HOUSING CHARACTER IN THE BORDER BEACH AREA OF CAMBAYYA

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ABSTRACT

Cambayya is one of the areas in the Makassar city that has slum dwellings located on the water. The houses appears sporadically due to various community problems, such as the high price of land in the Makassar city and difficult to reach by the lower classes and the desire to live near the workplace. As a result, people are looking for low-cost dwellings, although not for rationing, poor sanitation conditions, and lacking facilities and infrastructure. The purpose of this research is to know the physical and non physical character of the residence located in the area starting directly adjacent to the water body up to the Barukang road. The method used is the mix use method. In the housing study is divided into 3 zones. The first zone is in the dwelling above the water body, the 2nd zone in the dwelling above the coastal border and, the 3rd zone is in the dormitory adjacent to the main road of the area. The data is collected through the results of field observations in depth on the physical condition of the dwelling and the community. Medium data are measured through closed questionnaires submitted randomly to communities in each zone. The result obtained is the occupancy in each zone is different because of the influence of occupation, land ownership, and location of establishment.

Keywords: Housing, character, border beach, cambayya

INTRODUCTION

Kelurahan Cambayya (Kelurahan is the lowest administrative area directly under the sub-district located at the lowest level, it is as well as of village level and is headed by a lurah, the kelurahan is also a joint area of several RW (Rukun Warga). The administrative area chosen as the survey area is RW 4. This election is based on housing conditions that appear to have a different character from the general housing in urban areas. housing in RW 4 is partly built on the coastal border area to the shallow seas. The density of population and buildings is high, it can be known from

the calculation of population density reaching 437 people / ha and building as many as 92 units / ha.

RW 4 is a buffer zone (coastal border area) that should not be inhabited. But in fact, many homes are built in that place, even some have taken the territory of water bodies. This will have a negative impact on the aquatic environment and the view from and to the sea. The houses appear sporadically triggered by lack of land and high prices of urban land as well as low purchasing power of the community, especially for those working in the informal sector. As a result, for the people of this class will find a cheap and close residence from the workplace even though the surrounding environment is less supportive as decent and healthy dwelling.

The research location is in the north part of Makassar city, precisely in Kelurahan Cambayya RW 4. Figures 1 and 2 show the research location and the zone division.
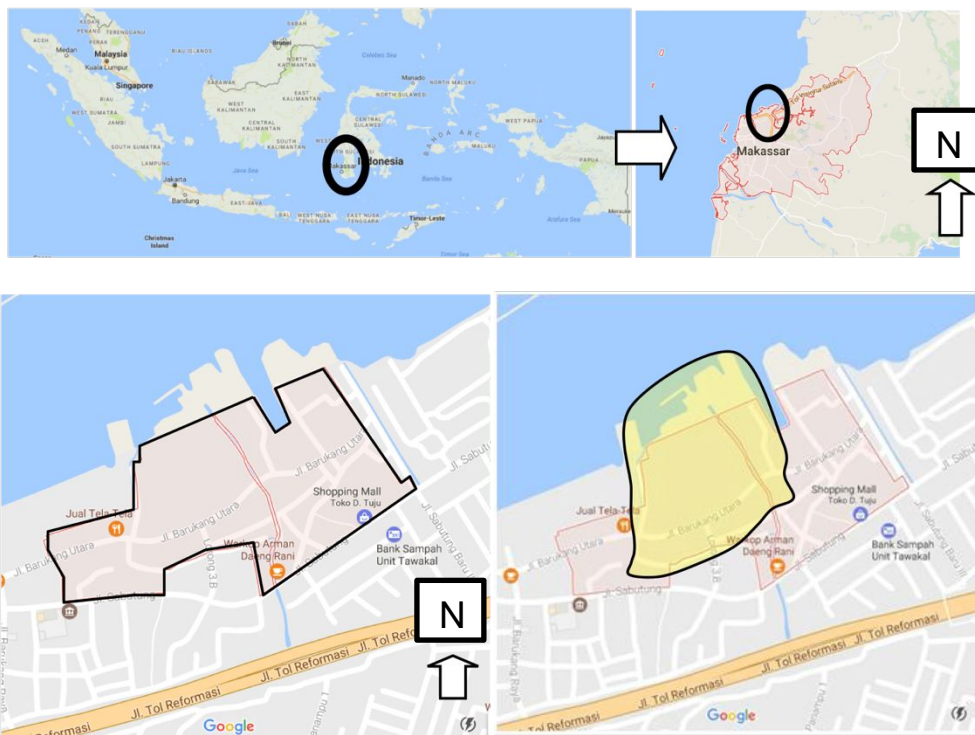

Figure 1. (Top) Location of Cambayya Sub District;
(Below) Location of RW 4. Kelurahan Cambayya

The left figure is the boundary of the research area that is the north part bordering the strait of Makassar, the east with PT IKI (ship industry company Indonesia), the south with Barukang street, and the west with Ujung tanah subdistrict. The right figure is the selected location RW 4 (the representation of the government in the kelurahan that consists of approximate 4 RW)
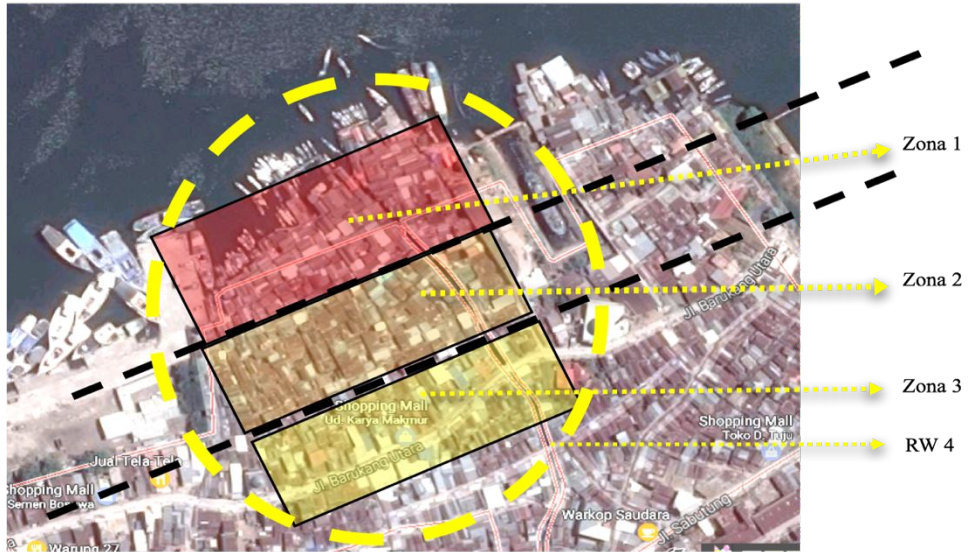
Figure 2. Zone Division of Research Area

Each zone is sampled as many as 20 people each one representing the head of the family. In each zone there are approximately 120 houses. In one house can be inhabited by more than one family.

Zona 1

a. Houses

The zone 1, homes are generally built on water, some built on reclaimed land. Housing has an elongated pattern following the beach shape, solid, irregular, and dirty *kolong* (space under the house) filled with garbage. Housing and environment conditions in zone 1 can be seen in Figure 3.

Figure 3. (Continuance) Physical Building Condition in Zone 1

The building shape is the raised-floor structure. The house terrace adjacent to the Makassar Strait also functions as a dock, boat mooring, and drying fish or other marine products. Generally, the house wall is a combination of zinc and board. The road used is a boarding bridge with a width of 1 m that can only be passed by pedestrians, motorcycles, and bicycle. The housing pattern is generally irregular. Based on the figure 3, the existing condition of houses in zone one is generally partly uninhabitable house and the house size is not in accordance with the residents number of the house, one of them caused by the lack of their financial ability to build a decent home or to buy land owned by the government. The structure of the house in zone one is a general emergency and semi-permanent.

b. Facilities

Street
There is a walkway as the access between houses looks very inadequate, width varies between 75cm - 1 m. made of wood and bamboo (Figure 4).

Figure 4. Path Condition

The path can only be passed by motorcycle and pedestrian, using wood material and narrow width. Sometimes people use it to take a bath. The distance from house to house is very narrow, we found among 50 cm until 1.20 m.
The material is used zinc or board with unplanned shape and looks very simple, material types and conditions are not important, for the community the most important is they have a shelter that can be a protection for the family and rest from the daily routine. It is seen generally used on the side and rear walls.

Sanitation
Neighborhood settlements in this zone look dirty with garbage floating in the underside of the house. At some points there are public toilets (fell free Water Closet) used by local residents for metabolic needs. Being for bathing activities they do above the wooden bridge near the house (Figure 5).

Figure 5. The Sanitation Condition

c. Demographics data

The following data (Table 1) shows the house size, occupation of houses, ownership status, and number of family members who live in one house.

Table1. The House size, Occupation, Land Ownership Status, and the Number of Households Heads

No.	the number of households heads (KK)	Occupation	House Size	Ownership status
1	1 KK	Urban village head	14 x 3 m = 42 m^2	Personal
2	1 KK	Fishermen	5 x 7 m = 35 m^2	Government
3	2 KK	Labor and Fishermen	5 x 13 m = 45 m^2	Government
4	2 KK	Labor and Fishermen	7 x 8 m = 42 m^2	Government
5	1 KK	Fishermen	4 x 5 m = 20 m^2	Government
6	1 KK	Fishermen	3 x 7 m = 21 m^2	Government
7	1 KK = 5	Fishermen	8 x 7 m = 42 m^2	Personal
8	1 KK = 5	Living cost from children	4 x 8 m = 32 m^2	Personal
9	1 KK = 4	Fishermen	5 x 11 m = 55 m^2	Government
10	1 KK = 4	Living cost from the child	3 x 7 m = 21 m^2	Government
11	1 KK = 6	Living cost from the child	9 x 7 m = 63 m^2	Government
12	1 KK = 7	Fishermen	8 x 15 m = 90 m^2	Personal
13	1 KK = 2	Fishermen	6 x 5 m = 30 m^2	Heritage
14	1 KK = 3	Fishermen	6 x 5 m = 30 m^2	Government
15	1 KK = 7	Labor	6 x 15 m = 90 m^2	Personal
16	1 KK = 4	Fishermen	6 x 7 m = 42 m^2	Government
17	1 KK = 1	Selling stalls	4 x 3 m = 12 m^2	Government
18	1 KK = 4	Fishermen	6 x 6 m = 36 m^2	Government

Table1. The House size, Occupation, Land Ownership Status, and the Number of Households Heads (continued)

No.	the number of households heads (KK)	Occupation	House Size	Ownership status
19	1 KK = 2	Pedicab driver	3 x 6 m = 18 m^2	Government
20	1 KK = 4	Fish auction	5 x 7 m = 35 m^2	Government
21	1 KK = 6	Fishermen	6 x 12 m = 72 m^2	Government
22	1 KK = 1	Peddler	2,5 x 6 m=18 m^2	Personal
23	1 KK = 3	Security	6 x 6 m = 36 m^2	Personal

Generally, the occupied land is owned by the government inhabited by fishermen and laborers, the building measuring between 30 - 44 m^2.

d. Activities

There are various activities undertaken by society in zone 1, the activities are shown in Figure 5.

Figure 5. The Activities at Zone 1

Various activities carried out by communities in zone 1 are centered on the pier, whether done by men, women or children. Men's activities are generally related to work as a fisherman, while women and children are generally only associated with leisure activities while doing interaction.

Zona 2

a.   Houses

In the 2nd zone, the buildings are erected on a coastal border, the land has been dumped before building a house. The houses in this zone can be seen in Figure 6.

Figure 6. Physical Condition of Housing

The houses located in zone 2 have 2 types, most of which is onland house type and only a small part is raised-floor structure house. The material used is also various kinds, there is material of zinc, wood, and stone or combination among them.

b.   Facilities

Street
The street condition of the housing environment in zone 2 is shown in figure 7.

Figure 7. Street Condition

The path in zone 2 is wider, the size between 1.5 - 2 m. materials generally use paving block, only a small part of it is still a soil street. part of the street is decorated with plastic flowers handicrafts from housewives in the area. The path in addition to functioning as a circulation area as well as an area of interaction, play, selling for the surrounding residents.

Sanitation

The sanitation facilities in zone 2 are inadequate. Water closet (WC) is located in each resident's house and there are no public toilets in the neighborhood. While the dirty water network flowed on the path side with unfeasible conditions (shallow and narrow), the dirty water flow is directed to the sea.

c. Demographics Data

Table 2. The House size, Occupation, Land Ownership Status, and the Number of Households Heads

No.	The number of households heads (KK)	Occupation	House Size	Ownership land status
1	1 KK	Fishermen	5 x 6 m = 30	Government
2	1 KK	Selling vegetables	7 x 9 m = 63	Government
3	1 KK	Fishermen	5 x 5 m = 25	Government
4	1 KK	Labor	12 x 4 m = 48	Government
5	1 KK = 3 org	Selling fish	3 x 11 m = 33	Contract
6	2 KK = 7 org	Labor	3 x 11 m = 33	Contract
7	1 KK = 2 org	Labor	3 x 11 m = 33	Contract
8	2 KK = 7 org	Labor	11 x 7 m = 77	Government
9	1 KK = 4 org	Fishermen	7 x 4 m = 28	Heritage
10	1 KK = 4 org	Driver	4x 5 m = 20	Personal
11	2 KK = 5 org	Labor	4 x 5 m = 20	Personal
12	1 KK = 6 org	Security	4 x 7 m = 28	Government
13	1 KK = 5 org	Car broker	6 x 12 m = 72	Government
14	1 KK = 4 org	Labor	4 x 7 m = 28	Personal
15	1 KK = 6 org	Fishermen	5 x 8 m = 40	Government
16	1 KK = 4 org	selling stalls	4 x 6 m = 24	Personal
17	1 KK = 6 org	Fishermen	4 x 5 m = 20	Government
18	2 KK = 4 org	Fishermen	7 x 6 m = 42	Government
19	1 KK = 6 org	Labor	7 x 6 m = 62	Heritage

In zone 2, in one house there are 2 household heads, more varied livelihoods, land tenure status is no longer dominated by the government

d. Activities

In zone 2, community activities are not different from those occurring in zone 1. People generally have activities on the road. The activity can be seen in Figure 8.

Figure 8. Community Activities in Zone 2

The relaxed activities and social interactions of men, women and children generally take place on the street in front of their homes.

Zona 3
In zone 3, houses are not construct on coastal border, but in the proper place.

a. Houses

Figure 9. Forms of Houses Adjacent to the Main Road (jalan Barukang)

Generally, houses are onland type, with stone material. Some houses, especially those bordered directly by the main road, built two-story and using brick material, but not denied if there is also a house in the form of semi-permanent in the zone (Figure 9).

b. Facilities

Street
In general, the width of the road in zone 3 is approximately 1 m to 2.5 m, and no longer found dirt road. In zone 3 the distance between houses range 10 cm or even up to 1 m (Figure 10).

Figure 10. Physical Condition of Street

c.   Demographics Data

Table 3. The House size, Occupation, Land Ownership Status, and the Number of Households Heads.

No.	the number of household's heads (KK)	Occupation	House Size	Ownership land status
1	1 KK	Labor	6,5 x 4,5 m =29.25	Heritage
2	1 KK	Installment Business	13 x 7 m =91	Government
3	1 KK	Mechanic	3 x 7 m=21	Government
4	2 KK	Grocery Store	8 x 10 m =80	Government
5	1 KK	Entrepreneur	7 x 10 m=70	Personal
6	2 KK	Teacher	5 x 5 m =25	Personal
7	1 KK	Entrepreneur	18 x 20 m =360	Personal
8	2 KK	Entrepreneur	8 x 17 m=136	Personal
9	1 KK = 7 org	Labor	5 x 10 m=50	Personal
10	1 KK = 1 org	Grocery Store	5 x 5 m=25	Personal
11	1 KK = 5 org	Labor	4 x 5 m=20	Personal
12	1 KK = 1 org	Selling	4 x 5 m=20	Government
13	1 KK = 4 org	Tailor	4 x 6 m=24	Government
14	1 KK = 5 org	Labor	34x 6 m=24	Government
15	1 KK = 5 org	Fishermen	3 x 7 m=21	Government
16	1 KK = 4 org	Fishermen	6 x 6 m=36	Personal
17	1 KK = 5 org	Civil Servants	11 x 12 m=132	Personal
18	1 KK = 4 org	Selling	12 x 7 m=84	Government
19	2 KK = 7 org	Construction Workers	11 x 5 m=55	Government
20	1 KK = 2 org	Fishermen	5 x 8 m=40	Government
21	2 KK = 6 org	Entrepreneur	7 x 6 m=42	Government
22	1 KK = 6 org	Fishermen	3 x 7 m=21	Government

Can be seen in table 3, in zone 3 generally residential land of the residents belong to the government, even though already many of the residents can buy the land. One of the reasons is because the location of their settlement is not directly adjacent to the sea, so they feel safe enough to stay for a long time. In addition, the economic level of citizens in zone 3, is sufficient. Generally, in zone 3 local people's livelihood is very diverse. Many residents open business in front of their houses. Like for example they open a food stall, internet cafe, and there is also selling clean water. This is due to the location of their residence directly connected to the main road in kelurahan Cambaya, although not a few who still work as fishermen and laborers. We can see in the table 2 the survey results, namely the area of the building in zone 3 is dominated by a wide range of 15-45 m2. Many of the residents are already able to have a much wider house. Even among them, there are already a few houses of sufficient size, adequate for them to live in.

d. Activities

Figure 11. Street Activities at the Zone 3
Activities of children and women and men are generally done on the street

THEORY / RESEARCH METHODS

Mix use method was used in this research. Physical data were taken through recording and deep observation. Physical data includes housing conditions, which include houses and materials, road and sanitation networks, and building distances. While non-physical data include the type of work, land ownership status, the number of household heads in the house, and the width of the house. Non-physical data is numerical and is taken randomly on every family. Data collection is divided into 3 zones, and each zone averages 20 families. Determination of respondents using random sampling method.

The interview process was performed with non-participation observation (Sugiyono, 2006), where the data of the research were analyzed and presented using descriptive statistical analysis technique.

RESULTS AND DISCUSSION

The following Figure 12 shows the differences land ownership in each zone in the study area
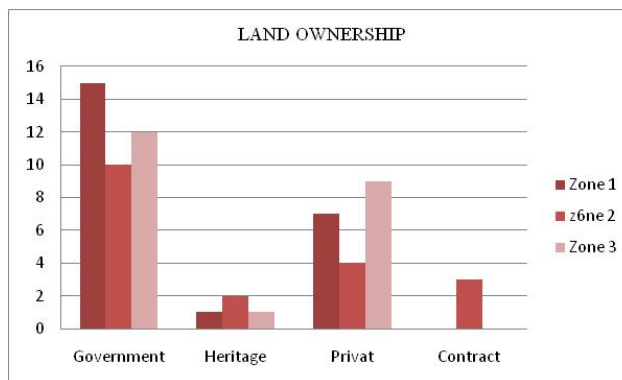

Figure 12. Land Ownership

As noted in the figure 12, that is, the ownership of the community's residence. Cambaya is still dominated by government-owned land. Although not a few of the residents are able to buy their own land. Figure 13 shows the occupation of the residents and Figure 14 shows the house size.
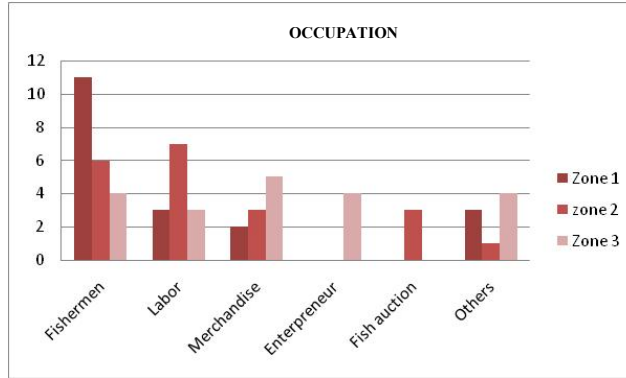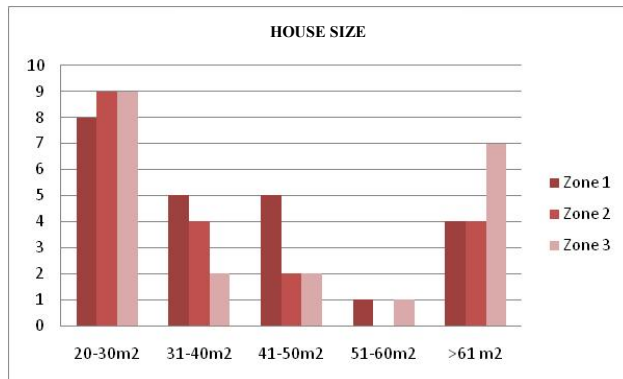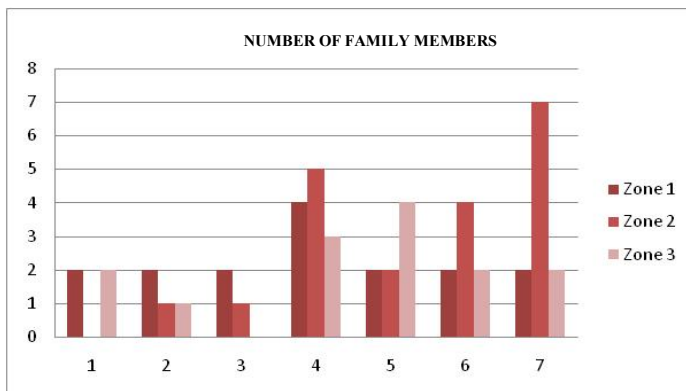
Figure 13. Occupation

Figure 14. House size

Figure 15. Number of family members

Figure 15 shows the number of family members. Cambayya generally inhabited by people who work as fishermen and laborers. The location of the houses is getting closer to the sea, the occupation of occupants is dominated by fishermen, while in zone 2 is more dominated by labor and in the 3rd zone, is dominated by trade sector.

Considering the field conditions, the area of RW 4 included in the category of wild settlements, As mentioned confirmed by Srinivas (2007), he defines wild settlement based on 3 characters, namely physical character, social, legal. In the area of RW 4, these three characters were found. Those facilities are very limited and with a very minimal quality. Generally low levels of income (fishermen and workers), and legal because most households are established on real government land, not for residential purposes.

Although the area occupied by the government and illegal for habitation, but the community, especially fishermen and laborers still choose the place as a residential locality. This is understandable because according to UN-HABITAT (2008) the poor in their efforts to get home, the proximity to the workplace and job opportunities are a major factor in the consideration of choosing a place to live. The proximity to markets, factories, business areas, transport networks and construction sites means greater income, higher employment opportunities, and lower transportation costs. RW 4 is a support area for fishermen and laborers because this area is directly adjacent to the sea as a fisherman's workplace and also close to the port as a workplace for transport workers.

Fishermen and laborers are professions with low income. The link between income level (economic status) and the space of settlements and houses are described in several theories and concepts as Suparlan (1978) says that the house form is determined by economic affordability and cultural influence, which will also affect the physical form of the settlement environment. Meanwhile, according to Smith (in Budihardjo, 1985), low-income communities place site selection near employment as the main preference, then following the status of location and finally the provision of social facilities and convenience. This is in contrast to the upper-income group preference / priority in the field of housing with income level of society can be seen in the following Figure 16.
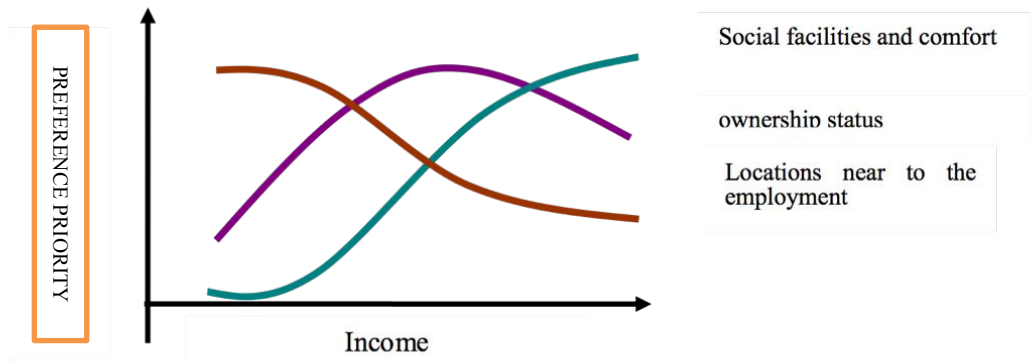

Figure 16. The Relationship between Income and Priority Preference

The Turner Theory (1972) also sees a connection between income abd preference priority, which in addition to income, location, and land positions, the cycle of life (age) also plays a role in that, this can be seen in Figure 17.
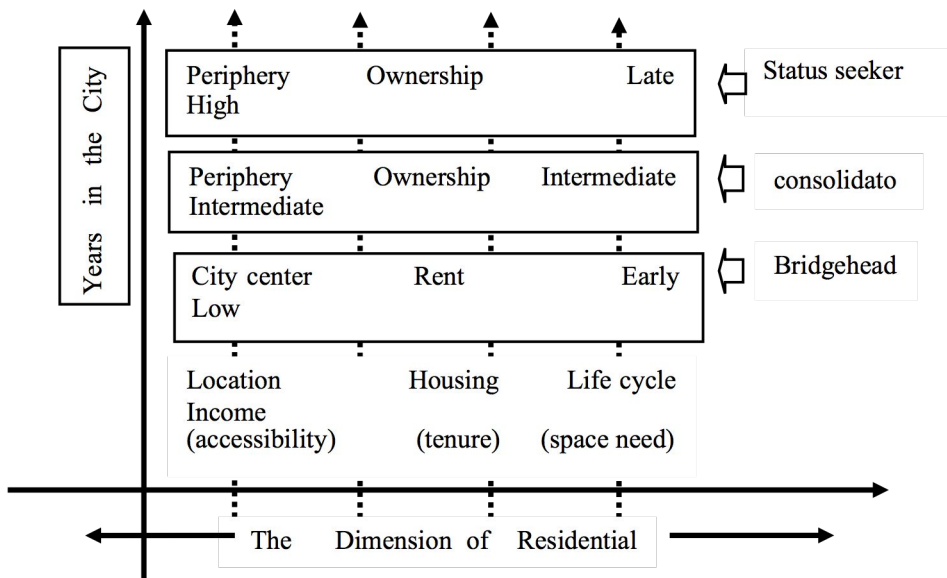

Figure 17. The Role of the Cycle of Life (age)

Associated with the income seen in the figure that the higher of personal income level, then the status of land ownership will be increasingly prioritized. The location of housing will be further away from work. While the study of the lower society demands in the house form revealed by Gans (1978; 29) in Budiharjo (1987) says "lower class people do not demand a beautiful and unique permanent home, yet expect adequate space to accommodate their life activities. the relationship between work and location of settlements expressed by Mulyadi (2007) in Idawarni (2013) that they (fishermen) generally live on the beach, close to the location of their activities, so it is not surprising that they live in areas directly adjacent to water.

Based on the Figure 12, 13, 14, informing that zones 1 and 2 people work is dominated as fishermen and unskilled laborers, the house size is generally between 20 - 50 m^2 and occupied on average between 4-7 people in one housing unit. The three mentioned factors have a relationship, as expressed in the following concepts: The number of families is an important factor affecting household poverty (eg Chemichovsky Dan Meesok, 1984; Sigit, 1985; Alamgir and Ahmed, 1988; Kuznets, 1989; Gaiha , 1989, Firdaussy, 1992) in Agunggunanto (2011). A large number of families will automatically affect the real consumption level of family members, which means the expenditure is also large, but it is not accompanied by high family income. Because fishermen and laborers dominating zones 2 and 3 are low-income groups, as Satria (2009) notes, the fishing community is the poorest of the poor. Informal sector workers such as laborers and fishermen are perceived as blue-collar workers as workers on jobs that rely on physical strength, which thus requires no skills and higher education.

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Fishermen and unskilled laborers have generally low education levels. Payung Bangun (1997) said that one of the poverty causes which is the life of some people related to the quality of human resources (HR) is low level. Therefore, it is not possible to have the ability to respond adequately to the challenges that must be faced in life (Kuemba, 2012).

A high family size, low incomes, and low human resources (low levels of education and skills) are the factors that cause poverty. Poverty of the community in the research area can be seen in the condition of housing material and land ownership.

CONCLUSION

The choice of residential location is strongly influenced by work and income. Lower class people often place occupancy on illegal land, due to the insistence on the need for shelter. The illegal lands are generally close to the location of the work. The arrangement of residential space is affected by the availability of land, land position, occupation and the number of families. Employment is a major factor in choosing residential locations for the low economically, while the land position as a government property gives the community greater opportunity to build shelter than on one's own land, the size of the occupancy is heavily dependent on land availability and economic capacity. This can be seen in zone 1 adjacent to the sea, the width of the houses is not affected by the type of work, but the initial opportunity to build a house. Materials and construction used are the emergencies, this is to facilitate residents to dismantle their homes if the government wants to immediately take over the land.

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