

Patron-Client relationships in capture fisheries business: A policy challenge

Hendrik Hendrik^{1,*}, Irwan Effendi², Zulkarnaini Zulkarnaini¹, Clara Yolandika¹, Azizah Mahary³, Izzatulmila Effendi⁴

¹ Social Economic of Fisheries Department, University of Riau, Pekanbaru 28293, Indonesia

² Marine Sciences Department, University of Riau, Pekanbaru 28293, Indonesia

³ Aquaculture, University of Asahan, Kisaran 21216, Indonesia

⁴ Faculty of Psychology, University of Diponegoro, Semarang 1269, Indonesia

* **Corresponding author:** Hendrik Hendrik, hendrik@lecturer.unri.ac.id

CITATION

Hendrik H, Effendi I, Zulkarnaini Z, et al. (2024). Patron-Client relationships in capture fisheries business: A policy challenge. *Journal of Infrastructure, Policy and Development*. 8(8): 4675. <https://doi.org/10.24294/jipd.v8i8.4675>

ARTICLE INFO

Received: 18 February 2024

Accepted: 26 April 2024

Available online: 8 August 2024

COPYRIGHT



Copyright © 2024 by author(s).

Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license.

<https://creativecommons.org/licenses/by/4.0/>

Abstract: The patron-client relationship (PCR) is a relationship between two parties who need each other. In several Asian coastal countries, in the capture fisheries business, this PCR has been going on for a very long time and continues today. This research aims to analyze patterns of PCRs from social and economic aspects, as well as the nature and changes in patterns of PCRs. The location chosen was fishermen in Rokan Hilir Regency, Indonesia. This research uses qualitative and descriptive methods. Data collection was carried out by interviewing 10 patrons, 50 clients, and 10 key informants and conducting focus group discussions. The research results show the pattern of PCRs in terms of social aspects including social assistance and social norms. Meanwhile, from an economic aspect, it takes the form of loans and fixing fish prices. It can be said that the pattern of PCRs is asymmetrical. There are shifts and changes in responsibilities and risks over time. In the past, the responsibility and risk were mostly borne by the patron, but nowadays this is mostly borne by the client. This relationship pattern is worth paying attention to when formulating development policies for fisherman communities and coastal areas.

Keywords: fisherman-financier relationships; asymmetric relationships; risk sharing; capture fisheries

1. Introduction

The patron-client relationship (PCR) is a relationship between two parties who need each other (Adisel et al., 2023). This condition occurs because the patron has social, economic, and resource advantages, while the client has a much weaker social and economic status than the patron (Firman et al., 2020). This PCR exists in various fields, including the capture fisheries business sector. Jiang (2018) explains that the patron (tauke) plays the role of patron as having power, wealth, and influence over fishermen, while fishermen act as clients because they receive influence from the patron. According to Roberts et al. (2022), a PCR is a reciprocal relationship between partners with higher and lower socio-economic status. Patrons provide protection and benefit from their influence and resources. The clients pay back through support such as exclusive services to certain patrons. The PCR in the fish trade can be seen from two characteristics. First, the PCR is a social bond in the fishing community. Second, patrons help lend money to purchase fishing equipment for fishermen and support them in meeting their economic needs. In return, the fishermen sell all their catch to patrons.

Fishermen's PCR with one another were entwined in both economic and non-

economic ways. Assistance costs were used to capture operational capital to build the financial tie between the economy and the client (Aida et al., 2020). Fishermen received fish to be caught and marketed by the skipper capital owner in exchange. Client relationships were safeguarded in a non-economic way by loans to fishermen who desired to labor without money. Furthermore, the relationship between the skipper and the fisherman was founded on a PCR that began with job prospects. This connection was made possible via an economic network created to provide fishermen without capital with access (Aida et al., 2020). Muhamad et al. (2023) explained that the limited capital of local fishermen keeps them connected to the migrant community. A PCR takes the form of a relationship in which one person uses his or her influence and resources (patron), providing protection and profits to a subordinate (client). However, there can also be an exploitative relationship between capital owners and fishermen.

Roberts et al. (2022) mentioned that PCR can be seen in the form of a fisheries value chain. Patrons are part of the collecting traders who play a role in determining the flow of fish volume, fish prices, and market information. It was further explained that patrons also depend on wholesalers for financial and sales support. The PCR is a socio-economic relationship that is mutually beneficial and has the character of a symbiotic mutualism between both parties (Syahputra, 2018). PCRs are mostly seen from social, economic, and marketing aspects. This study aimed to analyze patterns of PCRs from social and economic aspects, and the nature and changes in patterns of PCRs by taking location sampling in Rokan Hilir Regency, Riau, Indonesia.

2. Literature review

Patron is a term that comes from Latin which means father. Wahyudi and Sutisna (2021) and Roberts et al. (2022) explained that a PCR is a relationship or bond between two parties involving a set or number of friendship relationships. It was explained that this kind of relationship is exemplified in the lives of fishermen and business capital owners. A patron uses influence or resources, especially economic ones, to provide protection and benefits to clients and a client provides compensation in the form of support and funds, including personal or personal services to the patron. This relationship provides benefits for both parties. It is further argued that the PCR has a strong bond where both parties hope to benefit from it. PCRs are not based on coercion or violence. This relationship is identical to a friendship or mutually beneficial relationship that is symbiotic and mutualistic (Clements, 2022).

According to Ruud (2020), PCR have characteristics such as status inequality, direct interaction, and flexibility. Status inequality shows differences in wealth and power. Direct interaction means having direct face-to-face contact without intermediaries. Flexibility shows that their relationship is not limited to work relationships only but is also related to the environment, heredity, and past relationships. Furthermore, Oh (2021) mentioned that a PCR is a reciprocal relationship between one party and another party, where a patron is a person who has the status, economy, and power to protect his client. On the other hand, clients are people who must provide benefits in the form of respect or service.

Another researcher (Bercovitch, 2020) states that the PCR among fishermen is a

phenomenon of interdependence. The patrons provide financial facilities through loans. In the social structure of fishing communities, an inherent relationship pattern was found. This relationship is based on a mutual consensus between fishermen and tauke (collectors, agents, financiers). This situation follows the findings of Hamzah et al. (2019) adding that the limited sources of capital available experienced by fishermen force them to establish relationships in patron-client institutions. This lack of capital increasingly adds to the burden and challenges as well as great competition in terms of exploiting marine resources.

In fact, the government of the Republic of Indonesia, through the Ministry of Fisheries and Maritime Affairs, has made policies and regulations to protect fishermen. This policy can be seen from a social aspect in the form of Law No. 7 of 2016 concerning Protection and Empowerment of Fishermen, Fish Farmers and Salt Farmers (The government of the Republic of Indonesia, 2016). This law aims to help fishermen in facing difficulties in carrying out their business activities. Furthermore, in Ministerial Regulation No.42/2016 concerning Work Agreements between Patrons and Clients, the government makes regulations relating to wages, profit sharing systems, health insurance and insurance, as well as policies on assistance with fishing gear for fishermen and other social security (Ministry of Fisheries and Maritime Affairs the government of the Republic of Indonesia, 2016).

3. Methods

3.1. Data collection

A number of patron and client informants was determined deliberately. The number of patron informants was set at 10 people and client informants at 50 people. A patron is someone who provides loans for resources such as money, equipment, fuel, fishing fleets and daily household necessities for fishermen. These resources can also be in the form of protection and other benefits for fishermen. Clients are people who receive loans of these resources and provide compensation such as fish caught, other personal services to patrons. Apart from that, to complete the data, data was also collected from key informants such as 2 financial institutions (banks), 2 fisheries cooperative administrators (koperasi nelayan), 2 fishermen group leaders (ketua kelompok nelayan), 2 fisheries and maritime affairs service staff (Staf Dinas Perikanan dan Kelautan), and 2 community leaders (Kepala Desa). Data from various stakeholders such as annual reports from the head of the Fisheries Service, Village heads, heads of Fishermen's Groups, and Financial Institutions. Data collection was carried out by in-depth interviews and assisted by questionnaires that had been tested previously. Patron and client data were collected in three fishing production centers in Rokan Hilir Regency, namely Panipahan District, Sinaboi District, and Bangko District. The distribution of respondents also takes into account the strata aspect of the ship sizes used, namely 2–3 GT, 4–6 GT, and 7–8 GT. To be more complete, data collection and analysis were carried out by focus group discussion with several clients and patrons who were expected to provide a more in-depth explanation.

3.2. Data analysis

Analysis of PCR patterns use qualitative methods, namely research that aims to understand the phenomena experienced by research subjects. This research uses a symbolic interactionist approach which focuses on an event that occurs between the tauke as patron and fishermen as clients. Social and economic analysis was carried out by using descriptive methods (Loeb et al., 2017).

4. Result and discussions

4.1. Capture fisheries business in Rokan Hilir regency

Bagansiapiapi City is still one of the largest fish producers on the East coast of Sumatra (Afsohinas et al., 2021). The capture fisheries business in this area is dominated by ethnic Chinese who act as patrons because they control the economic sector, especially the marketing sector. This business has been going on for quite a long time and has been carried out on a large scale in the government since the Dutch colonial era in Indonesia. After Chinese immigrants arrived from Hokkien Island in 1826, a fishing business began in connection with capitalization in the fisheries sector (Fitrisia, 2016). Currently, fishing businesses in this area continue to decline due to the level of potential utilization of fishery resources having reached 90%. This shows that the capture fisheries business in this area experienced overfishing (Arief et al., 2023; Dahlia et al., 2021; Kusai et al., 2023). According to FAO (2010), the level of potential utilization of fisheries resources experiences overfishing is more than 80%. This situation is what causes the fishing business to continue to decline. Currently, fisheries production is only 53,266.00 tons/year, but management still uses a PCR pattern. Syahputra (2018) stated that in the capture fisheries business, patrons act as providers of capital for fishermen and form PCRs.

Around 92% of capture fisheries businesses in this area are small-scale capture fisheries businesses with fleets under 10 GT (FDRHR, 2021). Based on the research results, small-scale capture fisheries business actors in this area catch for 1–3 days with details of 55% fishing for one day, 25% catching for two days, and 20% catching for three days. For fishermen who catch per day, the fishing area is 2–4 miles with a boat size of 2–3 GT and the average number of fishermen is 2 people per boat. For fishermen who fish for two days, the fishing area is 4–8 miles with a boat size of 4-6 GT and the average number of fishermen are 3 people per boat. For fishermen who fish for 3 days, the fishing area is over 8 miles with a boat size of 7–8 GT and the average number of fishermen is 5 people per boat. Based on the calculation results, for fishermen who do one day of fishing their catch is an average of 61 kg, for fishermen who catch an average of 143 kg for two days of fishing, and for three days of fishing an average of 310 kg for each fishing trip.

The fishing gear operated by fishermen is static and dynamic. Static fishing gear such as pole traps and crab poles. Dynamic fishing gear such as sondong, gillnet, longline, and trawl. Of the various fishing gear, longlines, gillnets, and trawls are the dominant fishing gear operated by fishermen (FDRHR, 2021).

4.2. PCRs in the capture fisheries business

PCRs can be viewed from various aspects. According to Firzan and Erawan (2020), PCRs can be seen from social, economic, and political aspects. Patron-client can occur due to socioeconomic factors such as good and familial relationships that have existed for generations, ease of the sales process, and personal gain (Cinar, 2016). In this research, PCR in capture fisheries businesses is only seen from social and economic aspects. It is a reciprocal relationship between two parties because the patron has social and economic advantages and other resources while the client benefits from their support and influence. It is also a relationship in which the client is socially and economically much weaker than the patron. With superior social and economic status, patrons exert influence over clients and offer socio-economic protection and assistance (Humbas et al., 2021; Roberts et al., 2022). Tauke as patron plays a role as a socio-economic institution in Rokan Hilir Regency, such as managing the production, distribution, and marketing processes of fish. Furthermore, patron also acts as a place to borrow money without collateral for various client needs. Meanwhile, fishermen as clients sell their fish only to the patron at a price determined by the patron (Hendri and Yulinda, 2021).

From the patron's point of view, the PCR has benefited them. After conducting interviews with open questions where each client could answer more than one, the following results were obtained, namely (1) 100% of respondents stated that they could borrow money without collateral. (2) As many as 70% of respondents stated that with patrons, all catches would be sold even if they were of low quality so that no fish would be wasted. (3) As many as 90% of clients stated that they received assistance for various needs and (4) Furthermore, 90% of clients stated that a PCR could create good social relations and ensure the client's living needs. According to client information, their monthly income ranges from IDR 2,900,000 to IDR 6,200,000 per month. This income depends on the catch, fishing gear, and their role in the fishing operation.

4.2.1. PCRs in social aspects

In this study, PCRs are analyzed from social aspects such as social assistance and applicable norms. According to Firzan and Erawan (2020), PCRs in the social aspect can be seen from various aspects such as social relationships in the form of voluntary compensation and social compliance. Furthermore, Humbas et al. (2021) PCRs in the social aspect are viewed from the social protection and assistance received by clients.

Social assistance in PCRs in Rokan Hilir Regency can be seen from the amount of assistance provided by patrons. On Eid day it is IDR 500,000 to IDR 2,000,000, weddings IDR 2,000,000 to IDR 5,000,000, thanksgiving and education fees IDR 500,000 to IDR 1,000,000 (processed primary data). The amount of help depends on the circumstances and the individual client. Based on the research results, it was found that the smallest social assistance in a year was IDR 3,000,000, and the largest was IDR 9,000,000. If it is related to the income received by the client, it can be said that the patron will provide a maximum average assistance in a year equal to the client's income for two months (processed primary data).

The results of interviews with patrons revealed that the size of this assistance is influenced by the amount of costs required for the activity, the length of time the client

has worked, and the amount of contribution given. The longer the work with a greater contribution, the more assistance will be provided. Lesmana et al. (2021), mentioned that the longer the work experience with good productivity, the greater the compensation received. Syahputra (2018), mentioned that the PCR is a mutually beneficial socio-economic relationship (mutualistic symbiosis) between the two parties. In a PCR, apart from social assistance, they also have norms that they obey together and are generally accepted.

Norms are rules created to create a protected, appropriate, and safe community life. Ruman (2016) stated that norms are something fundamental in various social groups, both organic and mechanical. This norm is obeyed by all people in the area. In the PCR, fishing businesses in Rokan Hilir Regency apply several norms. For example, clients must trust patrons in buying and selling activities both in setting prices and the amount of catch. Clients will obey all orders and rules given by the patron and clients rarely betray the trust given by the patron. Furthermore, in social interactions, the patron will maintain the client's good name and vice versa.

4.2.2. PCR in the economic aspect

In this research, the PCR in the economic aspect is seen from various forms of loans served by patrons to clients. The PCR in the economic aspect is seen from the work system between patrons and clients as well as the pricing system (Rusydi, 2016). Humbas et al. (2021) mentioned that the PCR carries out personal economic activities such as the patron will help the client if they experience financial difficulties in the form of a loan.

Loans are the provision of money by patrons to clients which is used for fishing operational costs and other needs. The client is obliged to pay this loan at a certain time based on their agreement. This loan is made without making a written agreement or receipt, it is mutually trusting, usually, this loan is only recorded by the patron in a book. Based on research results, the types of loans in Rokan Hilir Regency are loans for fishing operational costs, fleet repairs, purchasing fishing equipment, and other needs. The form of loan given depends on various factors, one of which is based on the pattern of PCRs.

In the first relationship pattern, the loan is used for the needs of the client and his family. This loan is made if the client does not fish or does fishing but the results are below what is needed. The clients mentioned that the minimum loan they receive can cover their living needs for a week with an amount ranging from IDR 100,000 to IDR 750,000. This loan will be paid after selling the catch to patrons (processed primary data). The maximum loan repayment period is 3 months. Other loans are for operational costs. This loan is used to purchase fuel, consumption, and cigarettes. The size of this loan depends on the length of the fishing operation and the number of fishermen. This loan is paid directly after selling the catch. If the catch is less than operational costs, then this loan is paid during the next fishing operation.

In the second relationship pattern, there are four types of loans, namely the type of loan for operational costs of the same size as the first pattern. The next loan is for fleet repairs. The amount of this loan depends on the damage to the fleet, ranging from IDR 1,000,000 to IDR 10,000,000. Apart from that, loans for repairs and purchasing fishing equipment amount to IDR 1,000,000 to IDR 5,000,000. The maximum

repayment period is 1 year. Other loans for family needs when fishing is not carried out or the catch is insufficient. The loan amount is between IDR 100,000 to IDR 750,000. Loan payments are made in stages within a month at most (processed primary data).

In the third relationship pattern in the fishing business, clients did not borrow money from patrons. Clients will make incidental loans, for example for fleet repairs and fishing equipment or other purposes of IDR 500,000 to IDR 3,000,000 (processed primary data). This loan is smaller than the first and second patterns because the fleet and fishing gear are smaller, namely 2–3 GT. Likewise, with the catch, one-day fishing fishermen have fewer catches compared to others. According to Kucharska-Stasiak (2023), loans provided follow the value of the available collateral.

This is in line with the social exchange theory by Blau (2017) and Zamzami and Effendi (2023) which states that every human behavior is based on a balance of intrinsic (social) and extrinsic (economic) costs and rewards. The right to subsistence for clients becomes the legitimacy of the relationship between patron and client. The right to subsistence for patrons constitutes the legitimacy to levy relatively large levies during surpluses and small levies during times of famine. A large levy can also be levied which always changes according to the client's level of ability, as long as it does not exceed the client's subsistence threshold. Thus, the level of exploitation is not only how much of a share the patron takes, but also what effect the levy has on the basic elements of the client's life.

4.3. Profit sharing system between patrons and clients

In implementing the capture fisheries business in Rokan Hilir Regency, the system uses a profit-sharing pattern. According to patrons, they prefer to use this system because it is considered fairer, where when there is a large catch, clients will also get a lot of income and vice versa. This system has been going on for a very long time and has not changed until now. This profit-sharing system is based on trust without a written agreement. The profit-sharing system only applies to the first relationship pattern. The profit-sharing system in the first relationship pattern is carried out by dividing sales proceeds 50% for patrons and 50% for clients and operational costs are shared. Profit sharing for clients in line with their duties and experience in fishing operations. Usually, fishermen with longer experience acting as leaders and guides and knowing the direction of where the fish gather will get a higher percentage compared to other fishermen. If the catch is less than operational costs, the losses incurred are shared by the patron and client.

Indonesian Government Regulation Number 27/2021 concerning the implementation of fisheries and aquaculture, explains that for fishing businesses, the client gets 40% and the patron 60%, and only the operational costs of fishing are borne by the patron (GRRI, 2021). Based on this, it can be said that the profit-sharing system in this area does not harm clients because the calculations are almost the same as the profit-sharing regulations set by the government. According to Rusydi et al. (2016), the usual relationship is that the patron provides operational costs, fleet, and fishing equipment to the client who then carries out fishing activities. The profit-sharing system for each region has its distribution based on the agreement. This agreement

was made with mutual trust and there was no written agreement. Sinaga et al. (2015) and Syahrizal (2019) stated that the profit-sharing system implemented by fishermen does not have a written agreement but has become a tradition from their ancestors following the credit management of tauke.

The tauke’s credit management which applies fluctuating deductions is the tauke’s effort not to exceed fishermen’s subsistence limits. This can be understood by using a risk distribution theory approach. The choice made by fishermen in choosing tauke as their patron will depend greatly on the model of cooperation and profit sharing that can guarantee the fulfillment of their basic needs throughout the year. Kostadinova and Lazarova (2021), Ruud (2020) and Oh (2021) argue that societies with subsistence characteristics and large income fluctuations will tend to maintain the first relationship pattern even though there are choices for the second and third relationship patterns. The choice patterns and values that fishermen base on are subsistence risks and long-term life security. The potential profits that may be received at the expense of guaranteed subsistence are seen as a dangerous gamble.

4.4. The nature of the PCR

Table 1. The average price of fish at patron level in Rokan Hilir Regency.

No.	Species of fish	Price (IDR)		Price gap (%)
		Buy	Sell	
1.	Goulash fish (<i>Johnius carona</i>)	10,000	14,000	40
2.	Sagor catfish (<i>Hexanemachthys sagor</i>)	8,000	11,000	37.5
3.	Shrimp (<i>Caridea</i>)	17,000	23,000	35.3
4.	Fourfinger threadfin (<i>Eleutheronema tetradactylum</i>)	45,000	55,000	22.2
5.	White-eel Tailed Catfish (<i>Plotosus canius</i>)	25,000	30,000	20
6.	Pomfret fish (<i>Bramidae</i>)	30,000	36,000	20
7.	Mullet (<i>Crenimugil seheli</i>)	11,000	15,000	36.3
8.	Sole (<i>Pleuronectiformes</i>)	40,000	50,000	25
9.	Stingray (<i>Batoidea</i>)	28,000	35,000	25
	Average	23,778	29,889	25.7

Source: Processed primary data.

PCRs can be symmetrical or asymmetrical. Symmetrical nature means that the relationship between the two is balanced and no one dominates one over the other. On the other hand, asymmetrical nature means an unbalanced relationship, where one dominates the other. The nature of this relationship in the pattern of PCRs in Rokan Hilir Regency can be seen from two aspects, namely determining the price of fish and the profits obtained. In buying and selling law, determining the price of fish should be an agreement between the patron and client. It’s just that in this research area the price of fish is determined entirely by patrons. According to Hendri and Yulinda (2021), client fishermen in this area do not know the price of fish on the market. The price of fish is completely determined by the patron. Therefore, in terms of determining fish prices, the PCR in this research location is asymmetrical. Patrons buy fishermen’s catches according to the species and quality of fish and sell them to wholesalers,

retailers, and exporters. For more details, the prices of the dominant fish caught are presented in **Table 1**.

Each patron buys fish at a different price from one another. For example, for the goulash fish, several patrons buy it for between IDR 9000 and IDR 11,000 with an average of IDR 10,000. According to the patron's statement, this is influenced by the form of the PCR pattern. Where the patron provides the fleet, fishing equipment, and operational costs, the price of the fish is cheaper than the patron who only buys the fish. Furthermore, from the clients' information, they never haggle about the agreed price and it is entirely the right of the patron. Furthermore, it is explained that this situation has been going on from the past until now. Clients never think that they feel they are losing or benefiting from this relationship pattern that they are doing.

The profit obtained by patrons is the difference between the selling and purchasing prices by patrons. Based on **Table 1**, it is known that each patron makes a profit of 20% to 40% with an average profit of 25%. The size of this profit is influenced by various factors, one of which is the risk factor. According to Rachmawati and Ghani (2020), the greater the risk is borne, the greater the level of profit. Suprayitno (2020), explained that fish is a product that is easily damaged. This means that the risk of decreasing quality and price is high. This is the reason why patrons make bigger profits from the fish trading business in Rokan Hilir Regency. Lubis et al. (2012) stated that at the Nusantara Pelabuhanratu Fishing Port, West Java Province, patrons took profits of between 12% and 14%, much lower than the profits taken by patrons at the research location. This shows that the PCR in taking profits is asymmetric compared to the Pelabuhanratu Archipelago Fishing Port.

4.5. Changes in PCR patterns

Changes in PCRs occur as a result of ecological and demographic factors, which change people's lives from traditional conditions bound by mechanistic solidarity to conditions of modern society bound by organic solidarity. A change is said to have a major impact if the change results in changes to social structures, work relationships, livelihood systems, and community stratification (Santosa et al., 2020; Ullah et al., 2023). The pattern of PCRs in capture fisheries businesses in Rokan Hilir Regency is more influenced by work relationship factors and livelihood systems. In general, this factor can be said to be a social and economic factor. The work relationship factor between patron and client has not changed from the past until now, while the livelihood system factor in the fishing business has experienced a change in the pattern of PCRs.

In general, the pattern of PCRs in this area can be grouped into three patterns. The first relationship pattern is that the patron is the owner of the fleet, and fishing gear, and bears operational costs for fishing. Based on this, in this first pattern, all responsibility and risk in fishing is borne by the patron. However, 50% of operational costs will be the client's responsibility. Apart from that, patrons also buy all the fish they catch.

The second relationship pattern is that the patron lends operational costs for fishing, lends money to repair the fleet and fishing gear, and buys fish catches, while the client is the owner of the fleet and fishing gear. According to the patron's statement,

in this second pattern, it can be said that only around 50% of the responsibility and risk is borne by the patron and the rest is borne by the client. The third relationship pattern is that the patron only buys the catch, while the client owns the fleet, and fishing gear and bears operational costs. Based on this, in this third relationship pattern, responsibility and risk are fully borne by the client.

Based on the research results, it is known that the pattern of PCRs from the past until now has not changed. The only changes that occur are in the responsibilities and risks between patron and client. At this time, more responsibility and risk are borne by the client. However, this relationship pattern is still mutually beneficial like symbiotic mutualism. Based on the patron information, in the 1990s almost all of them used the first pattern, while the second and third patterns were relatively small. However, the percentage pattern of PCRs has changed. Currently, the first relationship pattern is only 15% remaining, whereas the second and third relationship patterns continue to increase. For more details, changes in patterns of PCRs can be seen in **Table 2**.

Table 2. Changes in responsibilities and risks in patron and client relationship patterns 1990–2022.

Patterns	Year			
	1990	2000	2010	2022
Pattern 1	75%	70%	50%	15%
Pattern 2	15%	20%	25%	40%
Pattern 3	10%	10%	25%	45%

Source: Processed primary data.

From **Table 2**, it can be seen that there have been changes in the responsibilities and risks between patrons and clients from 1990–2022. In 1990, in the first relationship pattern, the patron’s responsibility and risk was 75% and has now decreased to 15%. In 1990, in the second relationship pattern, responsibility and risk were shared, increasing from 15% to 40%. In 1990 in the third relationship pattern, client responsibility and risk increased from 10% to 45%. As explained previously, the first relationship pattern is 100% responsibility and risk borne by the patron. In the second relationship pattern, responsibility and risk are shared and in the third relationship pattern, responsibility and risk are borne by the client.

The change in responsibilities and risks in this relationship pattern is due to changes and a decline in capture fisheries as the main livelihood of the population in this area. Where before 1990 the results of capture fisheries were still very profitable. According to patrons, before the 1990s their average income per fishing trip ranged between 5–11 times operational costs with an average income of 8 times operational costs. At this time, their average income ranges between 2–5 times operational costs with average income being 3 times operational costs (processed primary data).

From patron information, this decrease in income was due to the reduction in catches per unit of fishing gear (catch per unit effort). In addition, the operational costs of fishing are greater at this time. This is because the distance from the fishing base to the fishing ground is getting farther, so it requires higher operational costs. According to Arief et al. (2023), the value of catch per unit of fishing gear (CPUE) in the waters of Rokan Hilir Regency from 2011 to 2020 decreased by 8.27%. This decline was

caused by the level of utilization of fish resources experiencing overfishing (excessive fishing). A decrease in CPUE values can also indicate that fishing operations are becoming less efficient. This inefficiency occurs because the catch obtained is getting smaller with the use of a greater amount of effort.

Information from patrons revealed that the change in responsibility and risk in this relationship pattern is due to the decreasing catch, while the fishing effort is uncertain. Based on this, the patron transfers the risk and responsibility to the client. This situation has resulted in changes in responsibilities and risks between patrons and clients in capturing fisheries businesses in this area. This responsibility and risk of loss are handed over to the client in the form of a second and third relationship pattern. According to clients, with the second and third relationship patterns their income becomes greater and their motivation to fish becomes higher. In this relationship pattern, greater responsibility is on the client's side because besides catching fish, they also think about the fleet, fishing gear, and the sustainability of their business. However, the risk accepted by clients is also greater because the fishing business is uncertain.

Fitriyana et al. (2023) stated that the higher a person's responsibility for their work, the higher their motivation at work will be and increase their income. Payne et al. (2017) and Batjargal and Zhang (2021) mentioned that the higher the level of risk that will be faced, the higher the level of income or profit expected by farmers. Ruud (2020) and Oh (2021) stated that informal financial institutions such as tauke who act as patrons usually grow well in the conditions of a society whose economy is subsistence. Likewise, the situation in Rokan Hilir Regency, where formal economic institutions have not been able to serve the community and fishermen optimally. So informal institutions such as patrons play a big role in the capture fisheries business in Rokan Hilir Regency. In the past, patrons were called middlemen, loan sharks, and other negative connotations. However, as time changes, their role also changes. The relationship between equality and proportional profit sharing can be developed as a policy model. The openness of information and improving the managerial skills of fishermen is the way to this goal.

5. Conclusion

The PCR from a social aspect can be seen from the various social assistance provided by the patron to the client. From an economic aspect can be seen from the various forms of loans provided by patrons to clients. The nature of the PCR is determined by the profits obtained by the patron and client. It can be said that the pattern of PCRs is asymmetrical. The pattern of PCRs is grouped into three patterns. In the first pattern, the patron is the owner of the fleet, the fishing gear and operational costs, responsibility, and risks are all borne by the patron. In the second pattern, the patron only lends for operational costs of fishing and fishing gear repairs, while the client, as the owner of the fleet and fishing gear, shares the responsibility and risks. In the third pattern, where the patron is only the buyer of the catch, while the client is the owner of the fleet, fishing equipment, and operational costs, all responsibility and risk are borne by the client. PCRs have played a special role in the economic development of a region, even though the negative image is highlighted more. However, as times

change, this research shows that this relationship is changing towards equality and a more proportional distribution of benefits. Therefore, a more comprehensive policy study is needed in such a way as a potential for local and regional development. It is believed that the strategy will become a policy model for the future.

Author contributions: Conceptualization, HH, ZZ; methodology, HH, ZZ, IE (Irwan Effendi) and CY; software, AM, IE (Izzatulmilla Effendi); validation, CY; formal analysis, HH, IE (Irwan Effendi) and IE (Izzatulmilla Effendi); investigation, AM, ZZ, and IE (Izzatulmilla Effendi); resources, HH and IE (Irwan Effendi); data curation, CY and AM; writing—original draft preparation, HH and IE (Irwan Effendi); writing—review and editing, HH and IE (Irwan Effendi); visualization, CY and AM; supervision, HH; project administration, CY; funding acquisition, HH. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

- Adisel, A., Suryati, S., & Riswanto, R. (2023). Portraying Patron-client in Fishermen Work Relationships: A Phenomenon from Bengkulu, Indonesia. *JSW (Jurnal Sosiologi Walisongo)*, 7(1), 25–36. <https://doi.org/10.21580/jsw.2023.7.1.10852>
- Afsohinas, C., Cheris, R., Masrul, W. (2021). Arrangement of Bagansiapiapi Fishing Port. *Journal of Architecture: Malay Architecture and the Environment*, 8(1), 42–46.
- Aida, K. N., Agustang, A., Arlin, A., et al. (2020). The patron-client relationship patterns in Siwa Lima fishermen community, Aru Islands District Maluku, Indonesia. *International Journal of Scientific and Technology Research*, 9(2), 74–77.
- Arief, H., Feliatra, F., Darwis, Dewi, N. (2023). Bioeconomic study and optimal use of the four-finger threadfin (*Eleutheronema tetradactylum*) resource in Rokan Hilir Regency, Riau Province, Indonesia. *Aquaculture, Aquarium, Conservation Legislation Bioflux*, 16(1), 282–290.
- Batjargal, T., & Zhang, M. (2021). Review of key challenges in public-private partnership implementation. *Journal of Infrastructure, Policy and Development*, 5(2), 1378. <https://doi.org/10.24294/jipd.v5i2.1378>
- Bercovitch, J. (2020). Superpowers and client states. *Superpowers and Client States in the Middle East*, 9–32. <https://doi.org/10.4324/9780367351526-3>
- Blau, P. M. (2017). *Exchange and Power in Social Life*. Routledge. <https://doi.org/10.4324/9780203792643>
- Cinar, K. (2016). A comparative analysis of clientelism in Greece, Spain, and Turkey: the rural–urban divide. *Contemporary Politics*, 22(1), 77–94. <https://doi.org/10.1080/13569775.2015.1112952>
- Clements, F. W. (2022). Refining a Shugenja Elite. *Journal of Religion in Japan*, 11(3), 236–267. <https://doi.org/10.1163/22118349-tat00004>
- Dahlia, D., Effendi, I., Elizal, E., et al. (2021). Profile and Prospects of Fish Processing in Rokan Hilir Regency. *IOP Conference Series: Earth and Environmental Science*, 934(1), 012093. <https://doi.org/10.1088/1755-1315/934/1/012093>
- Firzan, M., & Erawan, E. (2020). Patron-Client Relationship in Fisherman Community in Tanjung Limau Village, Kelurahan Gunung Elai Kecamatan Bontang Utara, Bontang City. *Progress In Social Development*, 1(2), 16–22. <https://doi.org/10.30872/psd.v1i2.20>
- FAO (Food and Agricultural Organization). (2010). *Code of Responsible Fisheries (Reprinted)*. Food and Agricultural Organization of The United Nations.
- FDRHR (Fisheries Department of Rokan Hilir Regency). (2021). *Annual Report. Department of Fisheries and Maritime Affairs of Rokan Hilir Regency*.
- Fitriyana, A., Prahiawan, W., & Kambara, R. (2023). Influence of Organizational Culture and Intrinsic Motivation on Employee Performance Through Organizational Commitment as an Intervening Variable. *Management Science Research Journal*, 2(1), 46–63. <https://doi.org/10.56548/msr.v2i1.42>

- Firman, F., Susilo, E., Hidayat, K., et al. (2020). Social Resilience Assessment of Fisherman's Flying Fish Communities in the COVID 19 Pandemic Time in Takalar District. In: Proceedings of the 1st International Conference on Fisheries and Marine Research (ICoFMR 2020).
- Fitrisia, A. (2016). Chinese immigrants in Bagan Siapi-api: Indonesian National Conflicts and Problems from the Colonial Era to Post-Independence. In: Proceedings of the National Seminar on 71 Years of Indonesian Independence. Andalas University. GRRRI (Government Regulations of The Republic of Indonesia). (2021). Government Regulations of The Republic of Indonesia Number 27/2021 on Implementation of The Marine and Fisheries Field. Government Regulations of The Republic of Indonesia.
- Hamzah, A., Batoa, A., Gafaruddin, A., et al. (2019). Dynamics of Institutional Patron-Client of Fishing Community. *Global Journal of Engineering Science and Researches*, 6(1), 145–153.
- Hendri, R., & Yulinda, E. (2021). The Role of Communication as Mediator of the Commitment Effect on the Marine Fish Supply Chain Performance at Bangliu in Bagansiapiapi Riau, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 934(1), 012034. <https://doi.org/10.1088/1755-1315/934/1/012034>
- Humbas, J. G., Massie, J. D. D., Wangke, S. J. C. (2021). A Study of patron-client relationship between fisherman and supplier in Kema. *Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(3), 401–410.
- Jiang, J. (2018). Making Bureaucracy Work: Patronage Networks, Performance Incentives, and Economic Development in China. *American Journal of Political Science*, 62(4), 982–999. Portico. <https://doi.org/10.1111/ajps.12394>
- Kostadinova, K. Y., & Lazarova, M. D. (2021). Counting Distributions In Risk Theory. *Annals of the Academy of Romanian Scientists Series on Mathematics and Its Application*, 13(1–2), 20–44. <https://doi.org/10.56082/annalsarscimath.2022.1-2.20>
- Kucharska-Stasiak, E. (2023). Long-term value versus market value as a basis for securing receivables in the banking sector. *Bank i Kredyt*, 54(1), 1–24.
- Kusai, K., Warningsih, T., Zulkarnain, Z., et al. (2023). Welfare Level of Fishermen's Senangin (*Eleutheronema tetradactylum*) With Gill Net Catching Tools in Sinaboi District, Rokan Hilir Regency, Riau Province. *Economic and Social of Fisheries and Marine Journal*, 010(02), 185–193. <https://doi.org/10.21776/ub.ecsofim.2023.010.02.05>
- Lesmana, M. T., Arif, M., & Barus, M. I. (2021). The effect of compensation, work environment and work discipline on employee performance. *International Journal of Economic, Technology and Social Sciences (Injects)*, 2(1), 312–324. <https://doi.org/10.53695/injects.v2i1.393>
- Loeb, S., Dynarski, S., McFarland, D., et al. (2017). Descriptive analysis in education: A guide for researchers. US Department of Education, Institute of Education Sciences (Indonesian). Pusat Evaluasi Pendidikan dan Pendampingan Daerah Nasional.
- Lubis, E., Pane, A. B., Muningsar, R., et al. (2012). The amount of losses for fishermen in marketing their catch: The case of the Pelabuhanratu Archipelago Fishing Port. *Maspari Journal*, 4(2), 159–167.
- Ministry of Fisheries and Maritime Affairs the government of the Republic of Indonesia. (2016). Regulation of Minister of Maritime Affairs and Fisheries No. 42 of 2016 concerning Work Agreements between Patrons and Clients, the government makes regulations relating to wages, profit sharing systems, health insurance and insurance. Ministry of Fisheries and Maritime Affairs the government of the Republic of Indonesia.
- Muhamad, H., Saleh, M., Mascunra, A. (2023). Patron-Client and Lindu Lake Tourism Development (The integration approach of ecological-based residential space). *Jurnal Penelitian Pendidikan Indonesia*, 9(3). <https://doi.org/10.29210/020232202>
- Oh, R. (2021). The Patron-Client Relationship. In: Church Planting in Patronage Cultures. Fortress Press.
- Pasaribu, E., Sardiyatmo, M., Hapsari, T. D. (2014). Analysis of the Factors Affecting the Price of Flying Fish (*Decapterus russelli*) at the Archipelago Fishing Port (PPN) Brondong Lamongan, East Java Analysis. *Journal of Fisheries Resources Utilization Management and Technology*, 3(2), 54–61.
- Payne, B. K., Brown-Iannuzzi, J. L., & Hannay, J. W. (2017). Economic inequality increases risk taking. *Proceedings of the National Academy of Sciences*, 114(18), 4643–4648. <https://doi.org/10.1073/pnas.1616453114>
- Rachmawati, E. N., Ghani, M. (2020). The Relationship between profit and risk in the perspective of Fiqh application in Islamic financial institutions. *Journal of Tabarru': Islamic Banking and Finance*, 3(2), 95–107.
- Roberts, N., Mengge, B., Utina, Muh. R., et al. (2022). Patron-client relationships shape value chains in an Indonesian island-based fisheries system. *Marine Policy*, 143, 105142. <https://doi.org/10.1016/j.marpol.2022.105142>
- Ruman, Y. S. (2016). Social order, norms and laws: a sociological explanation. *Prior'S Law*, 2(1), 1–16.
- Rusydi, B. U., Wahyudi, U. M. (2016). Patron-Client Relations in fishermen communities in the framework of Islamic economics. *Al-Amwal: Journal of Islamic Economic Law*, 6(1), 27–44.

- Ruud, A. E. (2020). Themohol: The hidden power structure of Bangladesh local politics. *Contributions to Indian Sociology*, 54(2), 173–192. <https://doi.org/10.1177/0069966720914055>
- Santosa, I., Muslihudin, Adawiyah, W. R. (2020). Changes in reciprocity: From patron-client relationships to commercial transactions in rural Central Java. *International Journal of Innovation, Creativity and Change*, 14(4), 846–858.
- Sinaga, H., Widiono, S., Irnad. (2015). Pattern of patron-client relationship in fishermen community in Malabro Village, Teluk Segara District, Bengkulu City. *Agrisep*, 15(2), 167–176.
- Suprayitno, E. (2020). Study of fish freshness in traditional and modern markets in Malang City. *Journal of Fisheries and Marine Research*, 4(2): 289–295.
- Syahputra, I. (2018). Patron-client relationship patterns of traditional fishermen in Kuala Lama Village, Pantai Cermin District, Serdang Bedagai Regency. *Journal of Sumatran Anthropology*, 16(1), 28–35.
- Syahrizal, S. (2019). Fishermen and inequality: Study about profit sharing system in fisherman society. In: *Proceedings of the first International Conference on Social Sciences, Humanities, Economics and Law*.
- The government of the Republic of Indonesia. (2016). Law of the Republic of Indonesia No. 7 of 2016 concerning Protection and Empowerment of Fishermen, Fish Farmers and Salt Farmers. The government of the Republic of Indonesia.
- Ullah, S., Khan, U., Ma, J., et al. (2023). Reflections on development and fishermen's survival in Gwadar, Pakistan. *Journal of Infrastructure, Policy and Development*, 7(2), 1957. <https://doi.org/10.24294/jipd.v7i2.1957>
- Wahyudi, A., & Sutisna, D. (2021). Analysis of Small Scale Capture Fisheries at TPI Pasir Case Study: Fishermen KUB Mina Jaya (Indonesian). *Jurnal Penyuluhan Perikanan Dan Kelautan*, 15(1), 85–100. <https://doi.org/10.33378/jppik.v15i1.246>
- Zamzami, L., & Effendi, N. (2023). Cultural and entrepreneurial attitudes of fishermen involved in the production of fishery products in West Sumatra, Indonesia: Implications for marine resource conservation areas in village development. *Journal of Infrastructure, Policy and Development*, 7(3). <https://doi.org/10.24294/jipd.v7i3.2629>