

The Structure of Unplanned Settlements In Badur Village, Medan, Indonesia

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ABSTRACT

An unplanned settlement often grows influenced by factors in life. In a settlement, there are structures that form the settlement both physically and non-physically. In Badur Village, the structures of settlements are shaped with the influence of social conditions and other factors. These structures consist of physical factors, such as settlement shapes, street patterns, and other created spaces. Non-physical factors which influence the formation of Badur Village can be viewed from several conditions, such as social, economy, and communication aspect. The authors used initial observation and interview to study those influencing factors. This theoretical review is also used as a reference in obtaining physical data created in the research area. The results and findings of this research are studies on factors which formed Badur Village. Therefore, the existence of this study is expected to be beneficial in supporting theories as well as further researches, and can also be a recommendation for the government to improve unplanned settlements, especially in Badur Village.

Keywords: Structure, Unplanned, Settlement

1. INTRODUCTION

A settlement is formed from those aspects influencing daily life. Grouping of settlements can occur by the influence from the aspects of life. These aspects are social conditions, economic activities, circulatory system, communication media, political system, administrations, cultures, and recreational activities (Sarkar, 2010). Badur Village is one example of unplanned settlements influenced by aspects of life. The location of Badur Village, which is still in the riverside of Deli in Hamdan Village in Medan Maimun and around the center of Medan in Indonesia, makes it as another portrait of urban settlements growing unplanned. Settlements orientation in Badur Village is influenced by the flow of Deli River. Riverside area generally becomes a place for unplanned settlements. In this case, the government has contribution in making policy towards the growth of settlements either planned or unplanned. The policy is generally designed to be a reference in building a residential area. However, this policy is often aimed at upper middle group; meanwhile, arrangement of living place for lower middle group is not set correctly. In this regard, it can be observed that social aspect and economic level of the society in a settlement will affect the shape and position of the residence (Eldefrawi, 2003).

2. THE STRUCTURE OF UNPLANNED SETTLEMENTS

Unplanned settlements arise with the driven need for a living place. Moreover, most of unplanned settlements become a residential space built in areas that are unofficially planned as a residential space. There are structures which shape the development of unplanned settlements. The settlement structure can be influenced by physical aspects which is the shape of the settlements and non physical aspects such as aspects related to life (Eldefrawi, 2013). Some of these aspects include:

2.1 Social Aspect

In unplanned settlements, social condition of the residents is also influential in shaping its structure. The most prominent characteristic in unplanned settlement is seen in the low quality of residential houses which do not have infrastructure and adequate social facilities (Ali and Sulaiman, 2006:2). Each activity in a city or a settlement requires a certain space and can be done through coordinates or template from the collaboration space. The residents can also connect the space required in accordance with the needs and to support their daily activities. In addition, it also pays to the occupants and their oriented space in building living quarters they sometimes are often not noticed by the authorities (Sanaei, et al.2015). A growing population is generally well supported by similar social circumstances and economic backgrounds (Hurskainen, 2004). Although every unplanned settlement has different characteristic compared with other areas, the special common characteristic can be a reference in assessing whether the settlement is built unplanned or not. The spatial relationship also forms a space that can be used by residents to interact or as a residential area. The growth of unplanned settlements will also increase if there is social equality on its inhabitants.

2.2 Economic Aspect

One factor affecting the development of unplanned settlements in terms of economic aspect is the increase in migration to urban areas. Migration is generally conducted to improve economic conditions that may be obtained in large cities. The immigrants who expect a more decent life will require spaces for their residences. Fulfilling the need for a residence will be manifested by looking for residential area that feels appropriate to their economic capacity (Rani & Shylendra, 2002). In addition, movement among residents also allows the creation of economic interaction space in the region (Mohamed & Mohareb, 2012). The interaction between residents often creates a need for mutual benefit; thus, a space supporting economic activity of the residents in the region is generally created.

2.3 Communication Factor

In forming unplanned settlements, there are certainly other factors that also support the desire of residents to stay. In this case, there are several steps to occupy the space, such as settled, proliferation, and introduction. Some of these steps are created with the influence of communication (Eldefrawi, 2013). Settling is performed by immigrants looking for a place to live. As the need of shelter is fulfilled, it will also bring a sense of comfort to the residents because they can occupy space in accordance with their economic circumstances. Then, there is proliferation which means inviting relatives to join and settle, creating a residential space, and also socialising among residents. The similar social circumstances and economic conditions will create attachments among residents to live together. With such similarities, the next process is introduction. This process occurs due to relative migration which causes the development of physical structure in the settlement in accordance with the social relationships between groups. Generally, the street width and the building pattern are created based on the needs, interactions, and correlations among residents who are already comfortable to live together.

3. METHODOLOGY

The research location was focused on Badur Village, located in Hamdan Village. The settlements of Badur Village are found in X neighbourhood, Hamdan Village, Medan City, Indonesia. The size of Badur Village is around 1.56 Ha. The location of Badur Village consists of two regions namely Badur Atas and Badur Bawah. In Badur Atas Village, the settlement is oriented toward the street; while in Badur Bawah Village, most buildings are oriented toward the river. In two blocks of settlement in Badur Village, there are ± 150 head families with the entire population of ± 420 people. The settlements location has a structure occurring as a social fact of its residents. Spaces in this research location will give contribution in shaping the social behaviour of its residents. The settlements structure has an impact on social life within it. Economic and communication factors become the basis of residents to occupy the research location. The research in Badur Village uses samples from some residents who are assessed as having important roles in their area. Method used to obtain data is by conducting interview. The interview is conducted to obtain data about social circumstances which affect the formation of the settlements in Badur Village. Besides, the obtained variable from theoretical review is made as a reference to observe spaces formed by the interaction of social, economy, and communication among residents.

4. DISCUSSIONS

4.1 The History of Badur Village Formation

Badur Village is a settlement located in the city of Medan. The name of Badur Village was obtained by carrying the history value associated with the name of cruelty victims of G30S/PKI named Badur. The names of G30S/PKI victims and the names of heroes are likely to be used in these areas, such as Ade Irma Suryani Street and Letnan Jendral Suprpto Street. The settlements located in the vicinity of Badur Street are then often called as Badur Village. Badur Village itself is divided into two districts, namely Badur Atas and Badur Bawah. The first settlement grew around Badur Atas namely Badur Street and Sa'idah Street. A growing settlement often refers to the environment in the surrounding area. A good or potential environment tends to bring the desire of settlers to occupy these spaces (Rapoport, 2006). In 1950-1960s, it can be seen that the growth of residential houses began around Badur Street. The growth of houses itself was built with close proximity to each other (Fig. 1).

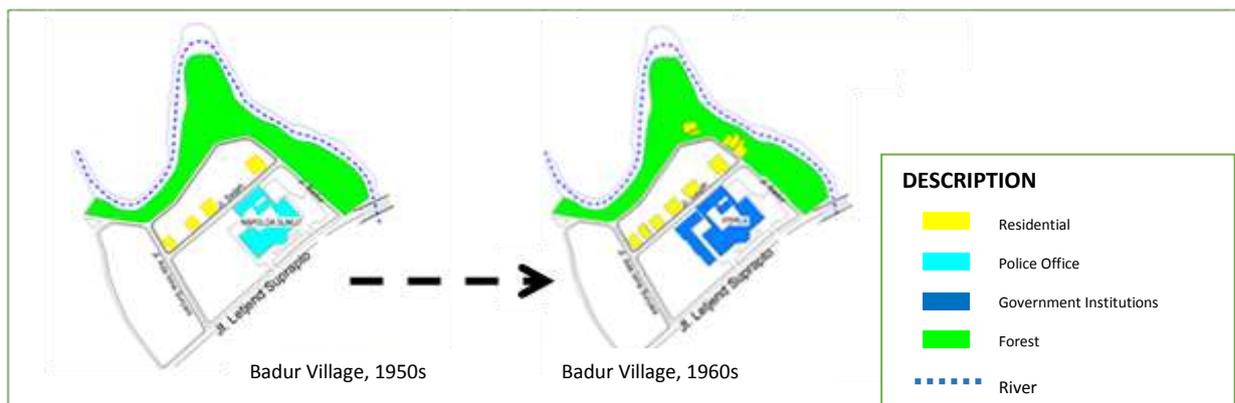


Fig. 1. The change process in Badur Village in 1950-1960s.

The dominant building in that region was the office of Sumatra regional police, but it became a government institution in the plantation sector in the following year. Then, the growth of residential houses started to happen in the riverside area. This was encouraged by the increasing number of immigrants who began entering the city of Medan by reason of looking for a job. The growth in the riverside area was not too significant, there were only few houses built close to each other (Fig. 2). In an area around the river, residential growth was likely towards the riverside area. It happened because the

river could be a life source, so that building residential area around the river made the inhabitants also use the environment. The development of immigrants, who came to the city of Medan, resulted in a greater need for housing. Thus, riverside area which was not planned to be used as settlements was made as residential area to fulfill their needs. Badur Village also became one of the settlers' destination in order to have a residence in the center of Medan. They inclined to choose places that have the potential to get a job and close to the city center.

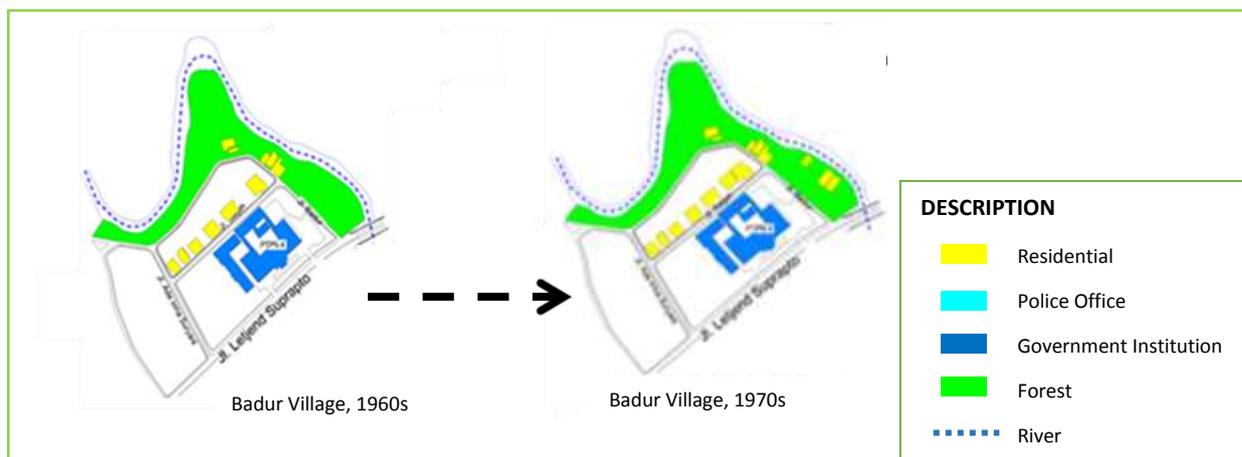


Fig. 2. The change process in Badur Village in 1960-1970s

Therefore, around the year of 1970-1980s, the growth of residential houses started in the riverside of Deli, especially Badur Village. As seen in the picture above, the growth in the riverside area and also around Badur Street began to appear. However, the growth of residential houses was not very significant. There were still many empty spaces around the area of Badur Village. The growth began in 1980s because there were economic factors in the settlements establishment in Badur Village. One of these settlers' reasons was to seek a better life in Medan City. It can be seen in Figure 3, a rapid growth of settlements occurred in the riverside area.

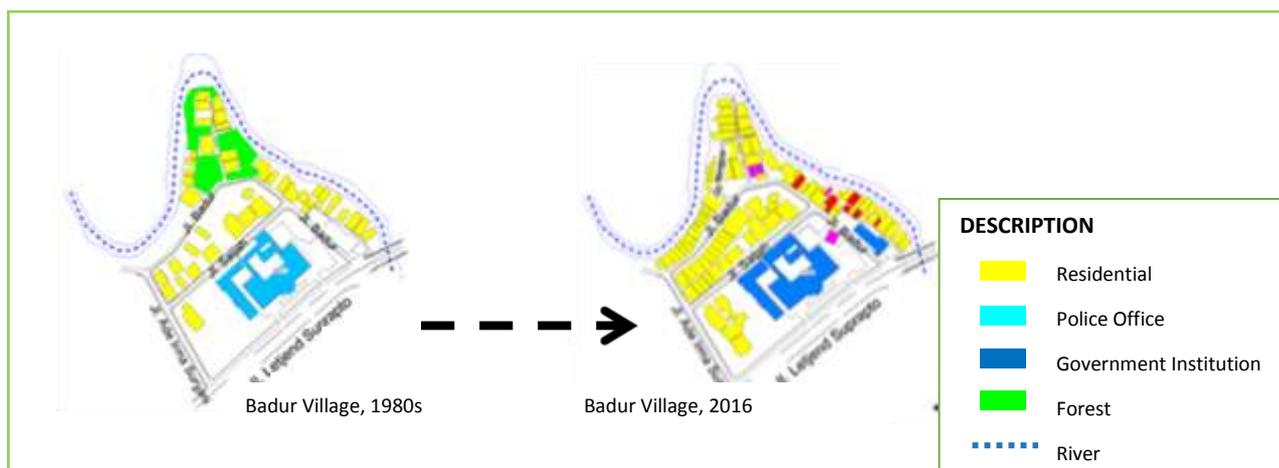


Fig. 3. The settlements growth process in Badur Village in 1980s-2016

In the picture above, it can be seen that there are significant differences from 1980 to 2016. At this time, the riverside area is already crowded with houses built close to each other. In addition to riverside area, the area of Badur Street is also increasingly filled with residential houses. The changes which occurred until now can be seen with fewer empty spaces in Badur Village. Besides, area of Badur

Village itself has changed, especially in Badur Street, because there are many elite residential grow around it.

4.2 The Effect of Social Circumstances in Badur Village

Formed settlements are naturally influenced by several factors. These factors will then be a reference in the development process of settlements. These factors can be obtained from the aspects of life. Of course, these aspects influence the form changes of the settlements. The change does not only happen in the housing area but can also form another spaces in the area. Generally, changes that form settlements can be reviewed from the characteristics of an unplanned settlement. Those characteristics can be reviewed by observing several factors, such as (1) land ownership, (2) structure and social facility, (3) infrastructure, (4) economy and financial, and (5) socio-cultural (Onyekachi, 2014). A total of 88% of Badur Village population do not have letter of land ownership; meanwhile, the number of people who have the land document is not very significant, which is only 12%. Due to lack of land titles, it shows that those buildings have grown in the absence of proper arrangements for their residences. In addition, social facilities located in Badur Village are inadequate. One of social facilities is government program, such as clinic. Besides, there is a studio or learning centre for children given from students who care about children education in Badur Village (Figure 4). In Badur Atas, it can be seen that buildings have a building demarcation line, approximately 1 meter from the street. While in Badur Bawah, houses was built without using building demarcation line or not according to housing regulations, so some houses are directly above the street. In Badur Atas, some houses now have land titles, so the placement of its buildings is better if compared with the house condition in Badur Bawah. Badur Bawah has no clear regulation about placement of houses and its building demarcation line. Thus, each building has different position with the house next to it (Fig. 4).



Fig 4. (Left) Social facilities in Badur Village, (Right) The structure of residential houses in Badur Village

In settlements, we will certainly find patterns associated with residential space, gathering space, street pattern, and settlements shape (Fernandez, 2011). In Badur Bawah, the circulation is not as good as Badur Atas, but the materials used are already better by using paving blocks. Other than that, the streets in Badur Bawah are also often used for parking residents' vehicles. But limitation of land located in Badur Bawah makes the local residents park their vehicles in the circulation which is also used for daily access. Building better streets can happen because of the assistance from outsiders. According to

most residents, both government and private party have a role in the construction of road in Badur Village. The streets in Badur Village are now built better because the street in Badur Atas namely Badur Street is part of city streets. The width of Badur Street itself is 3 meters. The street in Badur Atas is also often used to hold commemorative events, such as the 17th August event or known as Indonesian Independence Day and other events (Fig.5). Some places which are often used as gathering place are stalls. Stalls located in Badur Village are often used as a place to talk, chat with friends, or just sit back and relax. Additionally, children studio is also used as gathering place and used by local residents to welcome outsiders who come to Badur Village. Children studio is usually used by several students participated in social action with Badur Village residents.

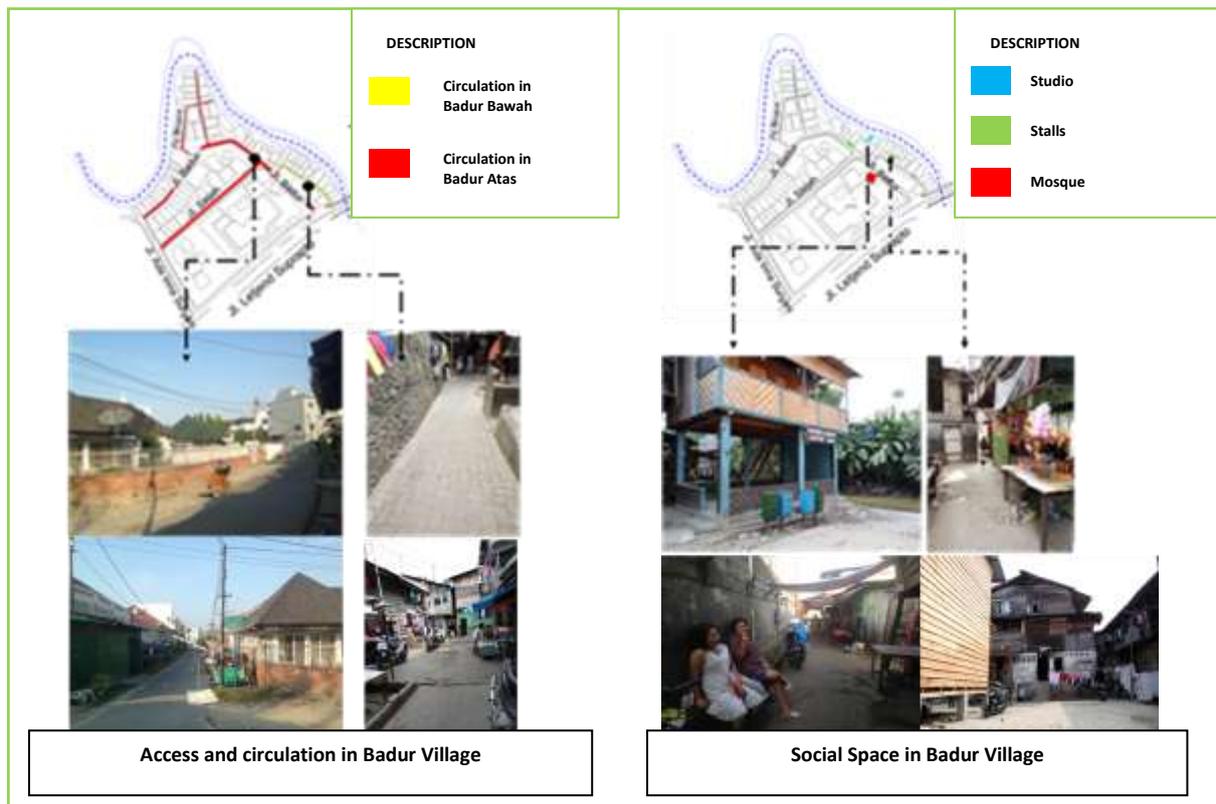


Fig.5. (Left) Circulation in Badur Village, (Right) Gathering spaces in Badur Village

That event or celebration definitely needs a place that can be used as a gathering space for local residents. When they hold an event, such as Independence Day or religious events, the place usually used is the street. However, if the event does not require too much space, then a field or open space located in Badur Bawah can be used (Fig. 5). From some of the pictures above, it is seen that social spaces used can be created in a planned or spontaneous way. From one example in the picture, there is a social space created on the street or in an empty yard around the house. It shows that social factors provide a role in shaping physical factors in Badur Village.

4.3 The Effect of Economic Conditions in Badur Village

The changes which led to an increase in the number of immigrants are the result of new job opportunities. The new job opportunities provide an opportunity for immigrants to get a better chance in terms of economy (Rani and Shylendra, 2002). Some people choose to live in Badur Village in order to get a job in the surrounding area. The location of Badur Village in the city center makes the area as a living place for the immigrants. The fact that the location is in the city center and close to institutions, commercials, hotels, health centers, historical buildings, and educational facilities makes the area as an

opportunity for job seekers and also a trading place. Other than that, another reason choosing to live in Badur Village is because of their poor economic conditions. They choose to live in Badur Village because they feel that they are able to obtain a place to live that does not cost too much. It is because the residential area they occupy is not planned as a living place, so it provides them an opportunity to build their residential spaces without a policy implementation in their houses.

Unplanned settlements often form residential space built in planned or unplanned area that does not have formal planning approval. The most prominent characteristic in unplanned settlements is its low quality buildings that do not have adequate infrastructure and social facilities (Ali & Sulaiman, 2006, Page 2). With the economic reality on the lower middle line makes the conditions of unplanned residences are in accordance with the standards. Meanwhile, the fact is the residence was constructed with scrap materials as well as unused materials. The dimension of the residential space is also different for each house. For housing located in the riverside, it is seen that it has less inhabitable conditions. Some houses even use secondhand materials for their houses. The houses condition built with scrap materials can be seen in figure 6. It shows that the low economic level in Badur Village population forced them to fulfill their housing needs by using another ways to build the houses. Economic limitations made them build impermanent residence (Fig. 6).

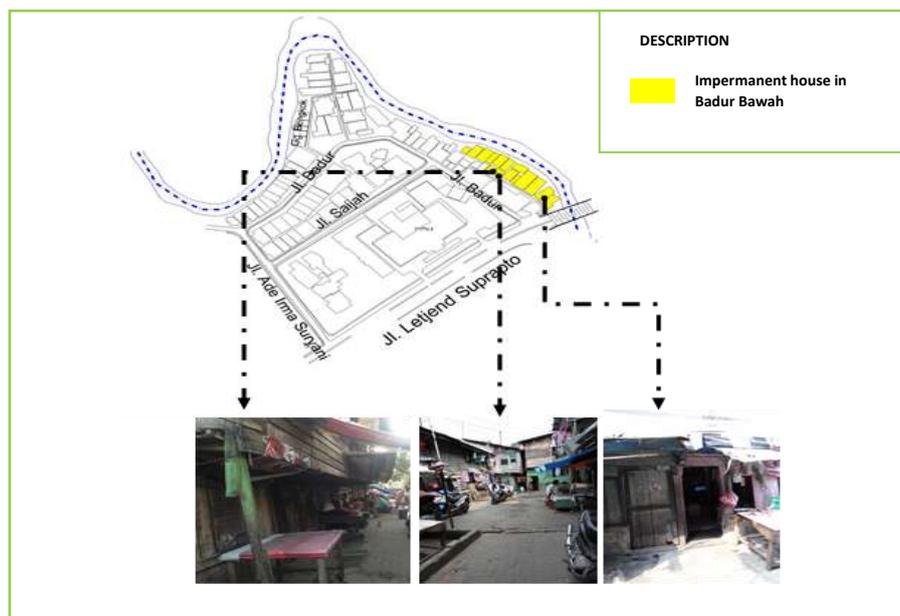


Fig.6. The houses conditions built with scrap materials

Beside that, some residents decided to open a business or stall in the area to support their daily income. The local residents who work as merchant also open a stall in Badur Village. The form of cities and settlements is combined with a symbiotic interaction of infrastructure development and economic activities with local residents. This interaction systematically occurs because of local residents' interest to continue developing their area (Bessusi et al, 2010). It can be observed from Figure 7, the placement pattern of the stalls located in Badur Village grows irregularly and some are located in a relatively close together. The stalls located in Badur Village use the front area of residences or on the street. The dimension of stalls is not so big and generally provides a gathering place, like the presence of chairs (Fig.7).



Fig. 7. The stalls location in Badur Village

From some of those things, the fact is given that the settlements of Badur Village are also heavily influenced by economic aspects. Economy plays an important role in bringing people and forming residential houses in Badur Village. One example can be observed from the physical buildings in Badur Village. Some residents with low income tend to build impermanent houses and use scrap materials. However, some residents who have more income tend to build better and livable houses. Thus, it can be observed that most residents have low economic level on average in Badur Village.

4.4 The Effect of Communication Aspect in Badur Village

In the development of unplanned settlements, there are several stages in bringing residents in the region. In forming unplanned settlements, there are certainly other factors which also support the desire of residents to stay. Mostly, in initial stage, the immigrants have to find a place that fit their needs. Then, the immigrants begin to settle in the area and adapt to the environment. The next step is making the region as an appropriate residence like their place of origin. For example, immigrants who are already comfortably settled would be likely to provide new information regarding the region and start inviting relatives to settle. Thus, the relatives who have received information about this settlement want to stay and get acquainted with their new environment. In this case, there are steps to occupy the space, such as settled, proliferation and introduction. Some of these measures are created by interfering with communication (Eldefrawi, 2013). Communication is considered as a means to obtain information about the whereabouts of Badur Village. Some roles of communication aspect in Badur Village give effect to the formation of settlements, thus growing into increasingly crowded. The influence of the first communication aspect is the immigrants living in Badur Village are likely to choose to stay for getting information about the region. Some newcomers are relatives coming from the same area with the residents who had already stayed there. Some residents coming from the same area tend to build their houses close together, but it is not too significant. Therefore, not all relatives choose to stay close together because of the limited land in Badur Village. Because of information that there are several houses for rent in Badur Village, it makes the immigrants staying in that rented house in Badur Village. Owners of those rented houses are residents of Badur Village, but because of economic improvement some residents prefer to move out and rent their houses. Thus, the communication that occurs between renter and house owner would provide information for people choosing to settle in Badur Village. In addition, the communication that occurs between residents also affects the formation of social spaces in the village. Those social spaces then lead to the formation of physical aspect in Badur Village, like a place use to hang out and chat together (Fig. 8).



Fig. 8. Spaces created from communication between the residents

Informal settlements are generally formed with a pattern of residential space that supports their daily life. For example, residential space is formed to support daily activities, such as the existence of communication between the residents creating a space in the settlements (Eldefrawi, 2013). In Badur Village, the social space created is also influenced by other aspects, such as social and economy. Moreover, in several places in Badur Village, there are also spaces created accidentally in the interactions between the residents. These spaces can be created on the streets, terrace houses, and stalls located in Badur Village.

5. CONCLUSIONS

Badur Village which is one of unplanned settlements formed through various influencing factors. These factors were then examined to find the structure of the settlements at Badur Village. The structure of Badur Village formed on such settlements growth can be obtained from the influence of physical and non-physical factors (Eldefrawi, 2013). In this case, Badur Village also represents theoretical review in its settlements formation. Physical factors were derived from patterns created on a residential area in the Badur Village; while non-physical factors can be observed from the influence of social, economy, and communication which form the settlements in Badur Village. The shape of Badur Village follows the pattern of river and Badur Street. The growth of settlements in Badur Village is formed with abstract or irregular patterns. The physical factors formed in Badur Village give more influence than non-physical factors. The existence of physical factors can be reflected in the morphology of the settlements, street pattern, and building shape; meanwhile, the non-physical factors that influence Badur Village development can be observed from the aspect of social, economy, and communication. Informal settlements are generally formed with a pattern of residential space that supports their daily life. For example, residential space is formed to support their daily activities, such as communication among residents creating a space in the settlements. The structure of social conditions becomes one of the factors that influence the settlements formation in Badur Village. Social conditions in Badur Village influence the formation of residential space. Most residents of Badur Village do not have ownership of the land. Therefore, it makes Badur Village does not get arrangement from the government.

In addition, those social conditions can be seen at residence that is still using scrap materials. Social facilities located in Badur Village are Posyandu and studio. The gathering places are usually found in stalls, neighboring houses, fields, and studio. Moreover, whenever there are events or

celebrations held, they often use street or field. Economic aspect plays a role in bringing the immigrants into Badur Village who then decided to live in Badur Village because it does not cost too much. The economic aspect is also used as an excuse for some residents to choose to live there because of its proximity to the city center, offices, commercial areas, health facilities, and education facilities. In addition, economic limitation also becomes an influence in deciding to stay in Badur Village especially in the riverside area, so that they can take advantage of the environment to support daily activities. Communication aspect also becomes one of the aspects that have influenced the settlements in Badur Village. Communication encourages settlers to occupy the area of Badur Village and use it as living place. Communication was established between previous relatives who have lived in Badur Village, then they brought their other relatives to settle there. Meanwhile, some immigrants, who are looking for a living place that does not cost much, choose Badur Village as their residence. It happens because the communication in Badur Village generates information for immigrants about the village settlements.

The facts found in Badur Village can answer theories described earlier, that the region is also supported by non-physical structure. The non-physical structure then also supports the form of settlements in Badur Village. From the reviewed theories, it can be linked that every aspect supporting the shape of Badur Village was created from non-physical factors. With development of Badur Village which continues making the area into a permanent shelter, proper regulation by the authorities is needed. Support from government to plan Badur Village as planned settlements is expected to regulate the development of Badur Village by examining social situation in the region. The government is expected to provide insights into local community to realise a decent residential area. In addition, appropriate policy settings can provide a reference for the people to build their residential space in accordance with the standardisation in building a house. However, approaches on social conditions in Badur Village are still needed. Thus, the local community can also understand the importance of making their residential area as the official and livable residence. Therefore, further research is needed to determine the perception of the residents in the development of their neighborhoods.

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