Original Paper

# ROOT PROBLEM AND CONFLICT RESOLUTION OF FISHERIES IN SEA WATERS OF SOUTH KALIMANTAN

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#### **ABSTRACT**

Conflict of fisheries (capture fisheries cases of purse seine) in the sea waters of Kotabaru South Kalimantan, require serious attention. The government has made some efforts to overcome it but not yet effective. Therefore it is important to know more deeply whether conflict resolution is already addressing the root of the problem. The study was conducted with a qualitative approach. The primary data collected through in depth interviews with key informants, while the secondary data obtained from literature studies, relevant agencies and newspaper clippings. Based on the analysis results that: the root causes of conflict based on the source of relationship issues, structural problems and value differences and conflicts based on the typology of conflict of jurisdiction, internal allocation and management mechanism. The resolution of conflict using negotiation and facilitation techniques. Conflict resolution is done is still not addressing the root of the problem so that the escalation of conflicts of fishing last long. Conflict resolution needs to be done effectively by involving stakeholders and increasing their participation in creating the sustainability of capture fisheries.

**Keywords:** conflict; fisheries; resolution; sea waters; South Kalimantan **Correspondence:** Phone: +62-511-4772124; E-mail: r\_melyan@yahoo.com

## Introduction

Fish resources are still considered to have an open access and common property, meaning that every person has the right to exploit these resources. The issue involves not only the utilization rights of the parties, namely local communities or fishermen, but also other parties such as employers and governments. Various parties who have an interest in natural resource management often collide, giving rise to conflict.

Priscoli (2002) states that natural resource conflicts can be caused by poor communication, differences of perception, ego battles, personality differences, differences in views about the good and the bad (conflict of values), differences in interests and structural factors. Conflict of fishing varies greatly between regions and between time. Conflict of fishing generally associated with the utilization

of fish resources is considered rare. Scarcity is associated with production problems, namely fewer fish can be caught by fishermen (not enough fish). In general, the parties involved in the conflict are a group of traditional fishermen. The diversity of fishing many types of conflict caused by diversity of fishermen's perception about the management of fish resources.

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Warner (2000) identified four things that can explain the emergence of conflicts over natural resources, including the competition of natural resources (increased dependence on natural resources, thereby increasing competition). Yurlikasari (2010) mentions that the modernization of the fisheries sector has proven to increase the flow of exploitation that led to the destruction of marine ecosystems and over fishing as well as social insecurity due to competition among fishermen in the utilization

of fisheries resources. With almost the same reasons (Solihin, 2010) pointed out the potential conflict can be caused by capture fisheries where fishermen hunting principle should always be chasing fish, a competition which resulted in the accumulation of units of fishing at the same place and time Conflicts on the world's fisheries in Indonesia is a common symptom, therefore, sufficient available sources of reference as the initial information to understand or carry out a review of fisheries conflicts. Research policy in general, using characteristics of the policy procedures that have a hierarchical relationship, or using several methods. Tool to change the information carried in an authoritative way. According to Dunn (2003) in an authoritative manner, policy statements are based upon assumptions about the status achieved by the maker of information, as the testimony of expert scientific or political observer can be used as part of an argument to accept a policy recommendation. Multimedia communication; media communicate a lot of users, the analyst is very important to ensure that knowledge (studied) are relevant to policy, so it is used by policy-makers and the recipients desired impact. Single communications medium that is often used by analysts of many scientific disciplines are scientific articles and books.

The resulting policy is based on authoritative mislead will result in an escalation of the conflict and ultimately getting longer because it has not directly illustrate the desire of stakeholders. In this research needs to be done by collecting data through focus group discussions and depth interviews with key informants that the real root cause can be uncovered and can provide a regulation in accordance with the real issues in South Kalimantan Kotabaru district. Moreover, it can provide an objective representation of the results of the analysis because of the policy statement is arguments derived from perpetrators of the conflict itself. With regard to the conflict Kotabaru purse seine in the waters of South Kalimantan, the study aims to assess the factors causing conflict by mapping the root of the problem and find a resolution to do.

## MATERIALS AND METHODS

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Study Site

Material of research was a case of purse seine fishing in the waters of South Kalimantan Kotabaru. The study was conducted in January 2009 was followed in November and December of 2010, located in the coastal village of South Kalimantan with the selection of research areas done purposive a region which is the basis of conflict, namely: District Kotabaru (Long live the village and the village of Lower Estuary)

#### Data Collection

The study was conducted with a qualitative approach. Data collected included primary and secondary data. Primary data were collected through focus group techniques (focus group discussion) and in-depth interviews against certain key informants. Selection of informants done purposively, namely representatives from government agencies: (DKP, Lanal, Polair, Member of Parliament, PPI), government officials, community leaders, fishing communities, fishermen's organizations: Pokmaswas, INSAN, AMNES, HNSI, Institutions community: WALHI, as well as academics. The selection of informants is also done by using the "snowball technique" with key informants. Observations focused on the fishing village, trading centers, TPI). Secondary data were obtained from literature studies, relevant agencies, and newspaper clippings.

#### Data Analysis

Data analysis was descriptive and narrative. According Indarwasih *et al.*, (2008) narrative analysis helps identify the causal relationship of a phenomenon so we get a detailed picture of a phenomenon. The root causes of the conflict based on the source of conflict is mapped by combining the approaches Gorre (1999) and Fisher *et al.*, (2000) that PRS analysis and analogy onions, then the root causes of the conflict based on the typology of conflict in the plot based on the approach of Charles (2001).

Conflict resolution approaches are analyzed through Priscoli (2002).

# RESULTS AND DISCUSSION

Causes of Conflict

The root causes of the conflict illustrate the causes of conflict fisheries. Based on the sources of conflict can be categorized as follows: (1) relationship issues (2) differences value (3) structural problems. Conflicts which stem from relationship problems that is the difference in perception because of the strong emotional, assumptions about the behavior of others, less or no communication, or the presence of repetitive negative behaviors such as purse seine fishers from Central Java to sell the fish cheaply, thus decreasing market price of mackerel in Kotabaru. Conflicts which stem from this relationship problem, if it can be communicated with it can minimize the escalation of conflict will even ensure the harmonization between the fishermen.

Conflicts which stem from differences in the value of the difference in the value system espoused by one user with the value applied by other users which is one of the users to impose the application of the values it uses to other parties, technology modernization that are used by the purse seine fishers from Central Java assumes that technological modernization is the development of fisheries. While others use lower technology and do it in ways that they understand defend the values that have existed for generations in the use of fish resources in the When compared with waters. research Wahyono (2000) laimed a major source of conflict is the increased intensity of exploitation. This is related to the accretion unit exploitation and changes in technology, in line with the value problem in the case of purse seine conflict that higher technology resulting unbalanced competition.

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Sources of conflict related to the structural problems of assessment of the uneven treatment given in accessing resources such as granting permission to the parties who have a higher technology. In this case conflicts occur secondary to the Ministry of Maritime and Fisheries which has given permission to the purse seine fishermen do andon from Central Java in the waters around Kotabaru.

Typology of fishing conflicts that occurred in the waters of South Kalimantan Kotabaru as presented in **Table 1**.

Table 1. Typology of conflicts of fishing in the waters of South Kalimantan

Excess		Causes of Conflict	Typology of Conflict	Parties Involved
warned,	1	Operation of Purse seine from Central Java are given	management	Purse seine
banned,		permission by KKP (Ministry of Maritime Affairs and	mechanism	fishermen vs
expelled,		Fisheries)		small purse seine
burning	2	Social jealousy local fishermen against fishermen who	internal	fishermen, KKP,
purse		use high-tech andon (lamp: 40.000-50.000 watt, to have	allocation	DKP, Police,
seiner,		fish finder, ship: 45-60 GT, fish catches: 2-3 ton/trip).		TNI AL.
action	3	Market competition: purse seine fishermen catch sells		(Fisherman
mass		cheaper than the market price	jurisdiction of	organization:
	4	Operation of purse seine fishing:> 12 mile, but the light	fishery	HNSI, AMNES,
		used to attract fish in the territorial waters of South		INSAN)
		Kalimantan		

Sources: primary data is processed

Root causes are reviewed based on sources other than the conflict may also based on typology. In line with this research typology of fisheries conflicts identified are: (1) jurisdiction of fishery, (2) management mechanism, (3) the internal allocation. Conflicts of jurisdiction because the purse seine fishers from outside the region (andon) entered the mini purse seine. Andon fishermen actually perform the operation on the fishing ground over 12 miles, based on the settings Arrest Pathways and the Law on Regional Autonomy, which imposed no offense, but the condition of the bathymetry regions in Indonesia are not equal then the Law on JJP (Fishing Route) should not be generalized mutandis to the case of conflict in South Kalimantan. South Kalimantan waters in the area 15 miles just to have a depth less than 40m, with the condition causing the local fishermen claim that the region is still in the area of South Kalimantan. Based on the escalation of conflicts ranging from the development up to a critical confrontation common in the era of autonomy, so it is often generalized identity conflicts. This is consistent with the statement Satria (2004) that efforts to generalize the conflicts of fishermen as a result of identity conflicts implementation of regional autonomy, which the government has authority management of marine areas and resources in it is only 8 miles to the sea, so it gives a great opportunity for fishermen from other regions and on free to make an arrest in the path > 8 miles.

The conflict heats up when emergence of the belief of local people as local people that they have the priority right to exploit resources that are around where they live. The presumption that others should not be entered into exploitation activities with a higher level of local communities. In such conditions, if there are people outside who are involved in exploitation activities in the territory of a particular community and the community is not pleased at the presence of outside fishers, it triggered a violent conflict. The presumption of ownership of the marine community is in line with the assumption Premdas (.... ho explained that there was a relationship between the identity of a social group with a place where they live.

Conflicts related to mechanisms associated with the management of conflicts between fishermen and the government over the issue of enforcement or policy, on one side of the fishermen complain that enforcement of regulations by the government done to excess on a group of fishermen, including marine resource extraction in excess of quota. Another problem is the existence of a policy that gives permission

to the purse seine in the waters around South Kalimantan Kotabaru considered a management mechanism, then an impact on utilization of fishery resources of justice in which the differences in character (semi-modern and modern) or interest (subtends orientation and industry orientation) in making use of fishery resources in the same fishing ground, further orientation by the industrial purse seine fishing can lead to over fishing which threatens the sustainability of capture fisheries. In case this is not in line with the opinion Branch (2008) fisheries against the weak management mechanism. Implementation of the policy should not neglect and contrary to national and international regulations in realizing sustainable world fisheries.

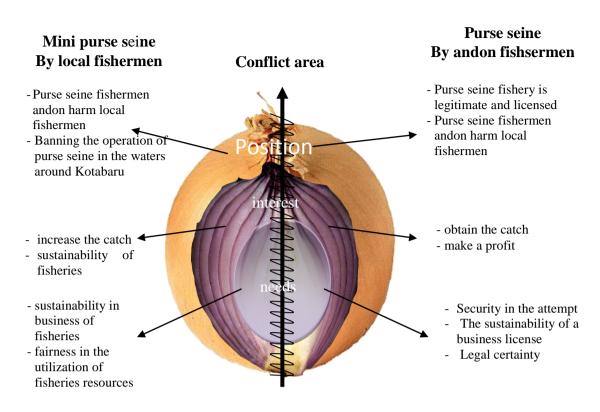
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Typology of conflicts included in the internal allocation due to the zeal of local fishermen because of the technology gap (lamp: 40000-50000 watts, to have fish finder, ship: 45-60 GT, so that the catch could reach 2-3 tons/trip). Conflict in the internal allocation category includes conflict that was born as a result of the interaction between the various stakeholders involved fisheries in technology and the capitalization rate used between the fishing gear. Differences in the capacity of fishing technology that is higher than the other fishermen in catching the same fish species, consequently reducing the catch of fishermen who have a lower capacity equipment, making the cause of the small fishing opportunities for fish and declining revenues. With the growing urgency of their household economy eventually angered fishermen.

Differences in ideology and principle of the utilization of fisheries resources can lead to conflict. Analysis of the "Position-Interest-Needs" of the sides of conflict depicted in **Fig.** 1.

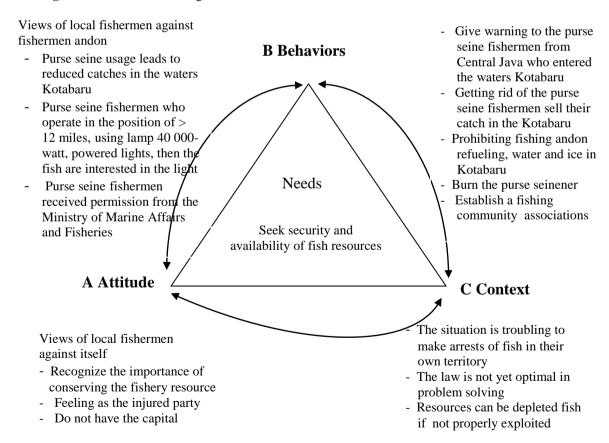
Based on the identification of "Attitute-Behavior-Context" as factors affecting conflict. The third principle is shown as an equilateral triangle. These three factors affect each other, therefore the two-way arrow sign at every corner (**Fig. 2**).



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Fig. 1. Conflict of describing the differenc "Position-Interest-Needs"



**Fig. 2.** The principle of "Attitude-Behavior-Context" andon local fishermen against fishermen using purse seine

#### Conflict Resolution

Conflict resolution is done in the case of purse seine evolved hand in hand based on the phases of conflict escalation. The development conflicts are grouped into five stages, namely (1) beforeconflict; before 2000 (2) confrontation in 2004-2005 (3) crisis in 2006 (4) due in 2007 (5) post-2008 conflict. Condition of conflict resolution and technique of conflict resolution are presented in **Table. 2** 

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Table 2. Condition of conflict resolution and technique of conflict resolution

No	Condition of conflict resolution	Technique of conflict resolution
1	Letter of agreement between the fishermen of Pekalongan with local fishermen from Kotabaru (2004)	Negotiation
2	Letter of agreement between the fishermen of Tegal with local fishermen from Kotabaru (2005)	Fasilitation
3	Follow-up deal that represented all stakeholders took place in Surabaya (2005)	Fasilitation
4	Still the operation of purse seiner fron Sentral Java ( $\pm$ 40 units) in the waters around Kotabaru, so do acts of conflict resolution, represented by all stakeholders held in Makasar (2007)	Fasilitation

Conflict resolution efforts have been made since the beginning of the conflict (the phase of confrontation). In this period began warning-warning, disputes at sea in the form of a rejection of the use of different fishing gears with the gear of local fishermen. Local fishermen provide warnings either verbally or in writing and make treaties. On 1 April 2004, the conflict is resolved by making an affidavit from the owner of the purse seine vessels from Central Java. There are four points in the letter of the statement, namely: (1) There will be fishing in territorial waters Kotabaru district by using light (2) Wherever possible bias light is not visible from the Kotabaru waters 12 miles from the outer islands (3) There will be docked to the port district Kotabaru for refueling, water and ice and do not sell fish except in an emergency (4) If later found by fishermen violating the letter of this statement then the fishermen Kotabaru district can perform actions without there are demands from the purse seine fishing.

In this effort was a failure because it is still only partial, not socialized to other users. Through these negotiation techniques, the level of public compliance to the agreement made only rely on moral. Users purse seine more exploitation in the waters around the Kotabaru, resulting in charges of breach of agreement because the fishermen's behavior to deviate from the agreement Central Java assessed. Local fishermen, especially the mini purse seine fishermen staged a protest to the Parliament and the Regent Kotabaru, but their protests were ignored. Finally in May 2005 mini purse seine fishing together and make an organization of fishermen by the name AMNES (Association of Fishermen Society Saijaan). AMNES planned invasion and willing to burn Pekalongan purse seiner, but the action can be thwarted by the Navy and the Police.

Conflict followed up by contacting the Department of Fisheries as a third party to intervene. Use of this facilitation technique is a form of government attention and have the force of law in the event of breach of agreement. On June 16, 2005 at the Ministry of Marine Affairs and Fisheries agreement contains 14 points, namely: (1) Achieve the fishing business climate is comfortable, conducive with guaranteed security. This effort involves all stakeholders, including the Department of Fisheries and Marine Resources in each region; (2) Prevent

damage to fish resources of the fishing activities that use materials and prohibited fishing gear, fishing line violations and violations of laws and regulations applicable; (3) In the interim, pending the results of studies on the influence of BPPI Semarang light intensity purse seine, purse seine vessels can operate with a minimum distance of 20 nautical miles from low tide boundary of each island in the evening; (4) For a while, the power of the lamp (light intensity) purse seine vessels 12 000 watt maximum; (5) The results of purse seine fishing boats are not sold in local markets. In terms of marketing in order to cooperate with local fishermen; (6) Initiating a partnership effort between the fishermen fishing in the province of South Kalimantan province of Central Java, (7) To conduct an increase in fishing technology in an effort to overcome the technology gap under the coordination of DKP South Kalimantan Region; (8) Do monitoring and oversight; (9) conduct deliberations involving the elements involved, facilitated by the Ministry of Marine Affairs and Fisheries and Local Government; (10) To disseminate legislation to fishermen fishing in Central Java and South Kalimantan, which is facilitated by the Department of Fisheries and Marine provinces of each region; (11) BPPI conduct an assessment of the effectiveness of the use of lights; on purse seine vessels. This study involves a representative HNSI, Fisheries and Marine Affairs and representatives of fishermen Kotabaru and Central Java; (12) This agreement is effective since signed up to the release of the central government's decision regarding the rules of the use of lights; (13) For those who violate this agreement, will be subject to sanctions in accordance with the provisions applicable law; (14) with the signing of this agreement, the agreement previously declared invalid.

There Still a polemic between fishermen from Kotabaru with fishermen from Pekalongan, Juwana, Pati Central Java who catch fish in the territorial waters of Kotabaru using purse seine still conduct. Further settlement of the conflict had response from the government to follow through on the deal has been done before. On 24-25 January 2006 in Surabaya a meeting chaired by KKP, obtained a formula for conflict resolution evaluation.

Agreement between fishermen from Central Java with the Association of All Indonesian Fishermen (HNSI) Kotabaru signed in Jakarta. But fishermen Kotabaru not accept the results of the signed agreement is considered harmful.

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Institutional role that is still less neutral position, where government institutions have a tendency to side with either party, cause all the conflict resolution efforts by the government did not get a positive response that resulted in escalating conflict.

Kotabaru fishing communities who joined in HNSI assume that the agreements signed on behalf of the individual, and not on behalf HNSI, because today is concerned is not the chairman HNSI. The existence of purse seiner by 40 units in waters around Kotabaru burning anger fishermen 2006. The incidence of burning ships owned purse seine fishing in the waters of Kotabaru. Kotabaru fishermen staged a protest in front of the parliament building, demanding the expulsion to Purse seiner to out from the waters of Kotabaru.

Many parties involved at least a factor to be considered in conflict resolution. Besides fishermen, the agency that handles conflicts purse seine consists of government and non government agencies from across the region to inter provincial. In connection with the terms of the Kaiser and Forsberg (2001) provide some of the things that must be considered in fishery management such as the number of stakeholders or stakeholders should work together in managing so that conflicts can be resolved and provide a positive impact on the development of fisheries.

Fear that the conflict will spread, then conducted follow-up agreement / conflict resolution represented all stakeholders to do in Napier in 2007. The Government invited the fishermen met in Napier. The Government anticipates the conflict, and planning efforts: (1) to stop spending on new permits for the type of purse seine vessels; (2) transferring some types of vessels into territorial waters of another.

In post-conflict period in 2008 although there is no conflict, fishermen continue to fight for their right to be able to do activity tried in safe conditions. Fishermen ask for support from all parties which are supposed to solve their problems. Pokmaswas formed increasingly active in conducting surveillance and gathering all the problems of fishermen.

Pokmaswas establishment in accordance with the real needs of society, as a bridge between government and society. It provides growth opportunities active participation of local communities. So far the institutions that play a role in conflict management has conducted an evaluation, plan follow-up medium and long term, one of which is to form a working group handling of conflicts of fishermen in each region and the central level, provincial to district and guidelines for handling fisherman conflict between regions through the mechanism of Alternative Dispute Resolution (ADR). The essence of ADR is to build consensus or compromise in accordance with deliberation and consensus approach originates from the community. Institutional roles will be developed and legitimated, so that agreement can be obtained through the forums that can be held responsible, are binding and enforceable.

## Conclusion

Root problem of conflict in the case of purse seine in the waters of South Kalimantan Kotabaru, include: differences in values, relationship problems and structural factors. While the terms of the typology of conflict of jurisdiction of fishery, management mechanism and the internal allocation.

Conflict resolution through negotiation and facilitation techniques. But the interaction of several institutions have not been together long cause conflict escalated. Positive impact of the conflict has been established Pokmaswas which is executing on a level playing field with voluntary membership which consists of coastal communities and LSM to build synergies with local institutions and other institutions to create a network of communication and interaction between communities.

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