IMPACT OF THE GOVERNMENT'S HOUSE ASSISTANCE ON CHANGES IN SPATIAL PATTERNS AND COMMUNITY BEHAVIOR OF PINGGAN TRADITIONAL VILLAGE, BANGLI BALI REGENCY



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ABSTRACT

Pinggan Village, which is an ancient traditional village (Bali Aga) with a pattern of settlements and traditional mountainous Balinese buildings, namely Bale Saka Roras, in 2018 received assistance to improve housing quality from the government. that. This study aims to determine and analyze the impact of housing assistance on changes in settlement space patterns and changes in local community behavior. Research for changes in spatial patterns is descriptive qualitative, and changes in behavior using the two-average difference test analysis method. The results showed that housing assistance had an effect on changes in spatial patterns on the macro and meso scales, as well as changes in the behavior of rural communities. The meso scale is seen in changes in the shape and addition of buildings to the yard, while on a macro scale the distribution of housing assistance forms new settlement groups outside the traditional village area. Behavioral changes that occur are the decreasing function of traditional buildings (bale's sake roras) only for religious and cultural activities.

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1. INTRODUCTION

The house is one of the basic humans needs whose current level of importance is needed after the needs of clothing and food are met. Amendment to the 1945 Constitution Article 28 H, states that the house is one of the basic rights of the people, therefore every citizen has the right to a place to live and a good and healthy environment. This confirms that the provision of adequate housing and residential areas is one of the country's top priorities.

The province of Bali cannot be separated from the condition that meeting the needs of houses and residential areas that are livable for Low-Income Communities is an absolute necessity that must be met. The currently developing issues related to



housing and residential areas in Bali are the high number of people occupying uninhabitable houses and the backlog of home ownership. Calculation of data from the Bali Provincial Settlement Housing Office (2019), there are around 52,425 families who occupy uninhabitable houses spread across the province of Bali.

Housing assistance received by the community is not only an advantage but also creates a new problem or challenge in the community. On the one hand, with housing assistance, the community is able to improve the quality of houses to be habitable to be occupied according to Indonesian National Standards, but on the other hand there is concern that the housing assistance will cause a shift in the pattern of arrangement, especially in traditional settlements and building forms with Balinese architecture. , turned into a typical and contemporary building form and caused changes in people's behavior and needs for traditional houses.

The pattern of settlements in Bali, especially traditional villages, has a very unique shape and is very thick with a philosophy based on the concept of Tri Hita Karana both in spatial arrangement, layout, form, and use of materials, guided by thoughts, human relations with God, human relations. with other humans, and human relations with the environment. According to Gelebbet and Arinton (1985), Bali has an order in various aspects of life, including in terms of settlements. Not only is the shape of the building unique, but so is the pattern of village settlements.

Pinggan Village, Kintamani District is an ancient traditional village or often called "Bali Aga" which is very thick with the history of the ancient Balinese kingdom, namely the Bali Dwipa kingdom which was later known as the Balingkang kingdom. The traditional building in Pinggan Village called Bale Saka Roras is a building made of bamboo and wood which has 12 support poles where each room in the building has an important function in the life of the people of Pinggan village and is still maintained today. The Bale Saka Roras House is a miniature of the Tri Hita Karana concept used in the life of the Hindu community.

With unfavorable economic conditions, the existence of traditional buildings is considered not to meet the national housing eligibility standards, so that with assistance from the government, it is hoped that the community will be able to have decent houses in accordance with Indonesian national standards. In 2018 Pinggan village received assistance with self-help housing stimulants through activities to improve the quality of houses as many as 100 units. The housing assistance is predicted to cause problems with the local traditional settlement structure and the behavior of the people. This study aims to determine changes in the pattern of traditional settlements in Pinggan Village and changes in community behavior after the entry of government housing assistance.

2. MATERIALS AND METHODS

2.1 RESEARCH DESIGN AND DATA SOURCES

This research is descriptive qualitative which describes the field data as a whole on the appropriate data group. The literature search strengthens the results of interviews and field observations Sugiyono (2012). Primary data were obtained through observation of the research location, interviews with informants, personal documents, data on the amount of housing assistance, number of villagers, population growth rate, population density, and data on land use area. Secondary data were obtained from the Department of Public Works, Housing and Settlement Areas of Bangli Regency, as well as the Pinggan Village Government.

2.2 RESEARCH LOCATION AND TIME

This research is located in Pinggan Village, Kintamani District, Bangli Regency, Bali Province. The area of Pinggan Village is 16.53 km². This research was conducted for 4 months, from the beginning of June 2020 to the end of September 2020.

Table 1 Population and Research Sample					
No	Sample	Quantity	Technique		
1	Department of Public Works, Spatial Planning, Housing and Settlement Areas of Bangli Regency	1 person	purposive		
2	Bappeda R & D Bangli Regency	1 person	purposive		
3	SNVT Bali Province Housing Provision	3 person	Purposive		
4	Kintamani District Government	1 person	Purposive		
5	Pinggan Village Government	3 person	Purposive		
6	Traditional Village Head	1 person	Purposive		
7	Pinggan Village Community Leaders	3 person	Purposive		
8	Residents receiving housing assistance	20person	Purposive		
	Total	33 people			

Data Collection and Research Instruments

Data collection techniques used in this study are as follows:

- Direct observation to the Pinggan village area to find out the existing state of the
 research location area. Field observations were carried out in an exploratory
 manner on the spatial transformation and socio-cultural aspects that became
 factors of the settlement transformation. The results obtained are in the form
 of photo documentation regarding existing settlements and those receiving
 government housing assistance.
- 2. In-depth interviews with communities receiving housing assistance, elements of government institutions that handle the distribution of housing assistance, district governments, village officials and local community leaders
- 3. Questionnaire as a research instrument to provide closed questions to respondents.

2.3 RESEARCH DATA ANALYSIS

After collecting all the information that affects the continuity of housing assistance, the next step is to utilize all of this information in a matrix model that has two categories, namely when the community received assistance and after receiving it. This test model analyzes the score so that the average score is obtained on two different observations. 1 = not good, 2 = good enough, 3 = good, and 4 = very good.

3. RESULTS AND DISCUSSION

3.1 GENERAL CONDITION OF PINGGAN VILLAGE SPATIAL PATTERN

Based on observations in the field, conceptually, the physical environment of Pinggan Village uses a linear pattern with an elongated direction stretching from northeast to southwest (according to the north-south qibla). This pattern divides the zoning of the village area into the head zone (upstream) which has sacred value and the village foot zone (teben) which has profane value (Figure 1).

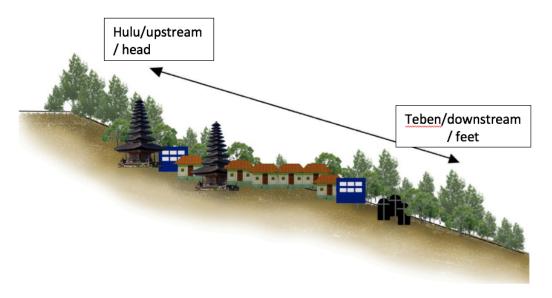


Figure 1 Settlement Patterns Upstream and Downstream of Bali Aga Mountain Village Source: Ganesha et al. (2012)

The village pattern follows the rules that position the location of the "Puncak Penulisan" Temple which is in the southwest direction of the village as the orientation of the sacred village direction and the orientation of the setra (graveyard) which is in the northeast direction as the village profane direction. The main village road extends in the northeast to southwest direction which is the core that functions as the main/general circulation of the Pinggan Village community, as well as access that binds the connection between the footpaths/alleys that lead to each resident's house yard. Pinggan Village takes the Hulu-Teben concept, as a form of division of village space/region which can be distinguished as follows:

- 1. The Upstream Zone (southwest of the settlement) is located for village spiritual activity facilities, namely the "Puseh Bale Agung" Temple.
- 2. The Intermediate Zone (middle part), is a residential area with residential buildings and public service facilities such as community halls, "Dadya/family" temples, schools, and fields.
- 3. The Teben Zone (downstream), is a shameful zone that occupies the lowest part which is used as a cemetery area and the "Prajapati" temple as well as plantations.

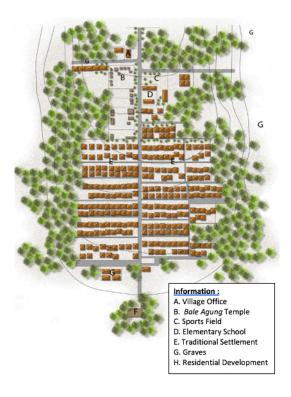


Figure 2 Spatial Map of Pinggan Village

Changes in Settlement Patterns Distribution of Government Housing Assistance

The traditional settlement of Pinggan Village is a form of Balinese Aga cultural and architectural values that still exist today. The traditional settlement is one of the unique settlements because Pinggan Village is an ancient Balinese village in the mountains, which still inherits traditions and beliefs that are different from other villages in the plains of Bali. The traditional settlement of Pinggan Village consists of traditional buildings that have their own roles and functions in the life of the people in the village. According to Adiputra et al. (2016) as a concept of value in the formation of the Bali Mountains settlement pattern which is still being applied from generation to generation, the direction of the mountain is upstream or kaja as a sacred zone with the highest (main) hierarchy. Meanwhile, the sea direction is teben or kelod

with the most profane and lower values. Traditional settlements are often presented as places that still hold traditional and cultural values related to beliefs or religious values that are special or unique to a particular society which are rooted in a certain place outside of historical determination Crysler (2000).

One of the changes in settlement patterns occurred due to housing assistance provided by the government to the people of Pinggan Village. Self-help Housing Stimulant Assistance is provided with the aim of encouraging the Pinggan village community, which is included in the Low-Income Community, to build their own houses that are livable and/or a healthy and safe environment in the form of stimulant assistance which in its development prioritizes the community empowerment system with a mutual cooperation pattern according to local wisdom. From the results of an interview with the Head of SNVT of the Ministry of Public Works, who was the leading distribution of this aid until 2019, 110 (one hundred and ten) recipients of assistance had been distributed in Pinggan village. The value of the aid as a stimulant is 17.5 million Rupiah for each aid recipient with 15 million Rupiah for buying building materials and 2.5 million Rupiah for the wages of a handyman. From the results of interviews at the research site and the head of the SNVT, information was obtained that the average value of community self-help is around 20-25 million Rupiah to realize and improve the quality of the houses occupied by the local community workforce. Assistance is provided to improve the standard of housing and the environment to be livable, including the existence of traditional Saka Roras houses whose current condition is considered to be in the category of uninhabitable houses that are not in accordance with Indonesian National Standards.

Changes in the pattern of settlements in Pinggan Village have started to occur due to the construction of additional houses by the community before the entry of housing assistance. At first the community only had a traditional Bale Saka Roras, but with the development of the number of family members, increasing activities and changing lifestyles, to meet their needs, the community began to build additional houses which were placed right in front of the Bale Saka Roras opposite. The existence of housing assistance that enters Pinggan Village causes the pattern of changes that occur in the traditional village settlement pattern to increase. According to Kardinal and Santhyasa (2017), the change with the addition of one more building on each land belonging to one family head has occurred in the third generation above it so that the change is accepted by the community now. Housing assistance from the government, some are built in traditional settlement areas because there is still land to build which will shape changes in settlement patterns on a meso scale, some are built outside traditional settlements which result in the emergence of new settlements on the scale of changes in macro settlement patterns.

3.2 MESO-SCALE SETTLEMENT CHANGES

Based on the results of interviews with the Pinggan Village Head Office, until 2019 Pinggan Village received 110 self-help housing assistance from the government,

which is likely to increase in the future. However, in developments in the field, not every location of aid recipient can be built for housing assistance by the community due to considerations of land area and future benefits. People who still have land to build in residential areas will build housing assistance in the existing environmental area called Banjaran. Communities who receive assistance but do not have land to build in traditional settlement areas will build housing assistance in fields/cottages which are far from traditional settlements. Beneficiaries who build on existing land based on observations have two tendencies, namely:

• Improving the quality of old buildings, in this case most of them are "bale's sake roras" buildings, which are no longer adequate to be occupied in terms of building structure, air circulation and lighting so that they do not meet the elements of comfort and health of residential spaces This improvement in the quality of the building, if observed in its application, will almost completely change the shape of the original building. Various considerations on the economic side, maintenance and taste for the shape of the building resulted in significant changes in the shape of the building leaving the original building form. The existence of contemporary materials is slowly starting to displace the use of local materials. Bamboo material which is the original material of Pinggan village has begun to be replaced with the use of brick walls and asbestos roofs. It is undeniable that economic considerations and limited knowledge about the use of local materials are the causes of the fading of the existence of traditional architecture in Pinggan village (Figure 3 .)



Conditions Before receiving assistance



Conditions after receiving assistance

Figure 3 The shape of the Bale Sake Roras (left) and the government aid house(right) Source: SNVT Housing Provision, 2018

 Building a new one on an existing yard by utilizing the vacant land in front of the traditional Bale Sake Roras building or improving the quality of the building in front of the Bale Sake Roras. This is done with the consideration that the existing Bale Sake Roras is still used as a place to live occupied by families who have occupied the Bale for generations so they have a reluctance to move. So that some of the Bale Sake Roras buildings are still maintained for occupancy, only a small number of them consider aspects of the preservation of these traditional buildings (Figure 4).

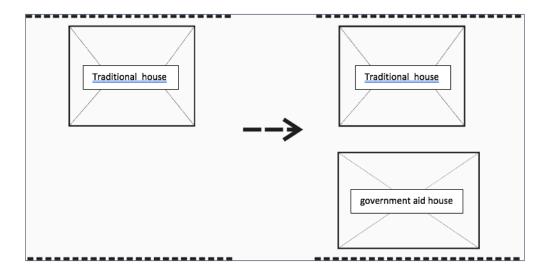


Figure 4 Changes in Settlement Patterns in One Family

3.3 MACRO-SCALE SETTLEMENT CHANGE

Changes in macro-scale settlement patterns are seen from the distribution of housing assistance placements outside the main village which is the traditional settlement of the Pinggan Village community. From the results of the mapping of coordinates based on data obtained and field observations, many housing aids were built in dry areas which are quite far from traditional settlements. From the results of interviews with beneficiaries, they prefer to build on the moor due to the consideration that it is close to the place to work on the land where most of the residents of Pinggan Village are farmers who do not have land anymore to build in the old settlements, and do not want to damage the traditional village settlement pattern. which has existed for a long time.

With the distribution of government housing assistance placement outside the old settlements, it has an impact on the formation of new settlement groups outside the main village. From the distribution of the placement of government housing assistance in Pinggan Village, the potential for the formation of new settlements is in 2 parts of the village, namely in the southern part and the eastern part of the traditional settlement. The pattern of settlements that occur on a macro scale, the placement of housing assistance is spread.

In the southern part of the village, it is possible to form new settlements because previously there were already resident settlements in the southern part of the village, plus the construction of government housing assistance. However, for access to the southern part of the village there is only a path that can only be passed by motor-bikes. Settlement is an environment where humans live which consists of a group of houses with various kinds of social facilities, public facilities, movement networks, and facilities and infrastructure. The settlement environment is a residential area in various shapes and sizes with land and space arrangements, structured environmental infrastructure (Nuraini, 2009).

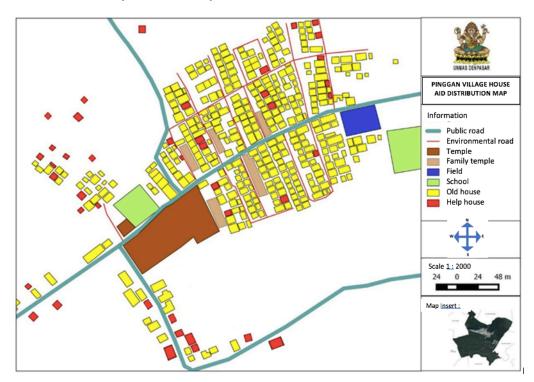


Figure 5 Distribution of traditional housing and government assistance

In the western part of the village there are not too many relief houses, but with sloping land conditions and close to traditional settlements, it is possible to form new settlements in the western part of the village. it has been seen that there are houses in the western part of the village, although not from housing assistance, but it is also possible for the community to form new settlements in the western part of the village due to not being able to build again in the traditional village settlements. According to Sujarto (1995), the settlement element consists of elements of Wisma (a place to live), Karya (a place to work), Likes (a place for recreation/relaxing/entertainment), and Perfection (worship, education, health, public utilities) or integrated in an environment and relationships with each other by elements of the clan (road network). The distribution of government aid housing is presented in Figure 5.

3.4 COMMUNITY BEHAVIOR CHANGE

According to Turgut (2001) the factors that shape settlement patterns include Behavioral Settings (traditions/customs, social relations and kinship in the family), Cultural Settings (belief systems, social systems), and Socio-Economic Settings (livelihoods, sources of income, income level). Humans have their own uniqueness; the uniqueness of each individual will affect the surrounding environment. On the other hand, the uniqueness of the environment also affects their behavior. Because the environment is not only a place for humans to carry out activities, but also an integral part of human behavior patterns. Processes and patterns of human behavior are grouped into two parts, namely Individual Processes and Social Processes.

Changes in settlement patterns due to government housing assistance will have a direct impact on changes in community behavior. The results of interviews with the people of Pinggan Village, changes in people's behavior have indeed started to occur since the existence of modern buildings that are included in the traditional settlements of Pinggan Village. The existence of government housing assistance that entered Pinggan village resulted in a significant change from the traditional settlement pattern which also directly resulted in changes to community behavior. The pattern of behavior change that occurs in rural communities occurs in individual processes and social processes. Individual Process refers to a behavioral approach schema that describes the relationship between the environment and individual behavior. Meanwhile, in the social process, interpersonal behavior that is very influential on changes in space is territoriality. From the results of the questionnaires that were distributed, then the results were averaged in the results as presented in Table 2.

Table 2 Community Behavior Patterns Before and After Receiving Housing Assistance				
No	Variable	Category	Average Score (Weight x Rating)	
			Before receiving housing assistance	After receiving housing assistance
1	Spatial/Physical Settings	Convenience of space organization	1,69	3,05
		Residential space health	1,61	3,03
		Resident safety	1,79	2,78
		Construction strength	1,63	3,05
		Quality of building materials	1,66	2,80
		Room lighting	1,40	2,56
		Ventilation/Air Circulation	1,29	2,46

Continued on next page

Table 2 continued				
2	Behavior	Home care	1,48	2,08
	Settings	habits		
		Maintain	1,60	2,25
		cleanliness		
		Environmental	1,36	1,81
		Conservation		
		Desire to repair	1,64	2,20
		the house		
		Desire to build	1,18	1,78
<u> </u>		outside		
3	Cultural Setting	Worship	2,35	2,83
		activities		
		Cooking activity	1,81	2,41
		Gathering	1,78	2,50
		activities with		
		relatives	4.40	0.54
•	0 1 5	MCK activity	1,48	2,56
4	Socio-Economic	Interaction	1,98	2,19
	Settings	between		
		residents	1.40	2.50
		Community	1,48	2,59
		self-help/		
		participation	2.02	1.00
		The tradition of	2,03	1,98
		gotong royong	1,53	2,21
		Saving interest Level of	1,53	2,14
		education	1,00	2,14
		Prosperity level	1,53	2,18
		Additional	1,53	2,10
		income	1,34	2,11
		Economic	1,33	2,19
		benefits for the	1,33	2,17
		village		
		AVERAGE	1,62	2,44
		AVLIMUL	1,04	۵,۳۳

The results of observations and interviews with village communities showed a change from before and after receiving assistance. Spatial, culturally, socially and economically, there has been a positive increase in the beneficiary's benefits. The community gets benefits after receiving housing assistance in order to improve the quality of daily life in the form of improving the quality of the house to be livable, but on the other hand there is an impact on changes in the spatial characteristics of the traditional Bali Aga village. There are two categories of behavioral changes that occur in the Pinggan village community, the first is the change in the behavior of the people in the traditional village settlements. Meanwhile, behavioral changes in the second category are changes in the behavior of people who build housing assistance outside the traditional village environment/moor. Based on Rappoport's theory, the effect of changes in the behavior of the people of Pinggan Village can be seen in Table 3 .

Table 3 Changes in Pinggan community behavior as a result of housing assistance				
No.	Causes of Behavior Change	Forms of Behavior Change		
1	Environmental Determinism	Changes in settlement patterns with housing assistance resulted in the dependence of rural communities on bale saka roras buildings to decrease. The use of bale saka roras is still used for consideration of benefits, not because of the preservation aspect of traditional buildings		
2	Environmental Posibilism	Communities have the opportunity to have a better place to live by getting housing assistance, but on the other hand it creates obstacles to preserving traditional buildings		
3	Environmental Probabilism	Provide options for rural communities to stay in traditional houses by improving the quality of existing buildings or choosing to take advantage of housing assistance by building outside traditional settlements.		

Changes in people's behavior in traditional settlements are more directed to the function of traditional bale saka roras buildings. For traditional and cultural activities, people still use the bale saka roras building, but for their daily activities people are starting to leave the bale saka roras building with consideration of the desire to live in a house that is healthier and more practical in terms of building maintenance. Changes in people's behavior is influenced by environmental determinism factors where the presence of housing assistance affects the level of community needs for traditional buildings. At first, the behavior of one family occupying one building in the bale saka roras house, with the inclusion of housing assistance, the community began to occupy less traditional buildings or even change the function of the bale saka roras building. Only the older family members remained in the bale saka roras house, while the younger ones chose to occupy the housing assistance building. The change in behavior is influenced by environmental posibilism factors, where people have the opportunity to occupy a decent house but also become an obstacle for the community to maintain the traditional house of Saka Roras. If it is left without increasing awareness of the importance of preserving traditional houses, over time people's behavior will continue to change and the existence of traditional houses will decrease and eventually be replaced by modern buildings. Assistance in improving the quality of housing in the future will be increasingly needed by the community, but the uniqueness of existing traditional village settlement patterns must be preserved. In addition, there is one interesting thing, where the value of mutual cooperation decreased slightly after receiving housing assistance. The development process that is mostly carried out by builders cannot be denied causing the value of mutual cooperation to decrease.

People who previously only had temporary huts in their fields, with the help of houses from the government, the people repaired their huts into permanent build-

ings. The hut which was originally built in the fields was only used as a shelter when resting, after becoming a permanent building the community was more comfortable living in the fields with the consideration of facilitating daily gardening activities which constitute the majority of the livelihoods of the residents of Pinggan Village. In the end, the community had two choices when they finished working in the fields, the first choice was to return to their homes in traditional settlements or spend the night in their new homes in the fields. This change in community behavior is influenced by environmental probabilism factors.

4. CONCLUSIONS

- 1. Changes in settlement patterns in Pinggan village can be grouped into two, meso scale changes, namely changes in traditional settlement patterns with traditional building forms of bale's sake roras with the addition of new buildings; and macro-scale changes, namely the distribution of government housing assistance that is built outside of traditional settlements has the potential to become a distribution of new settlements outside the linear pattern of traditional Balinese village settlements.
- 2. Changes in traditional settlement patterns have an impact on changes in people's behavior in utilizing the traditional bale's sake roras house as a place to carry out all daily activities into religious and cultural activities.
- 3. The construction of housing assistance in the fields means that the community/farmers do not have to return to their traditional houses when they finish working in the fields, or make the new housing a new residential area.

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