DIALECTICAL NETWORK OF MARITIME DEVELOPMENT POLICIES IN THE FISHERIES SECTOR AT NATUNA, INDONESIAN BORDER

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Abstract

The purpose of this article is to elaborate the dialitical role applied in the policy network in the development of fisheries sector maritime. The study method will be described with qualitative while the case study approach will be explained descriptively. In every explanation about the result of policy in dealitical network will be based on critic of the actual approach and emphasize that the connection of network and result will not be as simple as imagined. It will be described clearly dealitical actor in the implementation of policy has three interactive connection or dealitical which involved between: connection structure and working agent inside it; connection and context which it applied; and connection to policy result. In the case of Implementation of Policy in Integrated Marine and Fisheries Center in Natuna, Indonesian Border, there are several outcome weaknesses resulted from the dealitical connection. Among them; weak local government political power, lack of coordination and collaboration, strong private patron client, and limited regional authority which is limited by the regulation itself.

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1. Introduction

Marine development policy in the fisheries sector is a policy framework that has been progressively modified in recent years and there has been no more significant change than the emergence of the concept of fisheries responsibility written in many international and regional fisheries instruments. As an archipelago country, Indonesia is benefited from its position which located in the intersection of two continents-Asia and Australia-and two oceans-the Indian Ocean and the Pacific Ocean. After the United Nations Convention on the Law of the Sea is applied in 1982, Indonesia had area expansion on November 16th, 1994, which became 8.193.163 km2, consisting of 2.027.087 km2 land and 6.166.163 km2 sea. Indonesian sea area consists of 0,3 million km2 territorial sea, 2,8 million km2 Archipelago Sea, and 2,7 million km2 ZEE (Nurdin et al., 2018).

Bearing in mind that maritime and sea is the direction of Indonesia's future development, it is necessary to study the development of Indonesia as a maritime and sea country as the basis for development policy. In a study conducted by Darmawan on Bibliometric Analysis of Fisheries Policy Articles In The Journal Scopus Written By Authors From Affiliates of The 10 Best Universities In Indonesia found that there were 88 articles from Indonesia based on fisheries policy keywords published from 2010 to 2021 with affiliates from 10 the best university in Indonesia. The findings show that from the affiliations of universities that are in the best category, there is the University of Indonesia as a university with a high level of productivity in publishing fisheries policies in

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Scopus publications. The highest rating is based on the number of published articles and high citations. In conclusion, Indonesia with a country that has vast seas or it can be said as a calm maritime country is unproductive in discussing fisheries policy in the international world (Darmawan et al., 2022).

To support the framework of maritime development, involve the support of the stakeholders which can be from the government or the public. The president of Indonesian Republic, Joko Widodo said that the big concept of maritime development which identified with Indonesia as Poros Maritim Dunia (PMD, World Maritime Central) and focused on 5 main pillar (Yani & Montratama, 2018) which are: (1) Maritime culture: rebuilding Indonesian Maritime Culture by redefinition of Indonesian National Identity as a maritime country. (2) Maritime economy: Managing and conserving nation's maritime resources. (3) Maritime connectivity: Prioritazing maritime infrastructures, facilities, transportation, and tourism development. (4) Maritime diplomacy: Optimizing soft power in handling regional threat and enhancement of bilateral and multilateral maritime cooperation. (5) Maritime security: Preparing hard power to strengthen the Indonesian Maritime Defense for Indonesian territory protection.

Indonesia's sea resource potential has 4 strategical meaning: (1) as a provider of natural resources and livelihoods; (2) as a unifying aspect to society; (3) as a defense medium; and (4) as a connecting medium. As we know, two thirds of trade traffic occur at sea (Nurdin et al., 2018). Therefore, the sea plays major role to maintain world's economic continuity. With this great potential, hence the maritime development policy in fisheries sector is a policy framework that needs attention from many perspectives and the actors that play roles in it. This condition proves that the public policy is not explained by one or two main actors, but as a result in actors' connection which many actors interrelated in a policy systematically (de Bruijn & ten Heuvelhof, 2004; Kenis & Schneider, 1991; Rhodes & Mars, 1992). Connection structure between the actors in this connection affects the interaction between them. For example, actor with a central position in the connection may affect the

decision-making process more than the actor in the connection's margin. Actors' behavior in the connection is ruled by a formal rules and informations which limit and shape the structure with many possibilities on the process (Ostrom, 1994; Scharpf, 1997).

Like positivists who try to explain, but unlike positivists, Masrh & Smith believe that some relationships between social phenomena are not directly observable, for example, relationships between networks and outcomes are mediated by actors' understanding of them. When realists talk about explanations, however, they will appeal to ideas different from those used by positivists. For a realist, not every relationship between variables can be observed directly; one cannot simply generate hypotheses from theories which are then tested. However, realists argue that one can support the view that these unobservable relationships do exist (Marsh & Smith, 2000).

Hence, based of this thought, Marsh & Smith introduced the dialectical model as an analysis of policy networks in discussing the policy implementation process and the results or performance impacts of the policy (policy outcome) as a supportive feedback for changing a policy. Dialectic Model Policy Network Implementation is seen from: 1. Structure and agency; 2. Networks and contexts; and 3. Networks and outcomes (Marsh & Smith, 2000).

This study aims to identify the dialectical policy network in the marine sector in Natuna, the Indonesian border. This network dialectic will describe the realist conditions between actors in the policy network in shaping the structure and carrying out the policy context as well as the influence of the network that is at the margins of the policy arena so as to provide outcomes on the implementation of the policy. Therefore, this study will look at the dialectical process between the policy network relations, namely in the maritime development of the fisheries sector with a study on the implementation of the Minister of Marine Affairs and Fisheries Regulation No. 48 of 2015 about Pedoman Umum Pembangunan Sentra Kelautan dan Perikanan Terpadu (SKPT) in the small islands and border area in Natuna, Kepulauan Riau.

Implementation of the Integrated Marine and Fisheries Center policy in Natuna, the

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Indonesian Border, there are several weaknesses in the policy outcomes resulting from the dialectic of the network. Among them; weak political power of local government, lack of coordination and collaboration, strong private patron client and foreign actors and furthermore limited regional authority which is limited by the regulation itself (Darmawan et al., 2023).

2. Methods

The method used is a qualitative research method with a case study approach with descriptive analysis. Sources of data obtained are divided into primary and secondary data. The qualitative approach is used by using the case study method to look at the problem as a whole (holistic), linking each functional variable and understanding its nature. Primary data is the type of data obtained directly from sources used as research informants. Secondary data is data collected from library information, such as textbooks, journals, research results, reports, and other documents. The source of information in this study was to determine purposively competent informants. The informants in this study were the head of the Natuna Integrated Marine and Fisheries Center, the Head of the Natuna Marine and Fisheries Service, the Natuna Harbormaster, the Head of the Natuna Fisherman Alliance, director of Indonesian fishery company (Perum.Perindo) and the Natuna Fisheries Entrepreneur. Data collection techniques used are literature study, observation and interviews. And the data analysis technique uses three components of analysis, namely data reduction, data presentation and conclusion drawing.

3. Results and Discussion

Over dacades, the study of policy networks has penetrated to other disciplines including organizational studies, sociology, international relations, governance, and politics (Dowding, 1995; Milward & Provan, 1998; Rhodes, 1997). In several England schools of political science, the policy network approach has been characterized by an emphasis on stability and resilience in policy making. However, nowadays the Anglo-network literature has developed, which according to Dowding is that policy network analysis is the dominant paradigm for the study of the policy-making process, especially in political science in England (Dowding, 1995).

The concept of networking in the study of public policy first emerged in the mid-1970s and early 1980s. This discussion began with policy networks with various approaches, one of which discussed how to solve capacity problems at government levels (Hanf & Scharpf, 1978). Then, the policy process, both formulation and implementation of policies is the result of the inevitable interaction between a plurality of actors with different interests, goals and strategies in an inter-organizational network where a particular public affair/problem is intervened (Kickert et al., 1997). This network theory makes an important contribution to thinking about network operations descriptively and tends to overemphasize governance and structural considerations at the expense of building a predictive capacity for comprehensive network establishment, operation, and effectiveness as suggested (Zubaidah et al., 2023).

In this case, the actors can be classified in a grouping and have reciprocal relationships and form a dialectical policy network, namely, state actors in this case the government (public organizations), society actors are usually interest groups, parties, social groups, then private actors, namely actors which engaged in the business world (private organizations) and other entities in the community as well as the citizens of the community itself (Thissen & Walker, 2013). The reciprocal or dialectical relationship in this policy network can be described in the following figure:
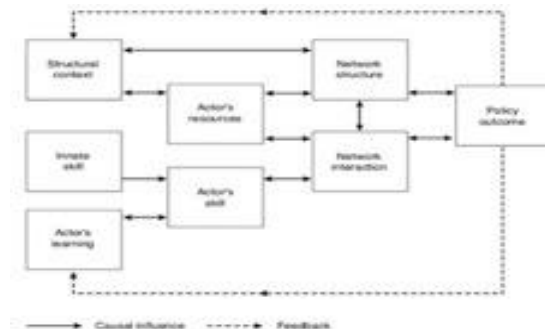
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Figure 1. Policy Networks and Policy Outcome: A Dialectical Approach

Source: (Marsh & Smith, 2000)

Network interactions and bargaining reflect a combination of actor resources and skills, network structure, and policy interactions.

The network structure reflects the structural context, actor resources, network interactions and policy outcomes.

Policy outcomes reflect the interaction between network structure and network interactions.

Almost every relationship is interactive or dialectical. It is reflected in the fact that the arrow is bidirectional. In this case, it will show the pattern of actor relations in implementing the policy to form a network pattern to survive its implementation and remain community oriented. In policy analysis, the relationship built between organized interests and the state can be defined as a policy network. Such networks develop, as actors in certain policy areas depend on one another's resources.

Network In Policy Implementation

The network in policy implementation will see how the government ensures the policy implementation process and makes implementation results consistent with the initial policy objectives and in the decision-making stage will be an important problem if the network in the implementation is not built. There are two approaches that researchers have used to interpret the implementation process, the "top-down" (Pressman & Wildavsky, 1984, 1965; Van Meter & Van Horn, 1975) and the 'bottom-up' approach (Elmore, 1979; Hjern & Hull, 1982). The top-down approach sets the conditions for successful implementation and achievement of policy objectives. For example, to suggest that

policies to some extent fail under government, it can be seen that they ignore managerial conditions for successful implementation and are too attached to 'top-down' conditions (Marsh, D & Rhods, 1992).

In certain cases, a 'top-down' approach may be inappropriate because the main actors making policy may be too dominant operating at the implementation level, meaning that the policy is too dominated by the central government (Cairney, 1999). In this case, the 'bottom-up' approach is considered to be able to see the complexity of the implementation process from its roots and argues that: 'top-down' models may not be suitable for use in situations where there is no dominant policy or institution, but many governments and actors, then none of them should outperform (Sabatier, 1986). There are also those who argue that interest networks will emerge in the policy sector, which means organizational complexities that are connected to each other by resource dependence and distinguished from other groups or complexes in the structure of resource dependence (Parson, 1995). In this case of fisheries policy, the 'top-down' approach that makes policies look too dominant operates at the implementation level, in the sense that the policy is too dominated by the central government and hinders the role of structures at the district and city levels to elaborate innovations from policies to make them more adaptive. This requires inclusive development in the fisheries sector. Inclusive development is a cross-sectoral issue that must be understood by all local government officials and integrated into written documents of each institution. This can explain why the achievement of increasing economic growth cannot be accompanied by income distribution and cannot optimally answer strategic

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development issues (Widianingsih & Paskarina, 2019).

Structure and Actor in Policy Network

There are several dialectical relationships between structures and actors in determining policy outcomes (Marsh & Smith, 2000). This can be analyzed by looking at several components, namely:

Networks are actors/agents

Two important things to note are first, the structure that limits and facilitates the agent. Second, the network culture acts as a constraint and/or opportunity for its members. In both conditions the policy network is a structure that will define the roles for actors to discuss the issues and how these agents or actors solve it, how the rules apply and how to organize themselves to maintain the network between them.

Looking at what is happening in Indonesia, the structure formed by input from a centralized policy makes it incompatible with local conditions. For example, in the fisheries sector, everything must go through a permit from the central ministry. This means that only actors in regions with political power can get more authority. This is because the factors that contribute to the success and failure of internal affairs also lie in the ability of leaders to strategically negotiate power between development stakeholders, build strategic networks, carry out bureaucratic reforms for the provision of better public services (Widianingsih, 2014). This example of the case in Natuna shows that political power in the negotiations is still weak, as evidenced by the distribution of results from fishery production which continues to decline and is inversely proportional to the resulting production.

Table.1. Revenue Sharing Fund (DBH) Natural Resources (SDA) Fishery Sector in Natuna

Year	2018	2019	2020	2021*
Target	IDR,943,027,000	IDR,690.488.842	IDR,788.276.289	IDR,1.128.319.000
Realization	IDR701.234.591	IDR,689.340.471	IDR,788.276.289	IDR,715.429.000

*Source: (djpk.depkeu.go.id, 2019 *August 2021; Research Process, 2021)*

From the table above, when compared to the amount of fishery production, the region has not had a significant impact on the production of natural resources from its fisheries. See in

the following table, the amount of fishery production actually increases every year, but what is obtained from the profit-sharing fund is not in accordance with what is obtained.

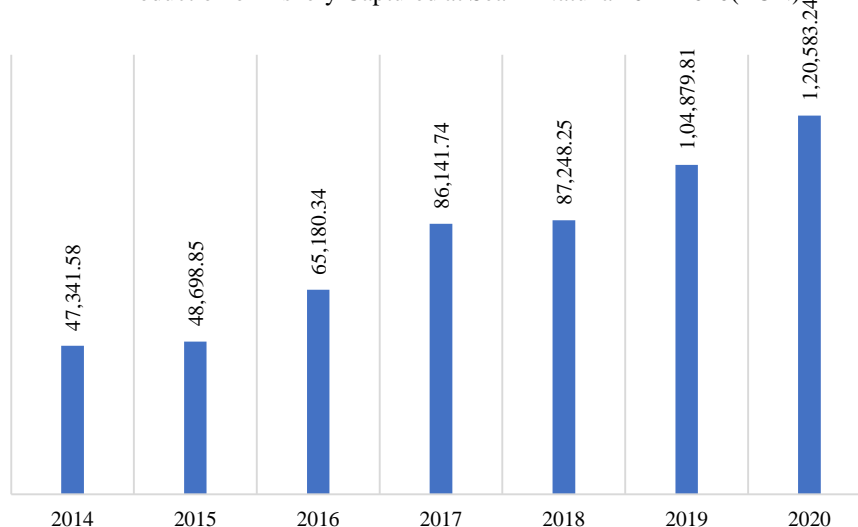Production of Fishery Captured at Sea in Natuna 2014-2020(TON)

Figure 2. Production of Fishery Captured at Sea (Natuna)

Source: (DISKAN, 2020) (Research Process, 2021)

Role from Actor or Agent

The results of the policy will not only be explained from the condition of the network in

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the structure, but there are results from the actions of the subjects or actors in the network. In accordance, the role of actors in the policy network can be seen through; First, the actors certainly have a conflict of interest because they can also be part of other policy networks. Second, the opportunity for actors in the network depends on their own actions. Third, skill of the members of this policy network to build their capacity in negotiation or lobbyingis still questionable. Therefore, the role of actors is important to see the level of coordination of the networks in policy. Then it is the actors/agents who play a role in terms of the social, structural, and political policy context in influencing other networks to utilize the resources of each of these actors.

Therefore, there are many institutions that exist in the Sentra Kelautan dan Perikanan Terpadu (SKPT) for example the harbormaster as a technical implementing unit from the center in managing fishing ports, Perum.perindo as a state-owned enterprise in the field of fisheries that runs a fishery business there, the society and fishermen, local governments, and private actors as fisheries entrepreneurs outside the SKPT. Of course, it is necessary to have policies and programs implemented by these institutions to optimize the potential for fisheries and of course to show the level of participation (care) of these institutions to support the development of the Fisheries Business Field. This means that the level of participation of institutions in the Fisheries Business Field in Natuna Regency will show the level of their seriousness in the participation of these institutions to contribute to fisheries development. This level of concern can certainly affect the development of fisheries in Natuna Regency. The following table will describe the level of participation of institutions in Natuna:

Table 2. Level of Institutional Participation in Marine Sector Development

Stakeholders	Pre Production	Production	Production	Trading
KKP (Directorate General of Fisheries)	Self Participation Rate	Interactive participation rate	Consultative Participation Rate	Consultative Participation Rate
Department of Natuna Fisheries	Functional Participation Rate	Functional Participation Rate	Functional Participation Rate	Consultative Participation Rate
Department of Industry and Commerce Natuna	Passive Participation Rate	Passive Participation Rate	Functional Participation Rate	Functional Participation Rate
Department of Cooperatives and SMEs Natuna	Consultative Participation Rate	Consultative Participation Rate	Consultative Participation Rate	Consultative Participation Rate
Financial institutions	Consultative Participation Rate	Consultative Participation Rate	Functional Participation Rate	Functional Participation Rate

Source: (KKP, 2020; Research Process, 2021)

The role of the central government through the KKP in other subsystems in developing fisheries in Natuna is also seen at the level of interactive participation (production subsystem) and consultative participation level (product handling and trade subsystem). Where the level of interactive participation in this production system shows that KKP must interact with stakeholders and other business actors in making decisions to develop fisheries in Natuna. However, this is certainly not easy, for example from the interactive level of participation, such as the fuel supply policy for fishermen and the joint marketing policy of fish products. This decision on the supply of fuel must be carried out together with other institutions such as Pertamina and the ESDM Office of the Kepulauan Riau Province (KKP, 2020). Furthermore, several decisions regarding the assistance of ships and fishing gear to increase production, the KKP must also coordinate with the Natuna Regency Fisheries Service to obtain information on the target recipients of the assistance so that they are right on target (fishery cooperative).

The role of the Ministries, especially the KKP in the subsystem of handling products and trade, shows the level of consultative

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participation. This role needs to be done because processors and traders already have their own social network to get fish supplies and distribute fish to destination markets. It is necessary to intervene by the KKP on the product handling and marketing subsystem so that it can be integrated and is currently being studied, so that the assistance provided by the KKP to business actors in this subsystem can continue and business actors can cooperate with the KKP. The Natuna Fisheries Service as an agency or institution in the regional government is also an institution authorized to develop fishery business fields in Natuna. The effectiveness of the participation level of the Fisheries Service is determined by the quality and capability of the human resources it has. Then the quality of the budget in developing fisheries in Natuna is also one of the main indicators of developing this sector.

If the condition of human resources and budget are limited, it will certainly have an impact on the level of participation of the Natuna Fisheries Service which is only at the functional level in each subsystem of the fisheries business system. The level of functional participation illustrates the extent to which the Fisheries Service's efforts to consolidate various potential programs, budgets, as well as technical and managerial assistance from various sources have been directed towards fisheries development in Natuna. Some of these programs include the Inka Mina and Mina Bahari ship assistance program, the ice flake assistance program and support for the fishing port development program (Selat Lampa). With this limitation on the level of participation, the District Fisheries Service must collaborate and build cooperation with other agencies such as the Industry and Trade Office, as well as the Cooperatives and MSMEs Office so that the development potential contained in the last two agencies can also be utilized to develop processing subsystems and subsystems. trading.

Furthermore, the role of the Department of Industry and Trade of Natuna when viewed from the picture of its participation shows the level of passive participation in the pre-production and production systems, as well as the level of functional participation in the handling of products and trade. This condition shows that the Department of Industry and

Trade of Natuna Regency does not receive information or socialization about the Natuna Regency fisheries development plan, so it needs to be synergized. While the Cooperatives and MSMEs Service is more on the level of consultative participation. So, looking at this level of participation, coordination is still very much needed, especially carried out by the Natuna Regency Fisheries Service with other agencies so that their role can be increased to an independent level of participation in the production subsystem, product handling and trade in the fishery sector.

Then, the Department of Trade and Industry as well as Cooperatives and MSMEs can increase the level of participation to become an independent level if the Natuna Fisheries Service can integrate programs from these services to assist in fisheries development. The program for the Department of Trade and Industry is needed primarily to support such development, for example by building an ice factory and cold storage or ice flake. It is the same with the Natuna Cooperatives and UMKM Service, so that some of its programs can be more directed to aid and guidance to fish landing centers, processing fishery products and developing fish markets in Natuna. In the fisheries business in Natuna Regency, the role of financial institutions is still not optimal, especially in the pre-production and production subsystems of credit assistance for fishery businesses which are very difficult to access by fishermen. Currently, fisherman's capital assistance is mostly obtained from traders/tauke than from banks or fishermen's cooperatives.

This assistance is provided in the form of patron client cooperation. According to Scott (1972), this patron-client cooperation can occur because formal institutions as a source of existing capital are difficult to access by fishermen (Xun Wu, M. Ramesh, Michael Howlett, 2018). On the contrary, it is even easier to obtain assistance from traders/financiers, even though the impact is not optimal for fishermen. This is a social security system that is understood by fishermen so that their business can continue to run, even though the fish must be sold to the traders/tenders with the selling price of the fish determined by the traders(KKP, 2020).

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Agents Change Structure

Agents/Actors can change the structure of the network structure and the agent owned is not fixed depending on the actor's capacity to renegotiate the network structure. So that changes in the network structure can occur at any time in a broad context. Of course, in this change, is it able to show good changes in the network and policy outcomes. Thus, the dialectical relationship between structure and agency has an important role in determining subsequent decisions in determining the shape of the structure and policy outcomes. Judging from the relationship between these agents, the government has not been able to facilitate what is needed and wanted from the regions. For example, in this case is the power of agents/actors in monopolizing the fishery market which is held by private entrepreneurs in the fisheries sector, the strength of their patron client makes fishermen prefer to work with the private sector rather than the government, plus privately owned facilities and sources of capital that make the private sector more able to invest. monopolize trade in the fisheries sector there.

The strength of this capital can be seen from the assets and facilities owned by the private sector when compared to the government, as follows:

Table 3. Ice Factory, Cold Storage & Ice Flake Machine Data

Ice Factory, Cold Storage & Ice Flake Machine in Natuna			
Type	Capacity		
	Central	**Local**	**Private**
Ice Factory	0	2 Ton	48 Ton
Cold Storage	200 Ton	30 Ton	770 Ton
Ice Flake Machine	8 Ton	0	5 Ton
TOTAL	**208 Ton**	**32 Ton**	**823 Ton**

Source: (Research   Process,   2021)

Then, the role of fishing port. According to UU No. 31 of 2004 concerning Fisheries as amended to UU No. 45 of 2009, a fishing port is a place consisting of land and the surrounding waters with certain boundaries as a place for fishery business system activities that are used as a place for fishing vessels to dock, dock. and/or loading and unloading of fish equipped with shipping safety facilities and fishery supporting activities. There are types of fishing port, based on the concept of development, it is designed in accordance with the capabilities of the regional resources, including marine resources, and is seen from the suitability of the volume of fishery business in the designated fishery development area.

The types of fishing ports are divided into 4 types/classes, namely Ocean Fishery Port (PPS) or type A, Nusantara Fishery Port (PPN) or type B, Coastal Fishing Port (PPP) or type C, and Fish Landing Base (PPI). or type D (Soewito, 2000). Each is distinguished by operational area, mooring facilities, pier length, land area, pond depth, capacity to accommodate fishing vessels, average production amount to supporting industries. The fishing ports that can export are PPS and PPN. Seeing what Natuna has when compared to the existing potential, it is not enough to optimize the fishery products it has. The fishing port infrastructure facilities in Natuna can be seen in the following table:

Table 4. Fishing Port in Natuna

NUMBER OF FISHERY PORT FACILITIES AND INFRASTRUCTURE IN NATUNA		
Subdistrict	**Number**	**Description**
Pulau Tiga	2	Coastal Fishing Port (at Selat Lampa)
		Fish Landing Center (at Desa Setumuk)
Bunguran Timur	1	Market Port (at Pering)

Source: (Research Process,2021)

Policy Network Context

The next dialectical relationship is the network and the context in which it is explained will be influenced by internal and external factors. Changes in network structure and policy can occur through these two factors: Iinternally, showing the dependence to resources of agents or actors from within (Marsh & Smith, 2000). Dependence on resources is an internal factor that often occurs due to a rigid structure (Dowding, 2001). Furthermore, to reveal that changes can also occur in the pattern of actor relations from external factors such as economy, ideology, politics, and knowledge (Marsh, D & Rhods, 1992).

Internally, the Government through the Ministry of Maritime Affairs and Fisheries (KKP) has made optimal efforts to carry out President Joko Widodo's vision and mission, by making Indonesia the world's maritime central. Since several years ago KKP has focused and prioritized the development of outer islands and border areas as Integrated Marine and Fisheries Centers (SKPT). Integrated Marine Fisheries Center (SKPT) is the development of small islands and border areas with a spatial basis by using the marine and fisheries sector as the main driver. SKPT is intended to accelerate the welfare of the people, especially fishermen through the development of independent and integrated islands. From the marine and fisheries perspective, the performance indicators that become the reference for development are increasing the income of the people, especially fishermen, increasing fishery production, investment value, credit value being distributed, the variety of processed products, the utility of the Fish Processing Unit (UPI), and leading to export value. fishery products (kominfo.go.id, 2019).

To realize the implementation of the Integrated Marine and Fisheries Center Program (PSKPT), one of which has been built in the Selat Lampat, Natuna Fishery Port, whose physical construction began in 2013 after the detailed design of the fishing port was completed in 2012 carried out by the District Maritime Affairs and Fisheries Service. Natuna. The cost of implementing the Selat Lampa PP building from 2014 to 2020 comes from the Central Budget (Directorate General of Capture Fisheries), the Maritime Affairs and Fisheries Service of the Kepulauan Riau Province and the Natuna Marine and Fisheries Service. However, in 2017, the PP Selat Lampa-Natuna was managed by the Central Fisheries Port Technical Management Unit (DJPT, 2020).

The government, especially the Ministry of Maritime Affairs and Fisheries, also provides strong support through various policies and several collaborations with inter-ministerial, one of which is the assignment to State-Owned Enterprises (BUMN) in the fisheries sector, one of which is the Indonesian Fisheries Public Company (Perum) to optimize the utilization of existing fisheries resources in Indonesia. Natuna. One of the policies issued by the government is Presidential Instruction (Inpres) Number 7 of 2016 concerning Acceleration of National Fishery Industry Development by assigning SOEs in the fisheries sector to play an active role in increasing fishery production (Pujiastuti et al., 2018). The Ministry of Maritime Affairs and Fisheries has also issued several regulations that support the role of SOEs in the field of capture fisheries, aquaculture, and fishing port services. In the field of capture fisheries, KKP through the Minister of Marine Affairs and Fisheries Regulation Number 5 of 2014 concerning the National Fish Logistics System mandates and assigns Perum Perindo as one of the operators.

However, looking at external conditions, business actors in fisheries in Natuna can be identified from several criteria such as: fishermen, processors and traders/collectors (Tauke). The socio-economic characteristics of these business actors are unique, although geographically they are close to export markets and regional markets, they still need a network outside the region that they can truly trust. The merchant/tauke is a business group that monopolizes the market, because the price depends on the network owned by the tauke to be resold outside the region.

In describing the characteristics of business actors in Natuna, several characteristics will be described. Characteristics of fishery business actors that can be studied include the size of the business they have, access to capital and ability to access the market. The socio-economic characteristics of fishery business actors in Natuna are up to the export scale even though they have to transit in other areas

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first. This will be described in some of the characteristics described in the table below:

Table 5. Characteristics of Fisheries Business Actors in Natuna

Business actor	Characteristics of Business Actors		
	Business scale	**Ability to Access Capital from Financial Institutions**	**Ability to access market**
fisherman	Small	Unable to access formal financial institutions	Natuna local market only
	Commercial	Can access the capital of formal financial institutions	Can access regional and export markets
Processor	Small (Household)	Some business units can access capital loans	Able to access regional market and local market dominant
Seller	Local	Some have accessed loans from financial institutions	Regional and local market access
	Inter-island and Export	Using loans and banking services	Access to export and regional markets

Source: (KKP, 2020, Research Process, 2021)

The table above shows that fishing actors in Natuna consist of small-scale fishermen from inside and outside Natuna. Small-scale fishermen in Natuna Regency based on the results of the study, there are around 58.4% and are fishermen with a small-scale motorized boat fishing fleet of 1 GT – 5 GT. There are also several fishing fleets measuring 10GT–20GT, 20GT–30GT and >30 GT with a small number of 25 units, 4 units and 6 units (KKP, 2020). In this 1 GT – 5 GT fishing fleet, they generally operate in the ocean between 1 to 3 days per trip and catch fish up to 20 miles to 100 miles from Bunguran Island (Natuna). Then, the small Natuna fishing fleet also generally uses fish finder to catch demersal fish. As is known, the fish finder is used by fishermen to look for coral reefs that have a lot of fish. If the coral reefs have been found by fishermen, they will fish for reef fish at that point. Fishing around the coral reefs is generally carried out by 3 to 5 fishing boats.

In the waters of the Natuna Sea, fishing fleets of 20 GT – 145 GT are also operating, which on average come from outside the Natuna Regency. This fishing fleet can be classified as commercial scale. The characteristics above that have been classified also show that small-scale fishermen in Natuna generally cannot access loans from banks and capital to go to sea, so far, on average, they get access to capital from traders/tauke. The merchant/tauke and fisherman are already bound by a close relationship which is usually referred to as a patron-client relationship. In other words, without patrons (traders) who provide capital assistance and buy their fish, the fishing business in Natuna will be difficult, because only the tauke have the network to sell their catch. With this relationship, market access for small-scale fishermen is only up to local traders/tauke and inter-island traders/tauke in Natuna (KKP, 2020).

Policy Network Outcomes

Furthermore, the outcome of the policy network in question is how to see the dialectic or pattern of relations between actors in the policy as implementers in the implementation process so as to provide an overview of the performance of the policy itself (Marsh & Smith, 2000). In this section, the author will describe the flow of the dialectical concept in the integrated marine fisheries center network in Natuna. This will occur from several processes that are considered capable of explaining the pattern of relationships that are built. There are five (5) sources of value systems that influence the intensity and dominance of relationships among actors formulating public policies (Wart, 2013), namely: 1) individual values, 2) professional values, 3) organizational values, 4) legal

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values, and 5) public interest values. Policy networks examine the pattern of social relations between several actors who are dependent on each other where they play a role in the public policy process (Kickert et al., 1997). Meanwhile, policy networks also have characteristics, namely the existence of interdependence, coordination, and plurality (Enroth, 2011). Thus, the policy network sees policy as a contextual process (contextualization of the policy process) where there is a relationship complexity between various actors, both formal and informal, with their respective goals (variety of actors each with their own goals). which are dependent on each other (Enroth, 2011).

Before discussing the case studies in this research, it is necessary to understand the policy network that can affect the results (Lowndes et al., 2017; Marsh, D & Rhods, 1992; Marsh & Smith, 2000) by looking at: (1) policy outcomes will be influenced by changes in the network both from the management of the structure and resources of the actors themselves and will have a broad influence on economic, political and social conditions. (2) the results of the policy can also affect the social structure that is built and describe which position of interest is more dominant. (3) policy outcomes are also influenced by the condition of actors in utilizing the built networks and then how they take strategies and actions in providing benefits to policies.

Furthermore, in the implementation of policies it can be seen that: (a) policies consist of more than one program, and therefore conflicts between institutions can occur and in this case, policy implementation becomes more complicated and risky, because different actors have different goals, then this can also lead to a clash of goals. (b) some policies are fully implemented by one organization and this will create a potential for implementation failure due to lack of power in the network to implement policies (Cairney, 1999).

If the outcome condition of the implementation that has occurred is described, there are Limitations of Authority for the Management of the Straits of Lampa Fishery Port contained in the Natuna SKPT. Port is a place consisting of land and waters with certain boundaries around it, as well as a place for government activities and economic activities that are used for ships to dock, dock, up and down passengers and/or loading and unloading of goods equipped with shipping safety facilities and port support activities as well as a place for intra and inter-mode transportation.

In this discussion, it will be discussed about the fishing port which has a very important role in marine fisheries, because the fishing port is the center of the economy starting from fish landing after being caught from the fishing ground and then arriving at the initial stage of the fish being marketed at the fishing port. The increase in catch production is partly due to the large potential of fish resources in the sea, then the increasing habit of the population to eat fish, as well as the development of the fishing industry and also due to the increasing income of the population per capita (Lubis, 2011). The things mentioned above are factors that can trigger increased business in the utilization of fish resources in the sea so that it has the opportunity to increase the production of landed catches. Efforts to increase catch production must of course be balanced with sustainable development and development of fishing ports. Because the fishing port is the center for landing and marketing fish catches.

The position of the port even though it is in the district/city area in each region, but its management is limited because there are several institutions from the center that are indeed assigned to take care of the port. Furthermore, coupled with the promulgation of UU no. 23 of 2014 then the delegation of authority of the regency/municipal government to the management of marine space is handed over to the province. In line with this principle, of course, the implementation of autonomy in Natural Resources (SDA) lies with the provinces, which are responsible. The principle of real autonomy is a principle that for and dealing with government affairs in the province is carried out based on tasks, authorities and obligations that actually already exist and have the potential to grow, live and develop in accordance with the potential and uniqueness of each region (Ikasari, 2017).

What is meant by responsible autonomy is province-based autonomy, which in its implementation must be in line with the goals

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and objectives of the granting of autonomy itself. The basic objective is to empower the region, including improving the welfare of the people, which is the main part of the national goal. Specifically regarding the authority to manage marine areas, UU no. 23 of 2014 has led to the development of marine-based provinces including; (1) Regencies/municipalities that now no longer own marine areas are still given limited authority to manage resources in marine areas with certain matters that have been determined; (2) Regencies/Cities still get profit sharing for the management of natural resources under the bottom and/or on the seabed in accordance with the prevailing laws and regulations; (3) Furthermore, what is meant by Regency/City no longer has the authority to manage resources in the marine area, which still has several functions including: a) exploration, exploitation, conservation, and management of marine wealth; b) administrative arrangements; c) spatial arrangement; d) law enforcement of regulations issued by the regions or those that delegate authority by the government; e) participate in security maintenance; and f) participate in the defense of the sovereignty of the State; (4) Regencies/Cities do not have the authority to manage resources in the sea area starting from 0 miles and the Province has the authority from 0-12 nautical miles measured from the coastline towards the high seas and/or towards the archipelagic waters for the Province and 1/3 (one third) of the province's jurisdiction for Regency/City.

This means that Natuna as a district does not have maritime authority but is limited to coordinating and empowering the human resources of fishermen and coastal communities. Currently, not many fish processing industry companies have invested in the Natuna Straits fishing port. Some of them are due to lack of raw materials and cooperation from port managers. At the Strait of Lampa fishing port, there is only Perum.perindo as an investor from BUMN that runs its fishery business. The Selat Lampa Port is incorporated in the SKPT and is managed by the Head of the Port Authority and Harbor Authority (KSOP) with its own structure formed.

The Straits Lampa fishing port is only a pioneer port with limited authority in terms of landing and distributing fishery products. In fact, fish is a commodity that is perishable or easily decomposed, so it needs to be dismantled quickly and carefully and precisely selected. Factors that slow down the unloading are delays in unloading time, this happens usually due to queues for unloading at the port, the shallowing of the port pool so that ships have to dock far from the coast and require manual transportation to the beach or TPI and also the factor of limited facilities owned for loading and unloading like a crane. This delay in unloading time will certainly result in a decrease in fish quality (Lubis, 2011).

If management is limited by the abundance of fish produced in Natuna, then the private sector, which has been involved for a long time, will certainly allow this situation to occur by not collaborating with Perum.perindo at the Selat Lampa Fishing Port (PP. Selat Lampa), this is related to data the quality of the catch, trading and recording of landings at ports will confuse investment estimates in the fishing industry and many others. It can also be interpreted or concluded that various things related to the catch will be doubtful and can even give incorrect conclusions. The correct data collection is to record all the catches on each ship that lands the fish in the port through weighing at the fish auction place and not based on estimates only (Lubis, 2011).

Furthermore, it is estimated that Perum Perindo will find it difficult to build social networks with various other fishing fleets around the Lampa Strait (Pulau Tiga and Bunguran Besar) to support its business in SKPT Selat Lampa. Owners of fishing fleets at Pulau Tiga and Bunguran Besar locations (outside SKPT Selat Lampa) have been "tied up" by other collectors who share with traders in Tanjung Balai Karimun and Batam. This is suspected to be the cause of the fishing fleets on Pulau Tiga and Bunguran Besar not operating at the SKPT Selat Lampa location. To encourage them to enter the Lampa Strait SKPT, a new social construction is needed in the form of a regional regulation from the Natuna Regional Government and a regulation from the Minister of Maritime Affairs and Fisheries. These regional regulations and ministerial regulations will encourage the existence of self-owned and jointly owned business entities contained in the SKPT Selat Lampa.

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4. Conclusion

The establishment of a network on the development of SKPT in Natuna has not been able to reduce the role of the Tauke/big trader who has been the main actor in the fisheries sector business. The presence of Perum.Perindo (a government-owned business actor) should be able to push linkages between stakeholders but the fact is contrary. It is necessary to coordinate and delegate more authority to the regions in managing SKPT so that the regions can take part in managing the existing fisheries business entities. Furthermore, several related agencies in the regions also need to improve in terms of collaboration and cooperation so that the supply chain of fisheries in Natuna can also be developed properly. And it takes the government's attention in developing the existing fishing port.

Acknowledgement

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