

The Typology of Coastal House Functions in Bajo, Soropia Sub-District

Ahsan Hidayat Setiadi^{1*}, Lisa Dwi Wulandari², Damayanti Asikin²

¹Master Program in Built Environment Architecture, Faculty of Engineering, Universitas Brawijaya, Indonesia

²Lecturer, Department of Architecture, Faculty of Engineering, Universitas Brawijaya, Indonesia

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*Corresponding author: Ahsan Hidayat Setiadi

Abstract

Original Research Article

Geographically, Soropia sub-district is located in Konawe district, Southeast Sulawesi, which consists of a large number of coastal areas which are transitional sites between land and sea. This condition has indirectly affected the shape of the area's character caused by the relocation carried out by the government in an effort to build a tourist area in Bokori Island to move the coastal settlements in Bajoe Village, Soropia Sub-District. This coastal settlement is a form of reflection of the marine culture inherent in the Bajo people. One of the coastal settlements in the Soropia sub-district is a settlement in Bajoe Village with a building orientation towards land orientation. Due to this issue, in Bajo Village and its surroundings, there are three different site orientations in Luni coastal area including water-based buildings, semi-water buildings that tread on water and land, and land-based buildings. In addition, there is also a diversity of house functions in this coastal area which provide the characteristics of Bajo tribe's coastal building identity in Bajo Village, Soropia Sub-District. To find out the diversity of the characteristics and identity of Bajo tribe's coastal settlements in Bajo Village, a review of the typology is carried out. The discussion of the typology of this settlement can be visualized through the function of the house which elaborates the function and form of the floor plan of the house. Through the results of the analysis, it is found 5 typologies of functions in the existence of the coastal area of Bajo Village, Soropia Sub-District. Other than that, it is also found that (1) residential function houses with an elongated floor plan, (2) residential + trade function houses with elongated floor plans, (3) residential function houses with combined floor plans, (4) residential & rental function houses with elongated floor plans, and (5) houses residential function with a wide floor plan. The diversity of the types of functions found in these coastal settlements is influenced by the economic conditions and the type of work of the house's residents.

Keywords: Coastal Settlement, Bajo, Typology, Function, Soropia.

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1. INTRODUCTION

Soropia sub-district is one of the sub-districts located in Konawe district, which in this sub-district is very identical to the coastal area that the existing transitional site from land area to ocean area indirectly affects the settlement conditions in the area (Adha Taridala, *et al.* 2019). The character of the Soropia sub-district settlements, especially in Bajoe village, can be visualized through the form of architecture and marine culture that is still attached to the Bajo tribe as a coastal community (Rahim, Basri, & Fauzi, 2018a). Activities and community activities carried out in coastal and ocean areas certainly have an impact on the creation of a culture called marine culture. According to Dahliani in Maryati (2009), marine culture can be interpreted as a form of expression and perspective, way of life, behavior and a form of adaptation of people living in coastal areas for generations. Based on the results of this community, it creates the existence of coastal

settlements in coastal areas with various elements and components that support it (Afdholy *et al.*, 2019). In coastal settlements of Bajo tribe in Bajo village, Soropia sub-district, there are aspects that become the context of the existence of locality in the coastal area settlements of the Bajo tribe, Bajo village, Soropia sub-district, such as houses on water or houses on stilts, semi-stilt houses, or houses that tread on water (Gobang, Antariksa, & Nugroho, 2017). In these houses, various components and supporting elements are attached, such as bridges and piers. In the coastal area of the Bajo tribe in Bajo village, Soropia sub-district, there are 3 areas of space that affect the characteristics of the area. The existence of 3 orientations to live in water, semi-water and also land is due to the relocation that occurred in the Bajo tribe who originally inhabited the coastal area of Bokori Island (Rahim *et al.*, 2018a).



Fig-1: The Bajo Tribe Coastal Settlement Area in Bajoe Village, Soropia Sub-District

Bokori Island, which was previously known as a place where the Bajo tribe inhabited with a model of a house on stilts or *babaroh*, is a prototype of a Bajo traditional house (Rahim *et al.*, 2018a). However, due to the relocation, Bajo people who live on the island of Bokori occupy land on the coast of Soropia. Due to the fact that Bajo tribal community has not adapted enough to the orientation environment of living on land, Bajo Back tribe inhabits the coastal area in the Soropia sub-district which is spread into several coastal villages, one of which is the Bajo village as a place to live (Rahim, Basri, & Fauzi, 2019). Over time, the Bajo tribal community in Bajo village underwent a transformation of living which was oriented towards the mainland. This has led to a transformation of residential forms that are different from the initial conditions of the Bajo house which is known to have the concept of a house on stilts as a form of natural response and cultural reflection that is integrated through traditional house buildings. Based on the phenomena that occur, the research seeks to highlight the uniqueness and potential of the typology of coastal houses located in Bajo village, Soropia sub-district, in the exposure of the results of this study it will certainly provide crucial insights regarding the characteristics of the typology that is devoted to the function of the house.

It is hoped that this research will not only raise the uniqueness of the typology which is specialized in its function and can also become a reference in planning sustainable coastal settlements. Because in the planning of sustainable buildings such as coastal houses of the Bajo tribe, it certainly has the unique potential to become a tourist village with the existence of various typologies it has. Therefore, according to Wikantiyoso *et al.* (2021), to realize a sustainable area, it must be able to influence the conditions, ecology, or community

influences and economic conditions. This research is also expected to be able to map the research on typology of Bajo tribal houses academically and increase awareness regarding the typology of coastal houses and can enrich findings within the scope of this research.

2. MATERIALS AND METHOD

2.1 Literature Review

2.1.1 Functional Typology

Typology in general is a science that discusses and studies about types, in which types specifically have unique or special characteristics (something to be unique or different to the other) and then these types can be grouped or classified (Santoso & Wulandanu, 2011). Etymologically typology comes; thus, the meaning and understanding of typology in general is a science that studies the classification and grouping by type. In simple terms, understanding typology can be interpreted as a concept that seeks to describe a group of objects based on the similarity of characters from their basic form (Egam & Rengkung, 2017). Studies related to architectural typology can be used as references and benchmarks in an effort to find out architectural forms. According to Moneo in Afdhali 2017, typological analysis can be divided into 3 phases, including:

- a. exploring history in order to find out the initial idea of a composition or the origin of the occurrence of an object's existence in an effort to analyze its typology,
- b. analyzing the typology to find out the function of an object, and
- c. performing an analysis related to typology by searching for simple shapes in a building against the basic shape and basic properties.

If viewed based on the formation factor, function is an important factor that becomes the initial formation of the typology formation. Function is a crucial factor that is highly important in the existing form in architecture because fundamentally architecture is a place to accommodate human activities and needs that include natural conditions in it. Activity is something that arises from human behavior and habits physically and psychologically (Rizqi Afdholy *et al.*, 2019). The existence of the desire of the community or consumers related to the necessities of life is reflected and transformed into an idea (typology); the science of typology then produces forms and forms. Function is a use which can give meaning but there is a dependence on the object that it embodies. In the context of architecture, a form embodied by function can of course be a building or a house (Rahim, Basri, & Fauzi, 2018b).

Functions can be visualized through the relationship between activity types and space types. It is this function that eventually forms a pattern and also a type of space. The function will also of course determine the types of activities that will be carried out in the daily activities of the lives of the residents of the house. So it can be said that the function of the building is a basis for the initial idea of forming a model of the shape of the building which then affects the space requirements. According to Joseph and Gobang *et al.* (2018), an aspect of typology can certainly be studied from the inner space which includes the shape of the floor plan, as well as the spatial pattern of the building and also the connections between spaces. In other words, the space in the building is of course interrelated between one room and another with the function of the building, so it can be concluded that the typology of function is a typing process that can be seen through the non-physical aspects of a building which can then be visualized from the function and purpose of using the building which can then be related or connected to space and have an influence on the formation of the space.

2.1.2 The Culture of Living in Coastal Communities

There are two kinds of architectural components in an area which is a container or space which is a place for architectural forms to take shelter. These components are in the form of physical components as well as non-physical components. The physical components of architecture are visually more clearly shown through the appearance of the physical objects contained in an area space where the physical form is made by a series of interwoven mass and spatial planning on a time scale and also a spatial scale while the non-physical component is a social and cultural life of the community which is the background for the physical formation as well as ways to take advantage of the environment and human relations with the physical area (Sudarwani, 2012).

The life of the Bajo village community, Soropia sub-district, with the existence of marine culture becomes a unique thing that can be seen visually. Because Bajo people reflect their social and cultural existence in the form of buildings as an effort to respond to the needs of their activities which are close to the ocean and become a differentiator from buildings in general in the Soropia Sub-District. The dependence of Bajo community on the existence of the sea forms a marine culture that is closely attached to the life of Bajo people in Bajo village, Soropia sub-district. The social and cultural conditions of the sea inherent in the Bajo tribe, which incidentally are marine and coastal communities, make the patterns of settlements and inhabited dwellings adapted adaptively to these conditions (Tahara, 2014). According to Rahman (2014), Marine culture can be seen visually in the daily activities of the Bajo people in Bajo village, where the majority works as fishermen. Then, there are several traditional activities that cannot be separated from the ocean, such as *Bapongka*, *Sasakai*, and *Mamia Kadiola*. Judging from the physical aspect of marine culture, it is reflected by the form of coastal architectural buildings. According to Tahara (2013), physically, the coastal architecture of the Bajo tribe consists of coastal houses with supporting elements of a footbridge and also a pier.

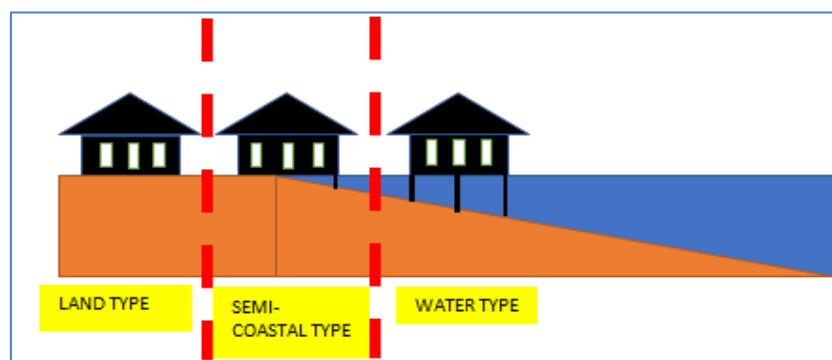


Fig-2: The Bajo Tribe Coastal Settlement Area in Bajoe Village, Soropia Sub-District

The socio-cultural aspect of the coastal settlement area of the Bajo tribe, Bajoe village, Soropia sub-district is a influential aspect because the community is able to create the built environment through distinctive characters such as the coastal settlement so that it becomes a unique and dynamic attraction (nurfansyah 2008). Spatial patterns found in coastal settlements generally form an elongated pattern following the coastline in coastal areas (serve 2016). The existence of the sea for tribal communities is certainly felt to be able to meet the needs of the sea gypsea community both from the social and cultural aspects because the sea and the Bajo tribe have a very close relationship and have been going on for generations.

The visual pattern of the Bajo tribal society looks simple because it can utilize the space in its residential building optimally. The physical condition of the building of the Bajo tribe is also influenced by the economic condition of the owner of the house so that in different economic strata, differences will be found in the physical form of the house.

3. RESEARCH METHOD

3.2.1 Research Method

The research method applied in this study is to apply descriptive qualitative research methods through a typological approach. The qualitative research method according to Cresswell (2014) is a research process in understanding various human and social problems by creating a comprehensive and complex picture which is then described in words. At the next stage, a report is carried out on the basis of detailed views that have been obtained from various sources of information based on natural settings. This research method is chosen by the researchers because it is able to observe phenomena that occur in the field (Sham *et al.*, 2018).

At the sample selection stage in this study, a purposive sampling is applied. Purposive sampling is a data collection technique that is carried out through certain considerations (Ramadanta, 2010). This technique is a technique that is carried out by selecting a sample based on the special characteristics possessed by the sample and based on consideration of the existence of a close relationship with the existence of previously known population characteristics. The existence of the population in the research related to this typology of function is all houses that are sheltered in the Bajo tribal settlement area with a total of 123 houses.

The determination of the physical criteria carried out in this study is carried out with the aim of obtaining the diversity of types found in the function of the coastal residential houses of the Bajo tribe in Bajon village, Soropia sub-district. Through the results of the classification of houses, several samples are taken and able to represent the type of building from the total

population of coastal houses, that will be classified based on the physical characteristics of the house, namely:

1. house that treads on water / water based architecture,
2. semi-water house (a house that treads on water and land)/ semi-water based architecture, and
3. House that treads on land / land based architecture.

The selection of respondents from this study is grouped into two parts, which are the first owner of the research object's house and the second is people who have conducted similar research on typology and research related to Bajo house architecture such as cultural observers, or academics. Respondents who come from outside are certainly expected to be able to strengthen the data from the findings obtained in the field.

3.2.2 Research Location Object

The location of this research is located in Bajo village, Soropia sub-district, Konawe district, Southeast Sulawesi. The population density in this area is quite low because there are only 123 houses with an area of about 1.5 KM² so that there is a fairly wide spacing in the Bajo tribal settlement area in the Bajo village, Soropia sub-district. The research area in Bajo village consists of 3 hamlets, namely Mapadaku hamlet 1, Samaturu hamlet 2 and Sikamaseang hamlet 3.

The scope of the research area is related to the typology of building functions in the coastal area of the Bajo tribe in Bajoe village, Soropia sub-district by taking houses that tread on water (water based architecture), semi water (above water and land), semi water based architecture and houses which tread on land based architecture. Based on the sample of houses taken at different site conditions, it is expected to be able to analyze and determine the typology of functions of the coastal settlement area of Bajo tribe in Bajoe village, Soropia sub-district.

Scope of the area in this study took 17 samples of houses scattered in the residential area of the Bajo tribe starting from houses that tread on water, semi-water (above water and land), and on land.

4. RESEARCH AND DISCUSSION

4.1 Identification of research object

Case taking aims to be able to obtain descriptive visualization related to the characteristics of the unit of observation in the case, as well as to generalize and predict population parameters. This research is applied because the researcher has not been able to conduct research directly on all units of observation comprehensively covering all units of analysis and individuals within the scope of the research population. In this study, the researchers take a case that represents the unit of observation.

In qualitative research, the sampling technique often applied in related research is the non-probability sampling technique. It is a sampling technique that can identify things classified as ambiguous in preliminary research. In the application of non-probability sampling in research related to Bajo typology, it is not known whether each element has the opportunity to be used as case elements or not.

The case selection applied in this study is purposive sampling. This case selection technique is a data collection technique through certain considerations (Sugiyono 2010). The population used as a reference in this research is all house buildings located around the coastal area of Bajo village, Soropia sub-district, Konawe district, Southeast Sulawesi. Precisely, it is taken in three hamlets namely *Mapadakau*, *Sikamaseng*, and *Samaturu* with a total of 123 residential buildings.

In order to be able to obtain cases through purposive sampling technique, the criteria for the object under study are excessively needed in this research. The object of research is a house focused on houses in the coastal area of Bajoe Village, semi-coastal which is also sheltered on land and whose footprint is on land. Based on this, the characteristics that are used as a reference in determining this case are based on 3 initial typologies which are the basis for the object of research. The application of the initial typology of the Bajo traditional house is useful to facilitate the categorization process in the research settlement area.

The physical building in this study is the basic characteristic in selecting cases. Based on the total population of the Bajo traditional house, the classification is basically based on the physical character of the traditional house. A house that visually looks original with a long period of time, as well as a house that is relatively young. The result of the clarification which is the determination is intended to be able to visualize the morphology of the shape of the house and then find the formation of the shape of the house that exists in this coastal settlement in researching the typology. Then, in order to provide a distribution limit that exists in the case of houses, it is necessary to add to the selection criteria that exist in the case of objects, for example, the object is a Bajo coastal house dominated by natural materials and the object is a Bajo traditional house which is equipped with supporting features such as a footbridge and various accessibility in it. The determination of the physical criteria of the building is intended to be able to obtain the type of house that is the diversity in this research on the typology of the Bajo traditional house; then, cases

are taken that represent the type of each building such as the direction of the face, the façade, and the materials attached to the building.

Furthermore, to visualize the diversity of types of Bajo houses and to visualize their effects, it is necessary to conduct direct insights to the community in the coastal settlement area of Bajo Village. The interviews conducted on the respondents in question are to obtain information related to the cultural character of the Bajo people living which is believed to have an influence on the shape of the community's house. The selection of respondents in this study is separated into two; first is the owner of the house, in which the object of research is divided into two, namely the indigenous people and respondents from outside the settlement. It means that the residents who will be selected as cases and key persons are village elders who have a long duration of stay in the residential area who know the development of the settlement in question. In addition, the characteristics of the respondents are obtained from outside the settlements or from research of a type of humanist or academic. Through the results of the explanation described above, the following criteria are described for objects and research subjects that are the plan of observation of this research.

- a. Object of research
 1. The object is the house that is sheltered above the coast.
 2. The Object is the house that is sheltered above coast and land.
 3. The object is the house of the Bajo villagers who take shelter on land.
 4. The object is the original Bajo traditional house.
 5. The object is with natural materials.
 6. The object is coastal house that features accessibility supporting elements such as circulation paths to footbridges.
- b. Research Respondents
- c. Respondents are residents who live in Bajo traditional houses.
- d. Respondents are residents of the house selected as object cases.
- e. Respondents from outside are residents and visitors who come from outside the research site.

Based on the criteria in selecting the research object, the selected research objects include all hamlets in Bajo village which consists of three hamlets such as *Mapadakau* as hamlet one, *Samaturu* as hamlet two, and *Sikamaseang* as hamlet three.

Table-1: House Sample

HOUSE NUMBER	COASTAL HOUSE	BAJOE VILLAGE	
HOUSE 1	OVER THE WATER	HOUSE 10	OVER WATER AND LAND
HOUSE 2	OVER THE WATER	HOUSE 11	OVER WATER AND LAND
HOUSE 3	OVER THE WATER	HOUSE 12	OVER WATER AND LAND
HOUSE 4	OVER THE WATER	HOUSE 13	OVER WATER AND LAND
HOUSE 5	OVER THE WATER	HOUSE 14	OVER THE LAND
HOUSE 7	OVER THE WATER	HOUSE 15	OVER THE LAND
HOUSE 8	OVER WATER AND LAND	HOUSE 16	OVER THE LAND
HOUSE 9	OVER WATER AND LAND	HOUSE 17	OVER THE LAND

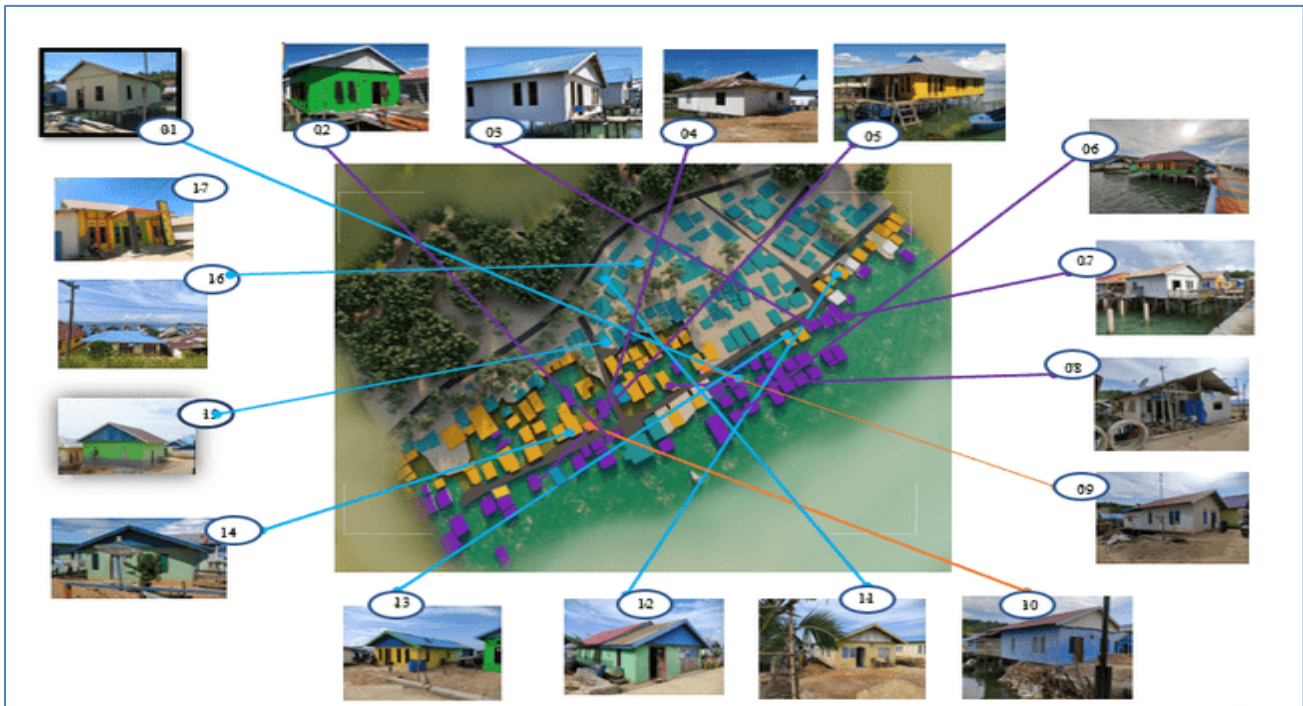


Fig-3: House Sample

4.1.1 Analysis Results of Function Typology in Coastal House of Bajo Tribe in Bajo Village

The coastal settlements of the Bajo tribe in Bajoe village, Soropia sub-district, are coastal settlements where there are various functions of their houses. The functions contained in each house in this study affect the existence of the form of the floor plan and the pattern of spatial arrangement in each house. The discussion of this function discusses the function of the house and space related to the form of the plan and spatial planning. The typology of the function of the coastal houses of the Bajo tribe is taken based on the process of identifying the space in each sample house. Then, based on this space, it can be determined the polarity of money and the shape of each house found in the coastal settlements of Bajo tribe in Bajoe village, Soropia sub-district.

The typology of buildings related to function begins with making observations reviewed by looking at the function of the houses of the coastal Bajo people in Bajoe village, Soropia sub-district. To be able to see the existence of the functions that exist in this Bajoe house, the existing space in the building can be identified. A house in which there is a living room, bedroom, kitchen, and toilet/bathroom is categorized as a building that has a residential function. Then, the house in which there is buying and selling activity and has a place for trading such as a storefront or shop in the house which is also used as a place to live can be categorized as a residential function + trade house. Furthermore, if there is a residential house but it also functions as a rental or rental house, the house is included in the +rental residential category. To determine the space in seeing the existence of the function of the house, it can be seen in the visualization in the following figure.

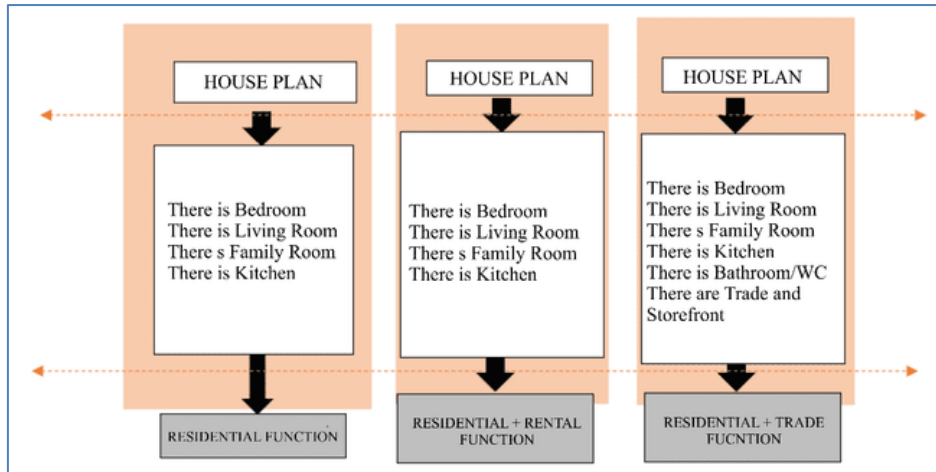


Fig-4: Visualization of House Function

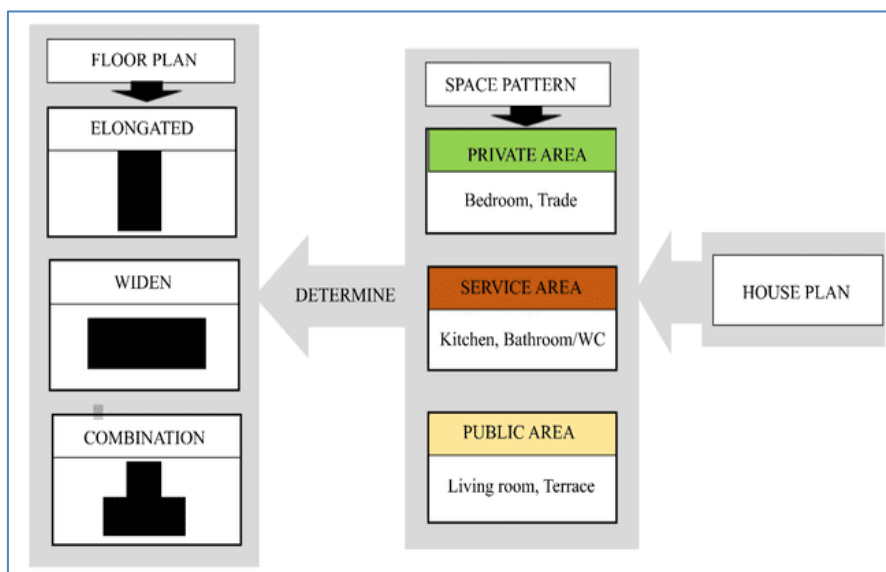


Fig-5: Form tracing

In identification stage of the function typology which looks at the function of the building, this stage also seeks to see the spatial arrangement pattern that occurs in the building. This is because the existence of function and space are interconnected. Thus, in the process of identifying the function, it is necessary to know the condition of the space first so that the function of the building is obtained according to the house under study. Each house contained in the building certainly has different functions and characteristics. In the building, there are private spaces such as bedrooms, service rooms such as kitchens and bathrooms, public spaces such as terraces and also living room.

The shape of the floor plan is certainly a result of a series of arrangements in forming the existence of a certain pattern through the shape of the plan will have an influence on the shape contained in each of the house buildings. Basically, every individual certainly has various and different wants and needs; thus, there are differences in the space requirements and the shape of the building. In an effort to limit the existence of the

diversity of floor plans and space in the houses in this study, efforts to limit the form are carried out by looking at the polar money contained in the house. The form of the floor plan which is the result of the arrangement of the spatial pattern in the interior from the results of the polar arrangement of the money inside/interior, it can be in the form of a square, elongated, widened, or a combination of several forms.

The determination made in looking at the function of the building and the shape of the floor plan carried out earlier becomes a basic reference in order to be able to perform a typology analysis of functions on a house sample in coastal settlements of Bajo tribe in Bajo village, Soropia sub-district. The analysis carried out on the typology of building functions and also the form of the floor plan is combined so that it becomes one to be able to see each house. The following is the reduction result from the typology function analysis on 17 samples of houses found in coastal settlements of Bajo tribe in Bajoe village, Konawe sub-district, Southeast Sulawesi.

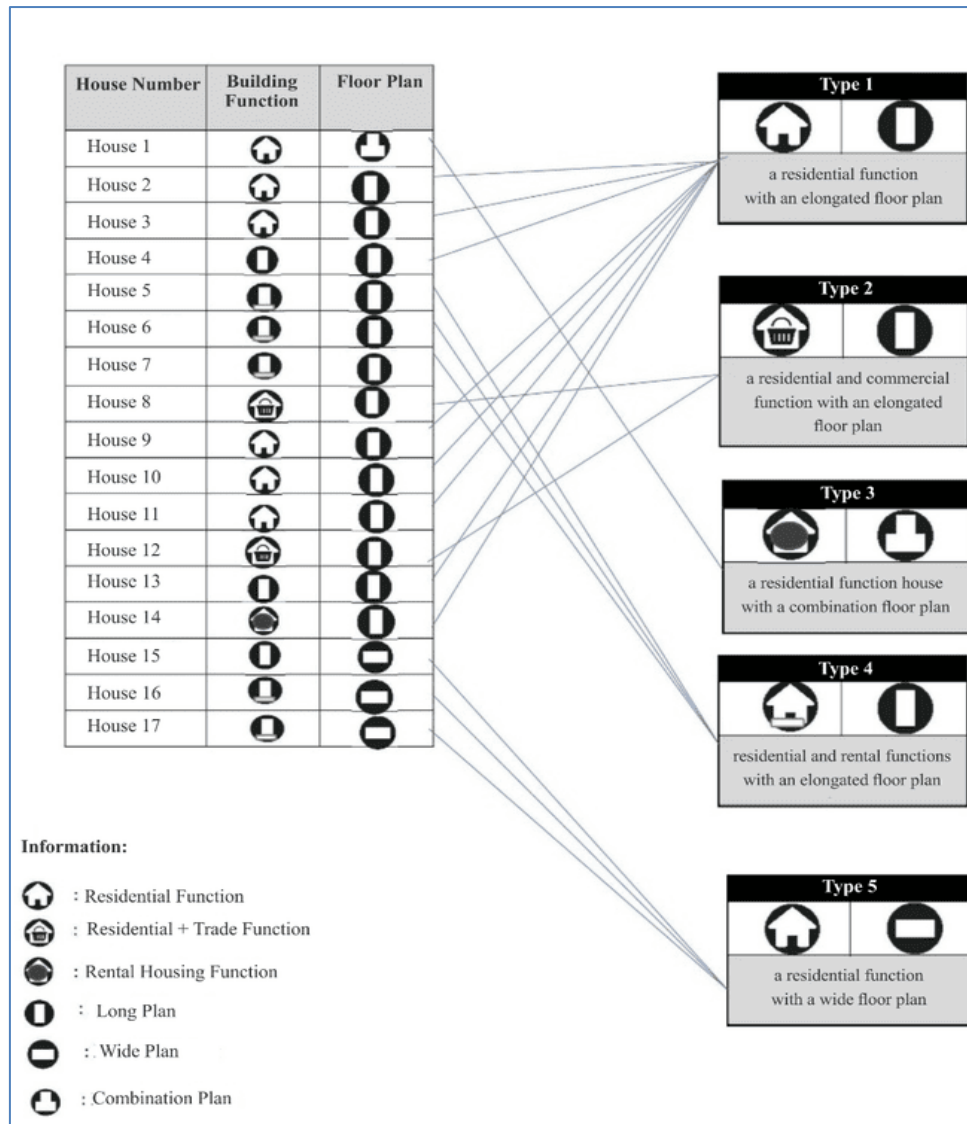


Fig-6: Function typology Determination Table

Based on the analysis results of building functions carried out on 17 samples of houses in coastal settlements of Bajo tribe in Bajo village, Soropia sub-district, show that in the buildings have three functions, which are residential functions, residential + trade functions, residential + rentals function. The function of the building certainly provides facilities for activities carried out by the residents of the house.

A house with a residential function is only a house that functions as a residence with all the socio-cultural dynamics attached to the house. In addition, a residence with a trade function is a residence that also functions as a trading house that provides daily needs in its business. Then, the residential and rental functions are residential houses which can be rented out to live for tourists who want to travel on the island of Bokori, considering that the location of the coastal settlements of Bajo tribe is close to the coastal tourist area of the island of Bokori. In addition to the various functions of

the building, there are three forms of house plans in this study; the difference in the form of these plans is related to the existing building functions in each house. The type of floor plan for houses in this coastal residential area consists of a floor plan with an elongated type, a floor plan with a widened type, and a floor plan with a combined type that is elongated and also widened.

The determination of the floor plan shape carried out is taken through the existence of spatial planning patterns that exist in each house. To be able to see the function typology of the each house building, it can be combined between the unit of observation of the function of the building and space so that it is possible to obtain a link between the typology of the function of the building and the typology of space which can then be seen through the shape of the floor plan and the spatial pattern. The following are the results of the distribution of the five types of houses that have been adjusted to the position of the house.

Table-2: Distribution of Functional Typology in the Coastal Settlement Houses of Bajoe Village

Type	Total			Total Number
	Coast	Semi-Coastal	Mainland	
The function of a residential house with an elongated floor plan	4	2	2	8
The function of a residential + trade house with an elongated floor plan	1	1		2
The function of a residential house with a combination floor plan			-	1
Functions of residential and rental houses with elongated floor plans	1	1	1	3
The function of a residential house with a wide floor plan		1	2	
Total				17

When viewed from the analysis process, the first type of house, a house with a residential function with an elongated type, is the type of house that dominates in the coastal residential area of Bajo tribe in Bajo village, Soropia sub-district. As for the other ties, they are only found in certain areas scattered in this area. It is caused by the residential function house with an elongated type, a type of house that is close to the initial prototype of a Bajo house with a stage type. Shelter is a primary basic need for the community as a place to live and carry out activities. The demand for housing or housing is always there considering its existence as a basic need so that, in the process of development, the dwelling is transformed and adapted to the needs and abilities of the occupants to build a house. As the case with several emerging types other than the first type, the need for work is the basis for the emergence of types of house functions, as happened in the type of houses two, three, four, and five.

4.1.2 Type 1 House

The first type is a type of house that has a residential function with an elongated floor plan. This type of house is functioned as a occupied house by Bajo tribal community with all the functions inherent in it in accordance with the existence of social and cultural influences reflected in the physical form of the building. This house with residential function consists of a terrace that can function as a public space and can be a dock for residents of the house. The function of the front porch as a dock is as a reflection of the activities of the head of the household who lives as a fisherman. Rituals and cultural activities in a series of celebrations can also be carried out on the catwalk terrace. Then, in the next room, there is a living room which is a public space which can also be used as a space extension in carrying out social and cultural activities. Furthermore, there is a family room which is a semi-public room with three bedrooms and a service room such as a bathroom/WC and kitchen at the back of the house.



Fig-7: Type 1 House Design

4.1.3 Type 2 House

The second type of house is a house that has residential and commercial functions with an elongated floor plan. This second type is a form of house transformation with the addition of a function, such as trading. The addition of this function to the house certainly provides a new space to accommodate this function. The added function in this house is caused by

economic factors which then affect the space and result in a form that adapts to the existence of the function in the house. Visually, this type two house looks like a commercial area for trading at the front of the house. The commercial area consists of grocery stores and oil and oil stores for fishing purposes. On the left side of the building, there is an accessibility path through the footbridge leading to the living room area which is then

adjacent to the family room and bedroom; while at the back of the house, there is a service area in the form of

a kitchen and bathroom.



Fig-8: Type 2 House Design

4.1.4 Type 3 House

The third type of house is a residential function house with a combination floor plan, such as an elongated and widening floor plan. A house with a residential function has a fixed space that is safe and adapted to its function as a place to live. These spaces consist of a walkway terrace area which is a terrace space for public spaces, a living room followed by a living room or family room, which functions as a semi-public space and can be used for traditional events. Then, there are room services such as kitchen and

bathroom at the back. The catwalk terrace can be used as a pier. Considering that, the owner of the house is a fisherman with water based architecture house model or a water house on stilts on the water. On the left side of the building, there is a ladder as access to the *leppe* or boat to go to sea. At the back of the house, there is also a kitchen with an extension of the room for washing which can also be access to get on the boat. Due to the existence of these supporting elements, this type of house has a combination or mixed floor plan consisting of an elongated and widening floor plan.

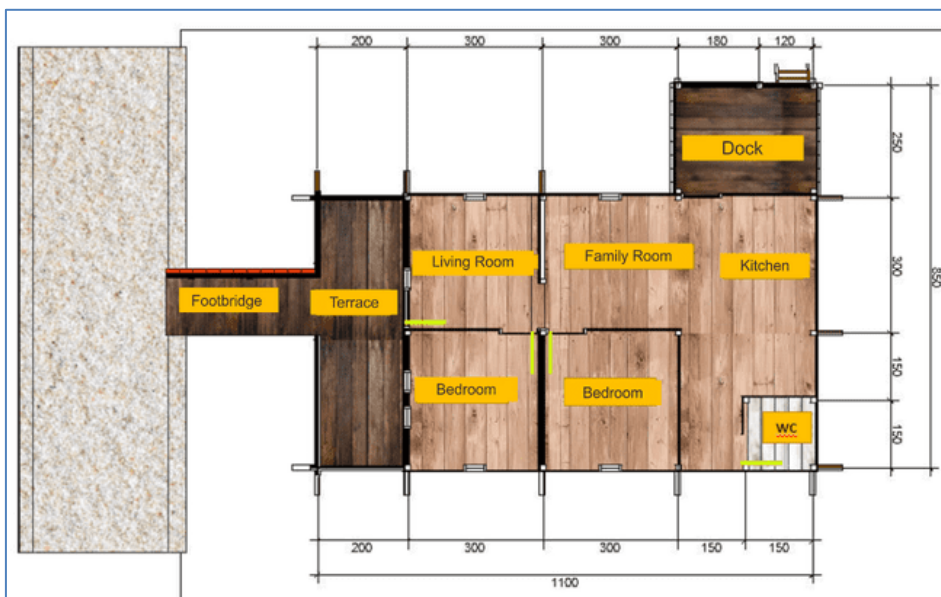


Fig-9: Type 3 House Design

4.1.5 Type 4 House

The fourth type of house is a house that has both residential and rental functions with an elongated

floor plan. This residential house can switch functions if the homeowner rents his house as a rental house for tourists who want to travel to Bokori Island. Lodging in

Bulau Bokori has relatively high prices; thus, residents' options for renting out their houses are a solution to be able to stay at a relatively low price. The space in this house includes a footbridge that can be used as a public

space and also a footbridge. Then, there is a living room. Furthermore, there are three bedrooms and at the back there is a service room such as a kitchen and bathroom.



Fig-10: Type 4 House Design

4.1.6 Type 5 House

The fifth type of the house is a house with a residential function with a wide floor plan. In general, houses with elongated floor plans dominate existing dwellings in the coastal residential area of Bajo tribe. However, this fifth type of house has another form, namely a wide floor plan. The shape of this wide plan is certainly influenced by the wishes of the homeowner and the arrangement of the space in it. There are spaces such as terraces, living rooms, family rooms, bedrooms. Other than that, there is also a side service area, namely

the kitchen and bathroom at the back of the house. This fifth type of house apart from a different shape, the facade contained in this *ruah* is also different when viewed visually in the coastal residential area of Bajo tribe. There are supporting elements combined with facade models such as lattices as *shadin* to reduce sunlight. In addition, the difference in the application of materials is also one of the things that make this house different in the form of a house in the coastal settlement area of Bajo tribe in Bajoe village, Soropia sub-district.

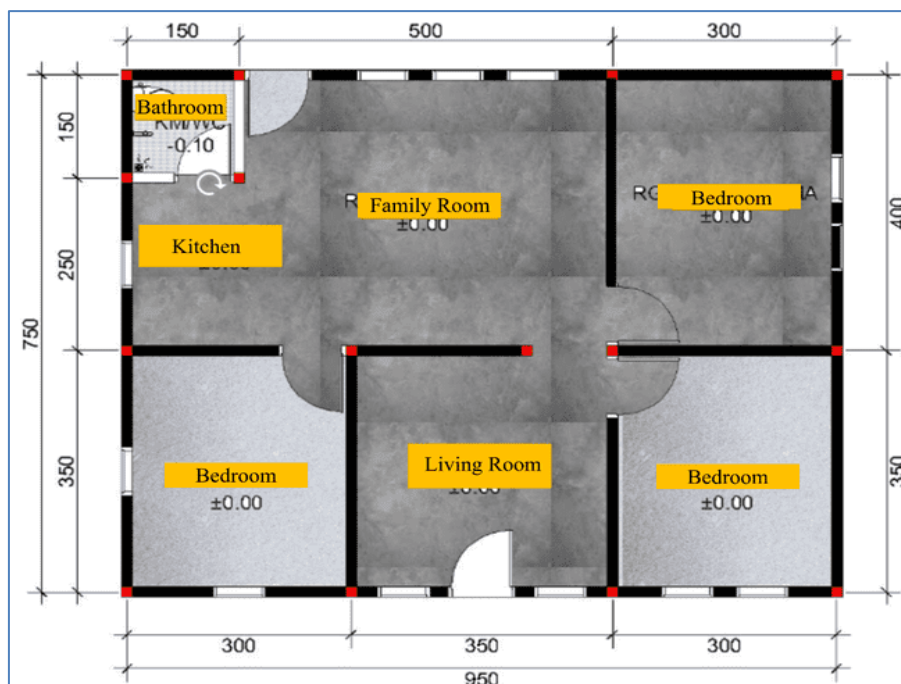


Fig-11: Type 5 House Design

5. CONCLUSION

The typology of functions in the existence of the coastal settlements of Bajo tribe in Bajoe village, Soropia sub-district has a variety of types of house functions. The typology of functions contained in the coastal settlements of the Bajo tribe is influenced by economic level factors and also the type of work owned by the residents of the house. The influence caused by the culture of living gives rise to the form of several types of house functions. There are five types that represent the typology of functions in the coastal settlement area of Bajo tribe in Bajo village, Soropia sub-district, such as the type of residential function house with an elongated floor plan, the type of function of a residential and commercial house with a wide floor plan, a house with a residential function with a combined floor plan, a house with a residential function and a rental with a floor plan, and residential function houses with wide floor plans. Each function contained in each building certainly facilitates the activities carried out by residents in the house. In addition to the existence of residential functions which are generally found in each house, there are also other functions such as trade and rental. The house with the additional extension of the trade function is certainly done to sell various daily necessities for the coastal community of Bajo tribe in Bajo village, Soropia sub-district which also affects the economic level of the home owner. In addition to the trade function, there is a rental function which makes the typology of the function of houses in this residential area diverse.

REFERENCES

- Adha Taridala, S. A., Muhammad Aslan, L. O., Yusraini., & Asriya. (2019). Income and cost efficiency of lobster farming in Soropia, Southeast Sulawesi, Indonesia. *IOP Conference Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/382/1/012037>
- Egam, P., & Rengkung, M. (2017). Analisis visual kawasan pesisir pantai. Studi Kasus Permukiman Masyarakat LOS di Pesisir Pantai Malalayang. *Jurnal Arsitektur DASENG*, 6(1), 21–31.
- Gobang, A. A. K. S., Antariksa, A., & Nugroho, A. M. (2017). Study of Spatial Systems in the Form of Bajo Tribe House in Wuring Village of Maumere City. *Local Wisdom: Jurnal Ilmiah Kajian Kearifan Lokal*. <https://doi.org/10.26905/lw.v9i1.1864>
- Gobang, A. A. K. S., Sudikno, A., & Nugroho, A. M. (2018). Pola pemanfaatan dalam tata spasial hunian suku bajo yang berkembang di kampung wuring kota maumere. *NALARs*, 17(1), 51. <https://doi.org/10.24853/nalars.17.1.51-64>
- Maryati, S. (2009). *Preferensi Masyarakat Dalam Memilih Sekolah Menengah Kejuruan Negeri (SMKN) Di Kota Semarang*. 119.
- Rahim, M., Basri, A., & Fauzi, H. (2018a). Typology of Bajo Tribe Settlement in North Maluku. *IOP Conference Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/213/1/012028>
- Rahim, M., Basri, A., & Fauzi, H. (2018b). Typology of Bajo Tribe Settlement in North Maluku. *IOP Conference Series: Earth and Environmental Science*, 213(1). <https://doi.org/10.1088/1755-1315/213/1/012028>
- Rahim, M., Basri, A., & Fauzi, H. (2019). Identification of construction system and arrangement of bajo tribe settlement based on local wisdom and environmentally friendly. *International Journal of GEOMATE*. <https://doi.org/10.21660/2019.64.ICEE4>
- Ramadanta, A. (2010). Kajian tipologi dalam pembentukan karakter visual dan struktur kawasan (Studi kasus: Kawasan Ijen, Malang). *Jurnal SMARTek*, 8, 130–142.
- Rizqi Afdholy, A., Dwi Wulandari, L., Utami, S., Magister Arsitektur Lingkungan Binaan, P., Teknik, F., Brawijaya, U., ... Arsitektur, J. (2019). *Tipologi fungsi rumah tepian sungai di pinggiran kota banjarmasin (Typology of Riverside House Function in Banjarmasin Periphery)*. 1(1), 2656–7180.
- Santoso, & Wulandanu, B. G. (2011). Studi Pengamatan Tipologi Bangunan pada Kawasan Kauman Kota Malang. *Local Wisdom-Jurnal Ilmiah Online, Issn: 2086-3764*, 3(2), 10–26.
- Syam, S., Yudono, A., Wikantari, R., & Harisah, A. (2018). Architecture spatial arrangement of Bajo tribes settlement in Kabalutan Island of Central Sulawesi. *IOP Conference Series: Earth and Environmental Science*, 202(1). <https://doi.org/10.1088/1755-1315/202/1/012062>
- Wikantiyoso, R., Cahyaningsih, D. S., Sulaksono, A. G., Widayati, S., Poerwoningih, D., & Triyosoputri, E. (2021). Development of Sustainable Community-Based Tourism in Kampong Grangsil, Jambangan Village, Dampit District, Malang Regency. *International Review for Spatial Planning and Sustainable Development*, 9(1), 64–77. https://doi.org/10.14246/IRSPSD.9.1_64