

# ARRANGEMENT OF THE BAJO ETHNIC FISHERMEN SETTLEMENT AREA BASED ON ECOLOGY AND LOCAL WISDOM ON THE COAST OF BONE BAY

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**ARRANGEMENT OF THE BAJO ETHNIC FISHERMEN SETTLEMENT AREA  
BASED ON ECOLOGY AND LOCAL WISDOM ON THE COAST OF BONE BAY**

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**ABSTRACT**

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Existence edge sea or coast beach is relative space dominant for settlement waters in Indonesia. of all many settlement waters in Indonesia, one of the of them is area live in the Bajo Tribe, which is located in the Bajoe Village, District Tanete East Riattang, Bone Regency. Forming process settlement the Bajo Tribe on the Coast Bone Bay to moment this, no free from condition geography and environment nature background behind by activity daily inhabitant as fisherman or sailor. Change pattern settlement from sea ( bido ') to land, causing the Bajo Tribe to experience change . This thing occur because by ecological, there are difference condition life on land with life in the sea. Temporary from side settlement seen that part big condition house stay from the Bajo Tribe Community in category no worthy inhabit and tend

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slum. Impact negative from existence settlement slum this no only character experienced micro directly by the settlers, but could character meso nor macro which is also felt by the people around settlement slum that. Problem settlement slum this will could lower quality environment coast and coast, as well as more far could damage ecosystem the sea that will have an impact on reducing results fish catch. Because that, research this aim for Describe characteristics settlement Fishermen of the Bajo Nation on the Coast Bone Bay and Instruct the right concept in residential area arrangement Bajo - based fishermen ecology and wisdom local. Research Type this is type non-experimental and non-experimental research descriptive-qualitative. Study this using the Snowball Sampling Technique and using SWOT analysis. Results: Based on Result of Analysis and Observation directly on location research, can be known that there are 3 types pattern settlements in the Bajo Tribe Settlement Area on the Coast Bone Bay namely 1) pattern settlement longitudinal (linear), 2) pattern settlement group, and 3) pattern settlement spread out. Based on results evaluation influence pattern settlement with aspect continuity could concluded that configuration most suitable room with draft sustainable for the arrangement of the Bajo ethnic settlement area, namely : pattern settlement group that can minimize damage environment. Other than that can also be used as the place for effort in increase economy Public as well as could maintain values social culture Public coast.

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**KEYWORDS:**

**Coastal, Residential Fisherman, Bajo Tribe.**

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### INTRODUCTION

The coastal area has a strategic role in the life of the Indonesian people. One of the functions of the coastal area is as a residential area for residents who work as fishermen or work in the marine sector, such as seaweed farmers and the like. The various potentials and natural resources in coastal areas attract people to fulfill their needs, so that various coastal settlements are formed according to the level of livelihood of the people. Coastal settlements that have problems in the form of settlements that tend to be dense (density between tall buildings and the distance between buildings are tight) and slums (irregular, dirty), unhealthy environmental conditions and lack of facilities and infrastructure as well as the economic condition of the community that is less able to develop (Ristianti, 2015). The settlement problem is closely related to the development process involving social, economic and environmental issues around it (Febriandi, 2016) in (Nurokhman, 2019).

The existence of the seafront or the coast is a relatively dominant space for aquatic settlements in Indonesia. Of the many marine settlements in Indonesia, one of them is the area where the Bajo Nation lives in Bajoe Village, TaneteRiattang Timur District, Bone Regency. The process of forming settlements for the Bajodi Coastal Bajodi people of Bone Bay to date, cannot be separated from the geographical conditions and the natural environment which are motivated by the daily activities of residents as fishermen or sailors. Changes in settlement patterns from the sea (bido') to land, caused the Bajo Tribe to change. This happens because ecologically, there are differences in living conditions on land with life in the sea.

Meanwhile, in terms of settlements, it can be seen that most of the housing conditions of the Bajo Tribe Community are in the uninhabitable category and tend to be slums. This condition is clearly seen from the very narrow yard, poor sanitation, incomplete supporting facilities and the layout of the building that is not in accordance with its designation, and the irregular layout of fishing equipment.

The ability of low financial resources will directly reduce the attention of fishing communities in improving and maintaining the quality of settlements. This is because the financial resources that come from low incomes are only sufficient to meet the basic needs of family members. This condition will result in the impact of settlement problems faced by coastal communities will become wider and more complex. The negative impact of the existence of these slums is not only micro directly experienced by the settlers, but can be meso or macro which is also felt by the people living around the slums. The problem of slum settlements will be able to reduce the quality of the coastal and coastal environment, and can further damage marine ecosystems which will have an impact on reducing fish catches.

The Bajo people living in coastal areas depend for their lives on marine ecosystems based on their customary law, so it is necessary to carry out environmental management in the marine and coastal areas in an integrated manner. Integrated environmental management has an impact on effective management to balance economic utilization and environmental conservation. Based on the balance of utilization, it is possible to develop other forms of

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management that are more applicable and adaptive. According to (Dewi, 2018) One form of management that is more applicable and adaptive in management is community based management of coastal areas.

Environmental management in coastal areas cannot be separated from the real condition of the Bajo people themselves. So the strategy needed in environmental management in coastal areas is community-based management. This is strongly influenced by the potential, characteristics and values of local wisdom of the local community. Thus, community-based management of coastal areas will certainly lead to the achievement of the welfare of coastal communities, especially reducing poverty in coastal communities. On the other hand, the government's role in this case is that the government is obliged to provide protection and fulfillment of community welfare, especially poverty eradication.

In the case of the Bajo Tribe Environment, apart from maintaining a settlement pattern that grows organically (thriving without planning) which is the hallmark of the development of the village area and the physical development of a residential area that maintains the typical values of the traditional area (environment), there are many potentials that need to be developed. Considered in the arrangement of the residential area. The pattern of past habits (cultures) that contain noble values and (ever) existed in the Bajo Tribe society becomes a value and character that must be maintained or even needs to be returned. This is also included in the pattern of community habits that support activities/activities. The existing potentials need to be developed and the arrangements made are also expected to support the economy and improve the quality of the environment and society. Therefore, this study was conducted to describe the characteristics of the settlements of Bajo Ethnic Fishermen in the Bone Bay Coast and to instruct the right concept in structuring the Bajo Tribe fishermen settlement area based on ecology and local wisdom.

### 1. METHODOLOGY

This research was conducted in a residential area of the Bajo Nation which is located in Bajoe Village, TaneteRiattang Timur District, Bone Regency. This type of research is a non-experimental and descriptive-qualitative type of research which is a type of research with direct field observations that provide an overview of the Bajo ethnic settlement area on the coast of Bone Bay as the object to be studied. This study intends to describe the characteristics of the settlements of Bajo Ethnic Fishermen in the Bone Bay Coast and to instruct appropriate concepts in structuring the Bajo Tribe fishermen's settlements based on ecology and local wisdom using a qualitative approach, namely direct observation in the field and interview methods to obtain a basic understanding, opinions, and motivations of the Bajo people and maintain their local wisdom. This study uses the Snowball Sampling Technique, which is a method used to identify, select and take samples in a continuous network or chain of relationships until the required data needs are met. The data collection method used in this research is to use primary data survey techniques (observations, interviews, and documentation) and secondary data (agency surveys, literature surveys). The analysis used in this research is qualitative descriptive analysis. Furthermore, the researchers used the SWOT analysis method on the elements of area design (Rahmawati, 2018).

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Picture. 1. SWOT Analysis

**2. RESULTS AND DISCUSSION**

**Characteristics of the Settlement Patterns of the Bajo Tribe**

Based on the results of direct observations in the field and satellite image maps, it is known that the characteristics of the settlements of the Bajo Nation on the Bone Bay Coast can be seen from the location and position of the settlements. As we know that the settlement of the Bajo Nation is a settlement that inhabits an archipelago along the coast. The following is an illustration of the position of the Bajo Tribe fishermen's settlements based on the results of the researcher's analysis:



Picture. 2 Illustration Position Settlement Bajo Tribe Fishermen

Source : Analysis Researcher , 2021

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Development Settlement Fisherman of the Bajo Nation from orientation waters Becomes mainland has cause a number of influence big Among others: 1) happened change physique Bone waters, 2) change function sea become a residential area, 3) occurs formation of deltas and expansion of land area, 4) occurs density building, 5) shaping settlements that are not regular and inclined slum.



Picture. 3 Building Layout Map Bajo Tribe Settlements  
Source: Field survey and results digitizing arcgis 2021

By layout building settlement of the Bajo Nation , then could explained that patterns settlements formed on the coast There are 3 Bone Bays , namely pattern settlement elongated, pattern settlement group and pattern settlement spread out. Following map patterns settlements formed on the Coast Bay Bones:



Picture. 4 Settlement Pattern Map Bajo Tribe Fishermen  
Source: results analysis writer, 2021

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**a. Settlement Pattern Elongated (Linear)**

The elongated (linear) settlement pattern is formed due to the presence of roads, rivers, railroads or beaches. The conditions of settlements on the Bone Bay Coast which form a linear settlement pattern are residential residents whose livelihoods have varied, ranging from fishermen, traders and entrepreneurs. The layout of the settlements of the Bajo Nation which forms a linear pattern on the Bone Bay Coast is described in the following figure:



Picture. 5 Settlement Patterns Elongated (Linear)  
Source: Author's Analysis, 2021

1) **Condition infrastructure settlement**  
- **Street**

Road conditions are good with service coverage that is in accordance with standards. In addition to facing the beach, the elongated (linear) settlement pattern also follows the existing road network in the area which has a major impact on the pattern of community movement in activities. The following are the results of the documentation of the road network on a linear settlement pattern in the Bone Bay Coastal area.



Picture. 6. Road Conditions in Settlement Pattern Areas Elongated (Linear)  
Source: Author, 2021

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- **Drainage**

Condition drainage on pattern settlement elongated (linear) enough good where on the side of the road right and left be equipped system drainage. Following results documentation condition drainage on pattern settlement elongated.



Picture. 7. Condition Drainage in Settlement Patterns Elongated (Linear)  
Source: Author, 2021

- **Drinking / clean water**

The location of the Bajo ethnic settlement area which is located close by with coast beach make inhabitant local no use well water but PDAM water as drinking / clean water source daily society.



Picture. 8 .Condition of Clean / Drinking Water in Settlement Pattern Areas Elongated  
(Linear) Source: Author, 2021

- **Sanitation**

System sanitation the Bajo Tribe community on the pattern settlement elongated (linear) mostly not yet apply system healthy sanitation. Based on Analysis results directly in the field is known that MCK activities already carried out in their respective homes, but most settlement not yet have septic tank and direct stream disposal feces sea . In addition, sorting waste the kitchen is n't there yet applied society.

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Picture. 9. Condition Sanity in Settlement Patterns Elongated (Linear)

Source: Author, 2021

- **Garbage**

Based on the results of direct analysis in the field, as big the Bajo people have not apply throw away trash in its place. This thing caused because of this area not yet served by vehicle carrier rubbish from service environment live. As a result, the garbage that is along walk on pattern settlement elongate piled up and seen dirty.



Picture. 10. Condition Solid Waste in Settlement Pattern Areas Elongated (Linear)

Source: Author, 2021

2) **CONDITION BUILDING**

Condition building on pattern settlement elongated (linear) already varies. Mostly settlements that are in the pattern this is settlement permanent. Following results documentation condition the building contained in the pattern settlement long (linear).



Picture. 11. Condition Buildings in Residential Pattern Areas Elongated (Linear)

Source: Author, 2021

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**3) CONDITION SOCIAL ECONOMY**

The elongated settlement pattern has a positive impact on the socio-economic conditions of the Bajo Tribe community. This is due to the existence of a road network that connects the transportation of the residential area with the activity center of the fishermen of the Bajo Nation. The existence of a main road that connects environmental roads with collector roads makes it easy for the community to carry out their activities and makes the local community start developing their business by opening stalls along the main road. In addition, the location of the Bajo Tribe Settlement Area on the Bone Bay Coast is very close to activities at the Bajoe Harbor and the Fish Auction Place (TPI).

**4) ADVANTAGES PATTERN SETTLEMENT LENGTHWISE (LINEAR)**

The advantage of the elongated settlement pattern is that it can provide easy access for residents to carry out economic activities, especially for people who work as fishermen can easily access their activities to the sea. In addition, the pattern of elongated settlements attracts people to live because the area connects various places and is easily accessible by transportation, both public and private, so that Bajo Tribe fishermen can trade their catch not only on a local scale but also trade their catch. they are outside the area. This will have a positive impact on the economic condition of the community, where initially their catch can only be sold at a low price but due to proper accessibility so that the catch can be sold at the highest price according to the market price. The strategic road that connects this location with Bajoe Harbor provides a plus for this memenjang pattern settlement location, apart from being a fisherman, the local community can also open businesses such as opening stalls along the road.

**5) DEFICIENCY PATTERN SETTLEMENT LENGTHWISE (LINEAR)**

The drawback of the linear settlement pattern is that it poses a threat to the beach if community waste is not treated properly. In addition, because the Bajo people are very dependent on the sea, they cannot be far from the coast, resulting in ineffective land use because they only focus on following roads and coastlines. Another impact of the linear pattern is the impact on the local wisdom of the Bajo Tribe community. Their traditional way of life and adheres to maritime culture slowly began to change following the influence of the more modern and consumptive culture of mainland people. This clearly undermines the value of local wisdom of the Bajo people.

**b. Settlement Pattern group**

The clustered settlement pattern has a characteristic that is the distance between adjacent settlements. This pattern was formed because of the culture of the Bajo people who like and enjoy gathering and living in close proximity to their families and fellow communities. In addition, this pattern was formed considering that the sea has long been a source of community livelihood and means of transportation. This is what causes fishing communities to build clustered settlements close to the sea. In addition, the formation of clustered settlement patterns makes the layout of settlements in this pattern tend to form open

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spaces that have a function as a gathering space, both as a work space for drying seaweed and as a social space. The layout of the Settlement is described in the following image.



Picture. 12. Settlement Patterns group  
Source: Author 's Analysis, 2021

### 1) **CONDITION INFRASTRUCTURE SETTLEMENT**

#### - **Street**

Condition walks on pattern settlement group still bad where the road status on the pattern is this that is Street environment. In addition, there is also Street the path that doesn't can traverse vehicle with large road 1 - 2 meters with road materials still gravel and already many are broken.



Picture. 13. Road Conditions in Settlement Pattern Areas group  
Source: Author, 2021

#### - **Drainage**

The condition of settlement drainage in clustered settlement patterns is still very poor. In this area there is no drainage so there are often puddles of water either during the rainy season or even during high tides around the settlements, especially on stilt houses. This makes the area slums due to the garbage carried by sea water and the results of the waste of the local community.

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Picture. 14. Condition Drainage in Settlement Patterns group  
Source: Author, 2021

- **Drinking / clean water**

Residential location Bajo people who live on the coast Bone Bay made Publicno use well water with reason the water salty so that Public using PDAM as drinking / clean water source everyday. This thing proved in area settlement there are interlocking pipes connected between houses to home. Following results documentation condition drinking / clean water network on pattern settlement group.



Picture. 15. Condition of Drinking / Clean Water in Settlement Pattern Areas group  
Source: Author, 2021

- **Sanitation**

The sanitation system in residential areas with a cluster pattern does not have a septic tank in each settlement. Because the location of the settlement is on the coast which often experiences ups and downs of sea water, the community makes toilets and toilets directly flow into the sea in the hope that they will be carried away by the sea water and clean. However, in reality, the results of community waste water disposal are accommodated and give off a bad odor around residential areas. The following is a documentation of the sanitation conditions of the Bajo Tribe fishing community in clustered settlement patterns.

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Picture. 16. Condition Sanitation in Settlement Pattern Areas group  
Source: Author, 2021

- **Garbage**

Based on the results of the direct analysis in the field, the Bajo people still throw garbage carelessly which causes the residential environment to become dirty due to piles of garbage that are dumped directly around the settlements and even under residents' houses. This is very concerning because if this is allowed to continue, it can threaten their health and the community will be easily infected with various types of diseases. The following are the results of the documentation of the waste conditions of the Bajo Tribe fishing community in clustered settlement patterns.



Picture. 17. Condition Solid Waste in Settlement Pattern Areas group  
Source: Author, 2021

2) **CONDITION BUILDING**

Condition building on pattern settlement group tend dense and shabby. This thing caused because Public fisherman no want to far from family. In addition, the condition economy society and profession they as fishermen are also reason Public for permanent live in the area although condition land it's very dense. Majority building on pattern settlement group this made of wood material. Following results documentation condition building on pattern settlement grouping the Bajo Tribe on the coast bay bones:

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Picture. 18. Condition Buildings in Residential Pattern Areas group

**3) CONDITION SOCIO- ECONOMIC**

Generally, the people who live in the settlement pattern group work as fishermen. The impact of clustered settlement patterns on the socio-economic conditions of the community is that the Bajo people can have closer family ties than other settlement patterns. The clustered settlement pattern will also make it easier for the Bajo Tribe to monitor their livelihoods as fishermen who are directly adjacent to the coast. In clustered settlement patterns, people generally have high social characteristics. The background of the same Bajo Tribe community makes it easier for family members to carry out certain activities and sometimes this settlement pattern is made by a large family so that it is easier for them to save and maintain the local wisdom of their ancestors. From an economic point of view, this pattern provides little benefit to people who generally work as fishermen. Accessibility in this residential area is still very minimal; the condition of facilities and infrastructure is not adequate. The fishing community still has difficulty in trading their catch due to road network access constraints. Fishermen who return to sea immediately sell their responses to the waiting collectors without processing their catch or bringing their catch to be sold outside the area. Lack of skills and capital is the main obstacle for the Bajo Tribe fishing community.

**4) ADVANTAGES PATTERN SETTLEMENT GROUP**

The main advantage of the clustered settlement pattern is the emergence of a very high community kinship pattern as a result of the location/distance between close community settlements making it easier to interact between individuals. Generally, this pattern is inhabited by people who have the same lineage. It aims to make it easier for the Bajo Tribe to interact between families without mixing with other tribes. In terms of the development of public facilities, this pattern provides advantages. For example, the construction of educational facilities will make it easier for Bajo ethnic children to take education, especially in elementary schools. Bajo ethnic children will find it easier to go to school because of access to facilities located in the middle of their settlements. The emergence of intense interaction between residents in the area which adds to the proximity of residents to each other. The existence of educational facilities also encourages and opens the mindset of Bajo ethnic parents about the importance of education for their children in increasing the family's standard of living. In addition to educational facilities, the construction of worship facilities,

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namely mosques, also has a positive impact on the community because their access is closer to their place of residence. Likewise for health facilities such as posyandu.

### 5) DEFICIENCY PATTERN SETTLEMENT GROUP

The drawback of the clustered settlement pattern is that this settlement pattern can develop in all directions without being planned; as a result, the area becomes dense and tends to be slum. In addition, the Bajo Tribe community has difficulty adapting to outside communities and is more closed because it prioritizes the family system that lives in the area. In terms of the road network, its development will be very difficult because people's houses first take up a lot of land.

#### c. Settlement Pattern Spread

This pattern is formed because of the relationship between the community and the sea, in this case people who work as fishermen. The pattern of settlements spreads to form individual settlements and is the beginning of the formation of Bajo ethnic settlements. Initially, this spread settlement pattern was formed in an area above the sea on the grounds that the workplace is close to people who work as fishermen. The formation of an access that surrounds the settlements causes the settlements to no longer be directly connected to the sea. Access to these settlements was formed spontaneously due to the layout of the settlements that were formed spread out. Generally, the form of a house with a spreading pattern is a house on stilts. The layout of the settlements that make up the pattern of settlements spread in the settlement area of the Bajo Nation is described in the following figure:



Picture. 19 Settlement Patterns Spread  
Source: Author's Analysis, 2021

### 1) CONDITION INFRASTRUCTURE SETTLEMENT

#### - Street

The condition of the road network in the scattered settlement pattern is very worrying, where the road made of wood with poles made of cement is a connecting road between houses that can only be passed by pedestrians. In fact, most of the roads made of wood are rotten and fragile. The road is not a public road but only as a connecting road between settlements in order to provide convenience in interacting. Generally, the fishing communities who live in this pattern work as fishermen so that the community's activities use boats more so that they park the boats directly on the poles of their houses on stilts to make it

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easier for them to fish in the sea. The following is the condition of the road network in the scattered settlement pattern at the research location:



Picture. 20 Road Conditions in Settlement Pattern Areas Spread  
Source: Author's Analysis, 2021

**- Drainage**

The drainage system in the settlement pattern spreads very badly due to the absence of a drainage treatment system, making the area often inundated with seawater at high tide, even seawater mixes with human waste, which pollutes the stagnant water and causes an unpleasant odor. The following are the results of the documentation of the drainage system in the scattered settlement pattern.



Picture. 21 Condition Drainage in Settlement Patterns Spread  
Source: Author's Analysis, 2021

**- Drinking / Clean Water**

The location of the settlement which is right above sea level makes the community use the PDAM network as a source of daily drinking/clean water through a pipe network that is connected from house to house. The following are the results of the documentation of the condition of the clean/drinking water network of the Bajo Tribe fishing community in a scattered settlement pattern.

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Picture. 22 Condition of Clean Water in Settlement Patterns Spread  
Source: Author's Analysis, 2021

**- Sanitation**

The behavior of the fishing community of the Bajo Tribe in a scattered settlement pattern. Most of them do not apply healthy sanitation. Based on the results of direct observations in the field, it was found that the Bajo people dispose of their household waste directly into the sea. In addition, the houses in this pattern do not have septic tanks so that they directly drain the sewage into the sea. The following are the results of the documentation of the sanitation network system in the settlement pattern spread in the Bajo Tribe fishermen settlement area.



Picture. 23 Condition Sanitation in Settlement Patterns Spread  
Source: Author's Analysis, 2021

**- Garbage**

The solid waste treatment system in the scattered settlement pattern is in the bad category. Local people immediately throw garbage into the sea. Even under each other's houses. As a result, when the sea water is high, the garbage will be renewed by sea water and when the sea water recedes the salt carried by the sea water will live under the stilt houses of the Bajo Tribe. Even worse, the existing garbage is mixed with garbage which makes the garbage pile up. In addition, the waste will have an effect on the poor environmental conditions of the residential area, which threatens the health of the local community. The

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following are the results of the researcher's documentation on the condition of solid waste in a scattered settlement pattern.



Figure 5. 1 Condition Solid Waste in Settlement Patterns Spread  
Source: Author's Analysis, 2021

### 2) **CONDITION BUILDING**

In general, the condition of the building in a spread settlement pattern is a stilt house whose main material is wood. The settlement stands on the sea that has been stockpiled but until now there are still frequent ups and downs of sea water which causes people to make settlements with a system of houses on stilts. Residential houses are located at a distance from house to house. The following are the results of the documentation of the condition of the building in this settlement pattern.



Figure 5. 2, Condition Buildings in Settlement Patterns Spread  
Source: Author's Analysis, 2021

### 3) **CONDITION SOCIO- ECONOMIC**

In the Spread Settlement Pattern, the Bajo Nation still applies maritime cultural patterns in their hip joints. The local wisdom of the Bajo Tribe culture is still applied as is the habit of those who live above the sea by building stilt houses made of wood on the water in the coastal area. Their profession as a fisherman makes it easier to earn a living because their boats are parked directly on the poles of the house. When they want to go to sea, the Bajo Tribe can easily access their fishing equipment which is directly connected to

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the high seas. The following is the socio-economic documentation of the Bajo Tribe community on the spread settlement pattern.



Figure 5. 3 Condition Socio- Economic Patterns of Settlement Spread  
Source: Author 's Analysis , 2021

**4) ADVANTAGES PATTERN SETTLEMENT SPREAD**

As for the advantages from pattern settlement spread that is method life the Bajo Tribe community who still traditional and apply culture maritime so that not yet influenced modern culture. The Bajo Tribe on the pattern settlement this still guard wisdom local ancestors them. In addition, the impact positive from pattern this that is Public could with easy access sea as a medium of eye livelihood they as fisherman. In addition, every house direct park ships they are on the poles home.

**5) DEFICIENCY PATTERN SETTLEMENT SPREAD**

The disadvantage of the spread settlement pattern is that the distance between the settlements is too far from one another so it is difficult to form interactions between individuals. In addition, the environmental conditions are very bad where local residents directly dump waste into the sea right under the houses on stilts. Access to the road network is also very difficult because each house makes its own path that is directly connected to their settlement with the main material of wood that can only be passed by pedestrians. The low environmental aesthetics in the area due to piles of garbage and household waste at high tide adorn the settlements and have an adverse effect on the health of the local community. In terms of developing public facilities, this pattern is very difficult. This is due to the location of the settlements of the Bajo Nation community which are above the sea with wooden materials, both houses and road networks. When a facility is built, the impact will be bad. One of them is a minimum education facility for elementary school (SD). The location is not very strategic and requires very large costs because in the process of building an educational facility it requires sufficient land and can serve all students in 1 (one) certain area. Therefore, seeing the pattern of settlements that spread, it is clear that it cannot support educational facilities if it is developed at this location as well as other public facilities, both health and worship.

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**DRAFT RESIDENTIAL AREA ARRANGEMENT BAJO TRIBE FISHERMEN**

Based on Result of Analysis and Observation directly on location research, can be known that there are 3 types pattern settlements in the Bajo Tribe Settlement Area on the Coast Bone Bay namely 1) pattern settlement longitudinal (linear), 2) pattern settlement group, and 3) pattern settlement spread out. For knowing draft the most appropriate area arrangement for applied to location settlement fishermen from the Bajo Nation who live on the coast Bone Bay then will conducted identification influence pattern settlement Fishermen of the Bajo Nation against Draft Settlement of Settlement Areas. Following results identification third pattern settlements located in the fishing area of the Bajo Tribe on the coast Bay Bones:

Table 1. Identification of Appropriate Patterns in Settlement of Settlement Areas Bajo Tribe Fishermen

SUSTAINABILITY ASPECT	SETTLEMENT PATTERNS		
	Elongated PATTERN	GROUP PATTERN	PATTERN SPREAD
Economy	4	3	1
Social Culture	2	4	4
Ecology	2	3	4
<b>SCORE</b>	<b>8</b>	<b>10</b>	<b>9</b>

Description: 1= less, 2= enough, 3= good, 4=very good

Based on the results of the assessment of the effect of settlement patterns on sustainability aspects, it can be concluded that the spatial configuration that is most in accordance with the sustainable concept for structuring the Bajo ethnic settlement area is a group settlement pattern that can minimize environmental damage. In addition, it can also be used as a place for efforts to improve the community's economy and can maintain the socio-cultural values of coastal communities.

After knowing the right settlement pattern developed in the arrangement of the Bajo Tribe fishermen's settlement area, a swot analysis will be carried out. The SWOT analysis used in this study serves to determine the potentials that exist in each settlement pattern and to find out what opportunities can develop the Bajo ethnic settlement area so that it does not get left behind. In addition, the SWOT analysis is also expected to find out what problems exist in each Bajo ethnic settlement pattern and what threats can occur in the Bajo ethnic fishing settlement area in the future. Therefore, it is important to do a SWOT analysis in order to find out these things. The following are the results of the SWOT analysis based on the Grouping Pattern.

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Table 5.1 Matrix SWOT Analysis of Settlement Patterns group

<b>MATRIX ANALYSIS SWOT</b>	<b>Strength (strength)</b>	<b>Weakness (Weaknesses)</b>
	<p>distance between settlement adjacent ; Kinship society is very high ; Easy and mutual accessibility connected ; Facility development facility general could with easy reachable When built in the middle of a residential area ; strategic location close with Bajoe Harbor ; View quite nature beautiful is at the coast Bone Bay.</p>	<p>The road is very narrow Condition very limited facilities and infrastructure Lack of awareness Public in guard environment Condition drainage and sanitation environment still bad The place mooring messy boat Weak community economy</p>
<b>Opportunity (Opportunities)</b>	<b>Strategy (S+O)</b>	<b>Strategy (W+O)</b>
<p>Have potency Destination area development tour coast Could developed as area cultivation fishery Could developed become a culinary area and become PAD Kab. Bone There is support development of the inner area Regional Regulation on RTRW Bone</p>	<p>Make a residential area fishermen of the Bajo Nation as a destination area tours that have easy accessibility ; Optimizing existing facilities and infrastructure in area as support Regional development as destination travel ; Provide facilities that support the Area for cultivation fisheries ; To do residential area arrangement in accordance with wisdom local friendly community environment ; Give training special for Public local in develop the area as a business area through cooperation between Public with government local.</p>	<p>Develop existing infrastructure in residential area fishermen of the Bajo Tribe; Invite Public local for aware and care to environment local ; Need existence development of a decent residential area management the environment ; To do affirmation to the rules maintenance environment especially in the area coast beach .</p>
<b>Threat ( Threats )</b>	<b>Strategy (S+ T )</b>	<b>Strategy (W+T)</b>

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<p>Appearance pattern life consumptive society When this area developed become a destination area travel , then Public local will threatened and marginalized as well as Wisdom local society will is lost The development of dense , chaotic and tended residential areas seedy is area vulnerable disaster like erosion , abrasion and tsunami</p>	<p>Increase awareness Public local for permanent guard sustainability culture so as not extinct ; Creating Cooperation between Public with government local in development of the area to be area destination travel ; Invite Public for care to environment the place stays them. Make strict rules and give mitigation disaster for Public local if occur disaster natural Conserve existing mangrove forest along coast bone bay</p>	<p>Making Zone zoning in order to create use good land ; Development tourism area management culture in the area coast ; To do addition facilities and infrastructure in area development ; do repair HR quality with recruit Public local to get involved in development of the area ; Society and government local must cooperate in increase quality environment and provide impact economy Public</p>
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Source: results analysis writer, year 2021

**3. CONCLUSION**

- a. In explaining characteristics Settlement Fishermen of the Bajo Nation who live on the Coast Bone Bay, can seen from location and position his settlement. In addition to the location and position settlement fisherman, for knowing characteristics settlement fishermen of the Bajo Nation in the Coastal Area Bone Bay can conducted with method identify and analyze characteristics settlement that is condition infrastructure settlements in the residential area of the Bajo Nation on the coast bone bay with see 5 (five) aspects that use standard Decree of the Minister of Settlement and Regional Infrastructure No. 534/KPTS/M/2001 regarding Standard Minimum Service (SPM). Aspect the consist from: 1) road; 2) drainage; 3) drinking / clean water; 4) sanitation; and 5) waste. Condition physique building Bajo people on the coast Bone Bay can seen from three (3) aspects that is condition building, pattern settlements and facilities settlements .
- b. Based on results evaluation influence pattern settlement with aspect continuity could concluded that configuration most suitable room with draft sustainable for the arrangement of the Bajo ethnic settlement area , namely : pattern settlement group that can minimize damage environment . Other than that can also be used as the place for effort in increase economy Public as well as could maintain values social culture Public coast. Development of residential areas for the Bajo people on the coast Bone Bay can achieved with several regional development strategies , including : other :
  - Increase role as well as active the Bajo Tribe community ;
  - Increase ability Public in management environment ;
  - Develop institutional Public based on ecology and wisdom local ;

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- Increase ability analysis problem environment and development area potential.
- Make a residential area fishermen of the Bajo Nation as a destination area tours that have easy accessibility ;
- Optimizing existing facilities and infrastructure in area as support Regional development as destination travel ;
- Provide facilities that support the Area for cultivation fisheries ;
- To do residential area arrangement in accordance with wisdom local friendly community environment ;

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