura Village

The development of the hand line tuna fishing community in Waeura Village, which has long acted as a stable entity in the midst of the social structure of society, is starting to face substantial challenges. This problem began to emerge as the construction of the sea wall began in 2015. Previously, tuna hand line fishermen had calculated the impact that this infrastructure project would have, and as such had submitted various proposals to the sea wall project stakeholders and to village government authorities.

However, the response to this problem from the village apparently did not match the expectations of the tuna hand line fishermen. The inability of tuna hand line fishermen to determine the direction of development to improve their welfare is a substantial indicator of the shift in the profession of tuna hand line fishermen in Waeura Village. This phenomenon is closely related to the marginalized social position occupied by hand line tuna fishermen, where their existence in the social structure of society is often ignored by policy makers. This condition creates a deep dilemma and has the potential to threaten the identity of coastal communities that has long been firmly established.

The low social position of tuna hand line fishermen can be attributed to the lack of intensive interaction between the tuna hand line fishing community and non-fishers. This is caused by the allocation of large amounts of time for tuna hand line fishermen for fishing activities, reducing their opportunities to interact with policy makers/village government. The human resource factor in village administration is also crucial, where the majority have an upper secondary level educational background, which is likely to influence the direction of policy in Waeura Village. Therefore, as a result, the challenges and difficulties faced by hand line tuna fishermen are often not directly recognized by the village government. However, in more depth, disruption to the activities of tuna hand line fishermen has the potential to disrupt the fish supply in Waeura village. This could result in greater dependence on fish supplies from outside the Waeura village area, which in turn could have a negative impact on the local economy of the village community.

In recent years, tuna hand line fishermen have faced significant challenges in fishing activities due to the construction of sea walls. They were forced to overcome this obstacle by breaking through the embankment barrier in order to maintain fishing activities. This practice results in an increased risk of damage to their equipment and boats. Not only that, the difficulties faced by hand line tuna fishermen are not limited to technical aspects alone. These difficulties also extend to the economic dimension, including a decrease in catches, and a reduction in income arising from changes in company regulations. Changes in regulations which require tuna hand line fishermen not to be able to sell their catch directly, but must go through intermediaries or collectors, have had serious consequences for the income of tuna hand line fishermen which has decreased drastically compared to the period before the change in

regulations. Moreover, adjustments to regulations regarding the quality of the catch, which must be cleaner than before, have also had a significant impact on the weighing process. However, the most detrimental aspect for tuna hand line fishermen is the practice of taking fish remains that could previously be resold, which are now taken by companies without providing any financial compensation at all. The accumulative impact of this policy harms tuna hand line fishermen substantially, narrowing their economic space and increasing their dependence on collectors who control the distribution chain.

This condition is further exacerbated by the increase in the price of fuel oil (BBM), which was originally only 8,000 per liter, now reaching 15,000 per liter. This increase in fuel prices causes very high operational costs for tuna hand line fishermen, thus having a negative impact on their income. In this situation, tuna hand line fishermen are unable to maintain their livelihoods due to the high operational costs they have to bear. This situation reflects the "critical mass" being faced by the hand line tuna fishing community.

Table 1: Process of Changing Livelihoods of Hand Line Tuna Fishermen in Waeura Village

Stage	Time period	Description	Main Impact
Growth of the tuna hand line fishing community	2000 to 2005	Strong bonds of solidarity between members of the tuna hand line fishermen.	Improving the welfare of tuna hand line fishermen
Formation of a hand line tuna fishing community in Waeura village	2006 to 2010	Residents' interest in the livelihood of tuna hand line fishermen	More and more people work as hand line tuna fishermen in Waeura village
The peak of development of hand line tuna fishermen in Waeura village	2010 to 2015	The fish supply in the village is fulfilled, there is economic synergy between tuna hand line fishermen and grocery traders	The welfare of tuna hand line fishermen is stable, contributing to the village economy
"Critical mass" of the tuna hand line fishing community	2015 to 2020	Construction of sea walls, changes in company regulations, and rising fuel prices	Many hand line tuna fishermen have been forced to leave their profession
Loss of livelihood for tuna hand line fishermen	2020 to 2023	Tuna hand line fishermen can no longer fish. The tuna hand line fishing community is experiencing an economic crisis	Tuna hand line fishermen changed professions to become farmers (onions and chilies) and agricultural laborers (eucalyptus oil workers)

Source: Data Analysis 2024

Marwell and Oliver (The Critical mass in Collective Action, 1993) identify this phenomenon which they call "critical mass", which triggers collective action. They emphasize that collective action can be organized and involve voluntary cooperation in which each individual decides independently whether to participate in the action or not (9). In this context, tuna hand line fishermen, in critical economic times, use this situation as an incentive to seek a better livelihood. In line with Coleman's explanation of rational choice theory, tuna hand line fishermen who choose to switch to a new job can be interpreted as an example of the application of this concept. Rational choice theory by James Coleman emphasizes that individuals' actions can be explained as the result of a rational evaluation of their values and preferences. This concept

emphasizes that individuals actively choose actions that are expected to optimize their benefits or feasibility. In this context, an evaluation of the condition of tuna hand line fishermen indicates that they are increasingly pressured by the dominance of larger economic forces, which results in limited choices in maintaining the sustainability of their profession as tuna hand line fishermen. This is mainly due to the drastic increase in operational costs that is disproportionate to the income earned, preventing them from taking actions that maintain these livelihoods. For example, the daily costs required for operations reach more than 50 liters of fuel oil (BBM), while their income has decreased significantly. Therefore, rationally, they are forced to consider transitioning to alternative professions or livelihoods that are expected to provide more stable and viable economic conditions, rather than continuing to endure these unfavorable conditions.

James Coleman analyzes that each individual has capital in the form of different resources and unequal access to these resources, thus causing an imbalance in the social structure. In hand line tuna fishing communities, these disparities create variation in livelihoods, dividing the community into farmers and farm laborers with significant differences in patterns of social and economic relations. According to Coleman, actors tend to consider various available options based on goals, resource availability, and probability of success. In the context of hand line tuna fishermen, employment decisions are often based on careful evaluation of available resources, in accordance with Coleman's theory of optimal option selection.

Individual rational actions are often guided by considerations of micro-macro relationships in a social context. Rational choice theory focuses on the goals or intentions of actors in making decisions. However, this theory recognizes two main factors that influence individual actions. First, limited resources make it difficult to achieve goals, even for actors who have large resources. This phenomenon is closely related to cost considerations and other major forcings. Second, individual abilities influence the choices available. For example, in the context of tuna hand line fishermen who have switched professions to become intercropping farmers (onions and chilies) and farm laborers (eucalyptus oil refiners), they are more capable of carrying out these jobs compared to being tuna hand line fishermen, because the capital required is relatively smaller, which can reduce the financial burden they have to bear.

After changing their livelihoods, many of them are faced with the need to hand over control rights to others. This is due to the difficulties faced by those who change professions to become farmers or agricultural laborers. The obstacles they face include the inability to set selling prices for their harvests for farmers, while for farm workers, they face new pressures related to obligations to land owners and the cost of living while working there. The rational choice theory proposed by Coleman states that giving control rights to other parties, such as land owners and collectors, is a rational action. The transfer of control rights is assumed to be carried out in a way that benefits the individual making the transfer rather than holding the control rights themselves (10). In this context, tuna hand line fishermen who change professions see giving control rights to other parties as an effort to obtain better results than if they had remained in their old profession, which tended to be more detrimental for them.

The transfer of control rights is a consequence of collective life, which involves two main concepts: reciprocity and redistribution. Reciprocity refers to the transfer of rights

to another individual, while redistribution refers to the transfer of rights to collective action. According to Sairin, the difference between these two concepts lies in the symmetrical and asymmetrical nature of the relationships involved. Reciprocity occurs in the context of symmetric relationships where activities based on exchange are mutually beneficial. In contrast, redistribution requires an asymmetric relationship in which certain individuals or groups collect resources from group members without necessarily giving them anything in return.

Asymmetric relationships in redistribution are characterized by the collection of resources by certain parties, which are then redistributed to the group in the form of the same or different goods or services. In this context, price regulations set by collectors become an important part of reciprocal relationships, so that farmers can ensure that the goods or crops produced can be distributed efficiently without the risk of marketing failure or damage. In addition, in the context of redistribution, land owners who provide equipment for the production process, such as in the processing of eucalyptus oil, emphasize a reciprocal relationship with workers (farm laborers). The obligations imposed on agricultural workers in the process of processing eucalyptus become part of the reciprocal relationship that regulates the exchange between them and the land owner.

Coleman acknowledged that the transfer of control rights in some cases does not necessarily convey the same rationality for the individual, unless the individual can retain some control over the decisions taken by the group representing him. This is because actions taken by a group can result in or influence events that have a significant impact on the individual. However, the main challenge arises in trying to divide the right of control over group actions fairly among a number of individuals. In the context of a community of hand line tuna fishermen who are changing professions, this transfer of control brings various fundamental problems that need to be addressed to improve their welfare. They are faced with the demands of working in a profession that is relatively new to them, with a limited level of experience and knowledge. This creates a situation where they are indirectly involved in competition with incumbents who have accumulated extensive experience and knowledge in the same field, as farmers and agricultural laborers.

Why do tuna hand line fishermen who change professions unilaterally transfer the right to control their actions to someone else? The answer, According to the perspective of rational choice theory, this action can be explained as a strategy to maximize individual interests. However, in the context of a community of hand line tuna fishermen who change professions, the transfer of control rights occurs unilaterally, which does not always produce the expected balance in the community structure. A balance of control between various actors is key in maintaining social harmony. However, when control rights are only transferred to one or a few individuals, this can result in an imbalance of authority that has the potential to give rise to arbitrary actions. The impact is not only detrimental to tuna hand line fishermen who change professions, but also disrupts the stability of the community system as a whole. The transfer of control rights to individual or collective behavior is one indication that rational choice theory has relevance in explaining macro phenomena. In this context, emphasis is not only given to structured or stable macro phenomena, but also to dynamic and fluctuating phenomena. The transfer of control rights from rational entities contained in the system, by Coleman (2019), is referred to as "wild and volatile collective behavior". It

refers to the process of transferring control over actions from one actor to another actor unilaterally, rather than as part of a planned exchange.

Acknowledgements: We would like to thank the Faculty of Social and Political Sciences for supporting this research. We also thank to fisherman *hand line* tuna in Waeura Village involved for their willingness and assistance during the data collection process.

Author Contributions: Jul Untung Papalia, Suparman Abdullah, Sakaria: Study concept and design. Jul Untung Papalia: Collect and process research data. All authors: creation of publication manuscript.

Conflict of Interest: There is no conflict of interest in this research.

Funding: All research and publication funding is carried out independently without any financial assistance from other parties.

Reference

- 1) Isir, M., & Abdullah, VI (2022). Empowerment of Fishermen in Processing Food Products Made from Rebon Shrimp in Coastal Communities. *Saga Community Community Service Journal*, 1(1), 11-20.
- 2) Midgley, J. O. (1995). Social development: The developmental perspective in social welfare. *Social Development*, 1-208.
- 3) Sairin, Sjafri. (2002). *Introduction to Economic Anthropology*. Student Library.
- 4) Subair, Nurlina, et al. (2022). "Social Mediapreneur Training to Increase the Competitiveness of Women Fishermen Groups." *JMM (Independent Community Journal)* 6.4: 2548-2557.
- 5) Marwell, G., & Oliver, P. (1993). *The critical mass in collective action*. Cambridge University Press.
- 6) Akmal, R., & Tantoro, S. (2020). Fishermen's Livelihood Mobility in Kelombok Village, Lingga District, Lingga Regency. *Journal of Social and Political Sciences*, 2(1), 345-358.
- 7) Sakaria Anwar. (2018). "State and Market Social Capital". Makassar; Maupa Masagena Media Kreasindo.
- 8) Wibisono, Chablullah, and Ika Novita Sari. (2021). "Determination of the Fishermen's Environment, Development of Fishermen's Groups and Empowerment of Fishermen's Communities for the Welfare of Fishermen through the Development of Fisherman's Groups." *Science Tower: Journal of Scientific Research and Studies* 15.2.
- 9) Stewards. H. Julian. (1955). "Theory of Culture Change. The Methodology of Multilinear Evolution. Urbana. University of Illinois Press.
- 10) Coleman, JS, Widowatie, DS, Purwandari, S., & Muttaqien, I. (2019). *Basics of Social Theory = Foundations of Social Theory*.
- 11) Creswell, John W., and Cheryl N. Poth. (2016) *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.