

# The resilience of the Basarang Jaya Balinese Transmigrants residence in the land of Dayak Ngaju, Central Kalimantan

Herwin Sutrisno<sup>1</sup>, Theresia Susi<sup>1\*</sup>, Gagoek Hardiman<sup>2</sup> and Edward E. Pandelaki<sup>2</sup>

<sup>1</sup> *Program of Architecture and Urbanism, Departement of Architecture, Diponegoro University, Indonesia and Lecturer at Departement of Architecture, Palangka Raya University, Indonesia*

<sup>2</sup> *Departement of Architecture, Diponegoro University, Indonesia*

(Received 10 November, 2019; accepted 31 January, 2020)

## ABSTRACT

Basarang Jaya Village is the location for transmigrants opened by the government in 1961. The transmigrants in this village were generally from Bali Island. These transmigrants did not give up with the condition of the location, a peat bog area which is lacking in infrastructure. The resilience of the transmigrants to live in this land finally led to the development of Basarang Jaya Village and known as Mini Bali in Central Kalimantan. A residence is not only a physical thing, but it also a manifestation of interaction between humans and their environment. Therefore, the resilience of Balinese transmigrants is viewed from the changes of the function and form of the Balinese transmigrants residency. The objective of the study is to find out the changing process of the function and form in the Balinese transmigrants residence at Basarang Jaya. This research used the qualitative-descriptive method, and based on the research, it was known that the residency experienced four times changes in its form and building materials used.

*Key words* : Residence, Resilience, Balinese transmigration, Central kalimantan

## Introduction

The imbalance of population distribution and density between Java Island and other islands has driven the implementation of population control programs by moving people from densely populated areas to other areas. This program had been carried out since the days of the Dutch colonial government, which began with colonization policy through a program called "bedol desa" in 1905 (Yannesli *et al.*, 2014; Aryanti, 2015).

The program known as the transmigration programs was officially implemented by the Indonesian government in 1947 with the funding support

from the World Bank, Asian Development Bank and bilateral donors. One of the areas for transmigration program is Central Kalimantan Province.

Transmigration in Central Kalimantan Province began in the late 1960s signed by the opening of peat forests in Basarang, Kapuas as the transmigration area. Basarang Jaya village is the transmigration site opened by the government in 1961. Transmigrants in this village generally came from southern Bali Island such as Nusa Penida and Nusa Lembongan. This migration was caused by the eruption of Mount Agung and the worsening economic situation caused by the internal conflict in Bali after the National revolution (Wirawan, 2008).

The condition of Basarang Jaya Village, that was newly opened from the jungle and most of its areas are peat bogs plus the lack of facilities and infrastructures, did not make the transmigrants hopeless (Sutrisno *et al.*, 2015, 2019; Susi *et al.*, 2017). The resilience of the transmigrants to inhabit eventually led to the development of Basarang Jaya Village known as Mini Bali in Central Kalimantan.

The resilience of the transmigrants can be shown from the interaction between the people and their environment reflected in their living space (residence). The residence is a manifestation of humans' physical culture shaped through a continuous process and associated with the mobility of the economic aspects of its inhabitants in a certain period of time (Lawrence, 1990; Woy, Tobing and Siahaan, 2018). Therefore, the resilience of Balinese transmigrants is viewed from the form and function of the residence of Bali transmigrants. The objective of this study is to find out the changing process of the form and function of Balinese transmigrants' residence at Basarang Jaya.

## Methods

This research focused on the residence resilience of Basarang Jaya Village transmigrants. Based on the problem posed in this research, which emphasized more on process problem, the suitable research method is, therefore, the descriptive-qualitative method. This approach is appropriate for expressing and understanding an unknown condition in the research site (Strauss and Corbin, 1990).

The location of this study is Basarang Jaya Village, District of Kapuas, Central Kalimantan (Figure 1). This location was chosen because it was the first location of the transmigrants able to interact with their environment hence becoming an economically successful transmigration village. The object of the research was the house of Mr. Nyoman Remuja because he was one of the transmigrants who came first at Basarang. In this research, the data were collected using interviews and field observation.

The resilience of Balinese transmigrants was analyzed using the residency typology approach. The residence was then divided based on the concept of Tri Angga. This concept divides the building into three vertical parts; the first part is the main part called Utama Angga which the roof of the building functioning as the head (the most sacred one), the middle part is called Madya Angga in the form of

the body's building located in the middle, and the lower part is called Nista Angga functioning as bebataran or "the building's legs" located at the lower part of the building (Budihardjo, 1986; Gelebet, 2002; Diasana Putra, Lozanovska and Fuller, 2017; Winawangsari, Hanan and Martokusumo, 2017).

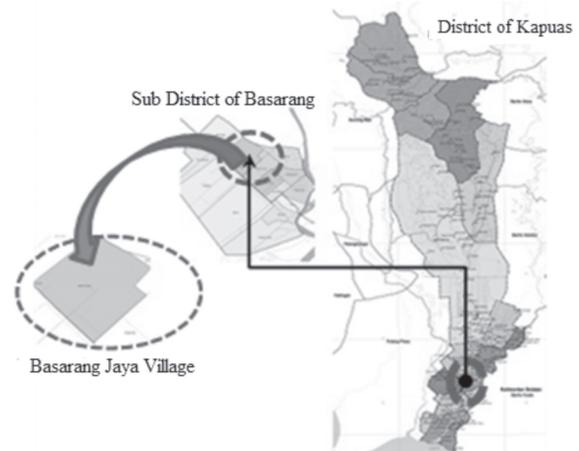


Fig. 1. Location of the Research

## Results and Discussion

Nyoman Remuja's house experienced four time changes. The first residence was the provided by the government where there was uniformity in the form, function and building materials. In this building, bathroom, toilet and washing room were separated by the latrine built on the edge of *handil* (tributary) (Figure 2).

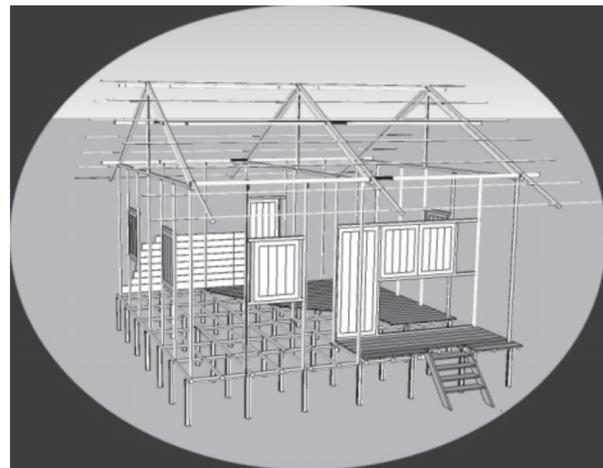


Fig. 2. The residence of Mr. Nyoman Remuja was built in 1963

The second phase of building was done in 1980. In this place, there was a change in the size and material of the house's legs and a change in the material of the house's head. The function of the house was same but except the location of the toilet, the bathroom and the washing room. The service area was no longer on the edge of *handil* (tributary), but it was located behind the house although it did not become one with the building. The service area was approximately one meter from the house (Fig. 3).



Fig. 3. The residence of Mr.Nyoman Remuja built in 1980

The third phase was conducted in 1990, the changes only at the size and the materials of the stilts. The function of the building and placement of the bathroom, toilet and washing room remain same (Figure 4).

Table 1. Tri angga analysis of the second residence of Mr. Nyoman Remuja

<i>Tri Angga Analysis</i>	
<b>Head</b>	A saddle roof, made of gelam wood with palm leaf.
<b>Body</b>	The wooden walls, floors, windows, and doors.
<b>Legs</b>	The foundation of a gelam rod is 100 centimeters tall, adjusting the current condition of the peat bog.
<b>Conclusion</b>	
<b>Form</b>	Mostly the houses built by government in the past were in similar shape (houses on stilts and materials (wood) adapting to the condition of the watery peat bogs.
<b>Function</b>	The function of these houses is to adapt to environmental conditions which is watery peat bogs where wild animals also live there.

Table 2. Tri angga analysis of the second residence of Mr. Nyoman Remuja

<i>Tri Angga Analysis</i>	
<b>Head</b>	A gable roof with the mixture of zinc and shingle as its material cover
<b>Body</b>	Windows, walls, doors were made of wood and glass, the horizontal ventilation and the floors were made of wood.
<b>Foundation</b>	Foundation from <i>ulin</i> (Bornean ironwood), with a height of 50 centimeters, made it suitable for the peat land
<b>Conclusion</b>	
<b>Form</b>	The terraced shape roof of Mr. Nyoman Remuja's house used wooden materials. The house on stilts as long as around 50 centimeters adjusted to the watery environment of the peat bog that began to solidify.
<b>Function</b>	The function of the house with stilts was adapting to environmental conditions of swampy land. The toilet and washing room were separated with the back side of the house.



Fig. 4. The residence of Mr.Nyoman Remuja built in 1990

The fourth phase of the residence building was done in 2000. There was a total change related to the size, the materials of the building's legs and the shape of the building's legs. The head of the building also underwent changes in its shape and its materials as well as the building's body. The location of the toilet, bathroom and washing room was changed where this service area was inside the residence (Figure 5).



Fig. 5. The residence of Mr. Nyoman Remuja built in 2000

Table 4. Tri angga analysis of the fourth residence of Mr. Nyoman Remuja

Tri Angga Analysis	
<b>Head</b>	The shape of the roof is like terraced saddle mixed with a flat roof on the porch, which is made of multi-roofed concrete.
<b>Body</b>	Wall made of concrete bricks were covered by plaster and finishing paint, windows and doors were made of wood mixed with glass, box ventilation concrete and floors were made of ceramics.
<b>Foundation</b>	Foundation was built with cast concrete, the chicken claw construction was used for pole in <i>sukong cerocok, galam</i> to reach hard ground overcoming condition of peatland and soft soil.
<b>Conclusion</b>	
<b>Form</b>	The shape of terraced saddle with reinforced concrete, which was directly stood on the ground, adjust to the conditions of the hardened and solid soil.
<b>Function</b>	The function of the residence with concrete construction adapted to peat land's environmental conditions The toilet and washing room were inside the house.

## Conclusion

The residence of Mr. Nyoman Remuja has experienced four times changes in its form, especially on its foundation, size, materials and the shape of its legs. The building function has not changed but there have been changes for the toilet, bathroom, and washing room. In the first phase, the rest room was located on the edge of handil while in the sec-

ond and third phases; the rest room was on the outside of the residence precisely located at the back of the house. Building materials used were also different. In the fourth phase, there was a total change to the head, body, and foundation in their size, materials and their shape. The service area also experienced a total change, where it has been integrated into the house.

This building change shows the phases of the interaction between the residence with the environment especially with the physical condition of the environment in the form of peat bogs. The cause of the transmigration of Balinese people like Mr. Nyoman Remuja is his willingness to adapt to the environmental conditions and his willingness to learn how to live with the local community and the existence of the sense of togetherness or living in the same boat feeling, as well as strong customs and kinship system in the Balinese transmigration community.

## Acknowledgment

This research project is funded by the Research and Community Services Office of Palangka Raya University. The authors also thank Mr. Nyoman Remuja for permission and cooperation during the research.

## References

- Aryanti, N. Y. 2015. Javanese Cultural Socialization in Family and Ethnic Identity Formation of Javanese Adolescent Migrant at Lampung Province', *Komunitas: International Journal of Indonesian Society and Culture*. 7 (2) : 251–258. doi: 10.15294/komunitas.v7i2.3624.
- Budihardjo, E. 1986. *Architectural Conservation in Bali*. Yogyakarta: Gadjah Mada University Press.
- Diasana Putra, I. D. G. A., Lozanovska, M. and Fuller, R. J. 2017. A methodology to evaluate the transformation of traditional balinese houses as a consequence of Tourism. *Archnet-IJAR*. 11(1) : 83–100. doi: 10.26687/archnet-ijar.v11i1.1134.
- Gelebet, I. N. 2002. *Arsitektur tradisional daerah Bali*. Edited by I. G. N. A. Puja. Denpasar: Badan Pengembangan Kebudayaan dan Pariwisata, Deputi Bidang Pelestarian dan Pengembangan Budaya, Bagian Proyek Pengkajian dan Pemanfaatan Sejarah dan Tradisi Bali.
- Lawrence, D. 1990. The Built Environment And Spatial Form. *Annual Review of Anthropology*. 19(1) : 453–505. doi: 10.1146/annurev.anthro.19.1.453.

- Strauss, A. and Corbin, J. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Second edi. California: Sage Publications.
- Susi, T., Buchori, I., Rudiarto, I. and Sutrisno, H. 2017. The survival strategies of transmigrants in peatland case study: Basarang Jaya Village, Central Kalimantan. *International Journal of Civil Engineering and Technology*. 8(8) : 416–423. Available at: [http://www.iaeme.com/MasterAdmin/Uploadfolder/IJCIET\\_08\\_08\\_042/IJCIET\\_08\\_08\\_042.pdf](http://www.iaeme.com/MasterAdmin/Uploadfolder/IJCIET_08_08_042/IJCIET_08_08_042.pdf).
- Sutrisno, H., Hardiman, G., Pandelaki, E.E. and Susi, T. 2015. Akulturasi Budaya Etnis Dayak dan Bali di Bali Basarang, Kabupaten Kapuas, Akulturasi Budaya Etnis Dayak dan Bali di Bali Basarang, Kabupaten Kapuas, Provinsi Kalimantan Tengah', (March 2019), pp. 1–6.
- Sutrisno, H., Hardiman, G., Pandelaki, E.E. and Susi, T. 2019. Living in Harmony: Acculturation of Balinese and Dayak Ngaju Cultures in Basarang Jaya Village, Central Kalimantan. *Jurnal Ilmiah Peuradeun*. doi: 10.26811/peuradeun.v7i3.279.
- Winawangsari, D., Hanan, H. and Martokusumo, W. 2017. Strategy of Adaptation of Traditional House Architecture Bali Aga. *International Journal of Research in Engineering and Science*. 5(8) : 1–8. Available at: <http://www.ijres.org/papers/Volume%205/Vol5-Iss8/Version-1/A5810108.pdf>.
- Wirawan, A. A. B. 2008. Sejarah sosial migran-transmigrasi Bali di Sumbawa, 1952-1997. *Jantra Jurnal Sejarah and Budaya*. 6 (3) : 418–442. Available at: <http://repositori.kemdikbud.go.id/id/eprint/5118>.
- Woy, V. T., Tobing, R. R. and Siahaan, U. 2018. Adaptation local ethnic and inherited ethnic on settlements architecture in Mopugad village, north Sulawesi. *International Journal of Engineering Research and Technology*. 11(6) : 963–986.
- Yanmesli, Y. 2014. Livelihood Strategies and the Welfare of Transmigrants. *Indonesian Journal of Geography*. 46(1): 44. doi: 10.22146/ijg.4989.
- 
-