Fencing Kolong Area Relation with the Work Type

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Abstract. Work was an important aspect of people's lives, as well as homes. Both were two things that cannot be separated in the life of fishing communities. The work that people currently do as seaweed farmers and fishermen involve family and community members. In work, it takes space that was roomy, shady, and comfortable. During this phenomenon in a rural community is no exception in the coastal areas that use the model of the house stage will do the development of space into under the body of the house (kolong) with various types of materials and purposes, generally the purpose of fencing was adapted to the material used. The development of seaweed cultivation work that requires space that was roomy, shady, and comfortable in the process (especially sorting of seaweed) this affects the fencing form of the kolong. The purpose of the study was to know how far the fencing area undertaken by the community associated with the work. The method used was a mixed-use method. The result obtained is the decreasing of the undercover area as a whole due to the increase of social requirement to the room which was roomy, shady, and cool to work.

Keywords: Fencing kolong space; stage house; coastal area; fishermen

1 Background

Pantai Bahari is one of fisherman's settlement in south Sulawesi. Seaweed cultivation was introduced in the area beginning in the late 1990s. Now the seaweed cultivation business is growing rapidly. Due to the existence of these businesses also have an effect on the space arrangement in the residence. Seaweed drying is scattered in coastal areas, roads, or people's home yard. But in the process of sorting (choose seaweed that will be used as seeds and that will be dried for sale) is generally done in places of shade, especially under the house (kolong). Kolong is space or cavity (width) under the object of legged or pierced (like the bed, house stage) [1]; the makeshift house is a house erected on pillars; house on stilts [2]. So far in the fisherman settlement especially those who use the design of the house stage, the development of the house is done vertically down (kolong). But now, there is a change in activity in kolong which it was originally only used for socialization, childcare, and children's play is now used as a workplace. The role shift will certainly affect the inhabitant’s decision of the house in the design and development of his dwelling.

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The purpose of the study is to determine the extent to which the role of work affects the decision of residents in developing or fencing under his current home.

The method used was a mixed-use method by mixing quantitative and qualitative methods. Quantitative by way of measurably measuring the number of homeowners who do fencing in the area under the house, the material used and the function of the under which has been fenced. Being qualitative was to make observations of the activities that take place under the vault. The analysis used to give a presentation of the amount of data that can be in the graph and table, then relate to the concepts and theories associated with it.

2 Field Study Result

Based on the results of field observations and measurements, the data obtained related to the work of the community with the style of development of his house. Figure 1, shows the shape of a house that is generally inhabited by seaweed farmers and fishermen in the coastal maritime village.

Fig. 1. Housing and House unit form of seaweed farmers under the house (kolong)

The community house generally takes the form of a stage house. The work need to employ 8-12 employees to work on the cultivation process. While for groups of fishermen who put the bait on fishing hook totaling 3-6 people. Work is done in the shade and sheltered so the working atmosphere can be more conducive. Generally, working as seaweed sorters (picking and tying on span straps) are women and teenagers. Figure 2, show activities that take place in kolong.
Fig. 2. Fisherman's business activities under the house

Workers who put fish bait on the hook are generally done by fishermen and involve family members and neighbors as laborers. The work was done starting at 9 a.m. morning, until 2 p.m., before the fishermen go to sea in the afternoon.

Fig. 3. Fencing material of kolong

From 108 samples of houses that carried out the development under the house unit, 57.24% of the data were collected using bamboo material, 6.48% using wood, 18.51 using zinc, and 26% using brick material as a cover the kolong. Houses that do fencing in kolong the use of split bamboo material generally functioning the space as a cattle pen or warehouse storage of used goods. But unfortunately, that serves as the second service room (service room 1 is above the house). Fencing using zinc material is used for service and warehouse, development with wood material to function for sleep/rest, service, and
warehouse. While, house that uses brick material as a cover material then generally function as a bedroom, service (kitchen + dining room) and family room. Figure 4, show the diversity of development types of kolong space the function in the region:

![Development of Kolong Function](image)

**Fig. 4.** Graph. Development of kolong Function

Fencing of kolong the commonly done for service needs. Service activities performed on top of the house moved to the bottom with the aim of more easily and close to the workplace and more secure

![Space Function with Occupancy Type](image)

**Fig. 5.** Graph of space function with occupancy type

### 3 Discussion

Residential of coastal areas especially those adjacent to the coast are very limited, housing conditions are very dense, the distance between houses is very close, and land prices are getting higher to build new ones (Figure.1). To anticipate the condition then the resident develops the space to the vertical, that is by utilizing space under the house. This is a frequent condition that if there is no more land to build, people develop houses vertically [3].
Data in Figures 3, 4, and 5 show the development of kolong by means of fencing kolong by use of different material types and functions. Fencing in the real area is adaptive re-use. According to Widiastuty [4], adaptive re-use that was understood as a modification of a place to be adapted to an existing function or proposed function. Jogja Heritage Society (2009) in Widiastuty [4] write that, formulates adaptive reuse as an activity using the old structure for new function. In general, rehabilitation of the exterior or interior.

Fencing of kolong for various purposes was done by residents. According to Kellet, et.al. [5], the reason someone changes the space comes from "the mutual relationship between the inhabitants and their place of residence". This reason also depends on the condition of the occupants, the physical aspects of the dwelling, and the socio-cultural requirements of the residents themselves. The residents fix and change the physical structure of the house based on their own expectations and needs.

Data shows that 53% of the community was fencing their houses using the bamboo material. Based on field observation, fencing of kolong use of the material is generally only functioned as a service room, warehouse, or cattle pen.

### Table 1. The Relationship Position with Empowerment Function Development

| Development Position at Kolong | Kolong Development |
|-------------------------------|--------------------|
|                               | Service | Rest/ slept | Living room | cattle pen | Work | Warehouse |
| Full area of kolong           | 12      | 16          | 11          | -         | -    | 4         |
| Central to Rear chamber       | 19      | 18          | 10          | 19        | 20   | 16        |
| Back chamber                  | 22      | 2           | -           | 21        | 9    | 19        |
| The front chamber             | -       | -           | 7           | -         | 4    | -         |

Generally, kolong fencing is only done on part of the middle chamber to the back of the chamber of kolong, this happens because the center forward is generally used as a workplace (seaweed and fish). In the work, they are in groups of 6-12 people (Figure 1 and 2), surround the pile of seaweed. It certainly requires roomy space to work, and the remaining available space is used for storage (Warehouse) and service. The number of people who do fencing for the needs of service in the marine fisherman settlement, one of the causes is the service space is a wet room, so that when placed in the upper room (house body) then the material under it will quickly experience weathering, so to prevent that the owner of the house move the kolong. For the type of space category that has undergone changes, the majority of changes made in the kitchen. This shows that the kitchen is the most vital space both in supporting domestic functions and productive functions at home [6].

Home development has the advantage, as Tipple [7] points out in profits gained in home change that can improve home quality standards, such as improving the physical appearance of the house (construction, materials, finishing), providing more space to the core household (main household), the availability of more space per person, and can increase the satisfaction of the owner and the occupants of the house itself. The following table shows the condition of kolong in the research conducted in the range of time 5 years at the same location.
Table 2. Comparison of fencing conditions in the kolong area between 2013 and 2018

| Year | Fencing material “bamboo” | Fencing function in kolong |
|------|---------------------------|---------------------------|
|      | 2013. idawarni [8].       | Sleep | Rest | Living room | Ware house | Cattle pen | Work |
|      | 96.15% | 57.24% | 47.1 | 32.7 | 10.6 | 52.9 | 34.6 | 17.1 |
|      | 2018   | 83%    | 40.4% | 35.97 | 18.51 | 9.66 | 30.51 | 13.66 | 28.66 |

Based on these data, it can be concluded that kolong is generally maintained. This is in accordance with Mona Aryani, Silfia [9], that the space that is maintained wide and its location could be because it is in accordance with the needs of residents. When looking at Figure 6, a graph showing the size of a community house on the Pantai Bahari in 2018, more than half of the existing houses have quite spacious residential area, so it can be said that the room needs of the residents in-house have been fulfilled, the space development in kolong was reduced. Kolong as a space for work function is increasing. The following data shows the dimension housing units in the Pantai Bahari.

Fig. 6. The houses size

It affects the limited number of people who do fence of kolong area with the aim of moving all the activities from the top to the kolong. The role of kolong as the workspace shows the many people in the fishing village that have turned into a businessman. This condition is in line with Kellet and Tipple opinion [5] that in low-income areas, the complex web of economic linkages which exists between home-based enterprises and housing allows all but the most destitute to out a living and have access to shelter. It is believed there is a symbiotic relationship between housing and home-based enterprises, as dwellers are able to consolidate their dwellings through the income earned; many households would not have a dwelling without their home-based enterprise and many enterprises would not exist without the use of a dwelling. Thus, housing plays an important part in the existence and operation of the informal economy in many countries.
4. Conclusion

Communities in Pantai Bahari that generally have a livelihood as cultivators of seaweed and fishermen experience significant economic developments, as evidenced by the size of their homes. This has an effect on their decision in the development of occupancy as has happened before. Currently the number of people who do fence under the house for the expansion of room need to be reduced, as well as the function of space under the house is generally widely used for work. Working as a seaweed cultivator requires more space and shade, so it is left roomier without cover to accommodate residents and community.

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