

Spatial Structure and Community Perception of Pejaten Village on Policy Determining Rural Industry Area in Tabanan, Bali

by Utari Vipriyanti

Submission date: 06-May-2023 07:56AM (UTC+0700)

Submission ID: 2085555910

File name: yanti_2022_IOP_Conf._Ser._3A_Earth_Environ._Sci._1027_012035.pdf (582.4K)

Word count: 3362

Character count: 18284

PAPER • OPEN ACCESS

Spatial Structure and Community Perception of Pejaten Village on Policy Determining Rural Industry Area in Tabanan, Bali

18
To cite this article: NU Vipriyanti *et al* 2022 *IOP Conf. Ser.: Earth Environ. Sci.* **1027** 012035

View the [article online](#) for updates and enhancements.

You may also like

- 19
- [Fisheries development model to increase fish consumption in Tabanan, Bali](#)
Budi Wardono, Risna Yusuf, Fauzan Ahmad et al.
- 13
- [Water management study in Denpasar, Badung, Gianyar and Tabanan \(SARBAGITA\) area](#)
I G L Parwita, M Mudhina, G Yasada et al.
- 5
- [Urinary stone profile at Tabanan Hospital within July 2014 to June 2016](#)
A N O Diatmika, D Santoso and I B T Yatindra



*Benefit from connecting
with your community*

ECS Membership = Connection

ECS membership connects you to the electrochemical community:

- Facilitate your research and discovery through ECS meetings which convene scientists from around the world;
- Access professional support through your lifetime career;
- Open up mentorship opportunities across the stages of your career;
- Build relationships that nurture partnership, teamwork—and success!

Join ECS!

Visit electrochem.org/join



16

Spatial Structure and Community Perception of Pejaten Village on Policy Determining Rural Industry Area in Tabanan, Bali

NU Vipriyanti¹, SPK Surata¹, IP Sujana¹, E Handayani¹ and DA Puspawati¹

¹ Universitas Mahasaraswati Denpasar

Corresponding Author: mangtiutari@yahoo.com

Abstract. Tabanan Regency is well known as Bali's rice granary. However, one of the villages located in an agricultural area, Pejaten Village, is famous as its tile industry. The Tabanan Regency Government has designated Pejaten Village as a rural industrial area. The successful implementation of these policies needs to be supported by preparing human and natural resources that have adequate competence and creative power. This study aims to analyze (1) community knowledge and perception about rural industrial area; (2) the spatial structure of industrial village based on the Hindu's concept of balance called *Tri Hita Karana*. The method of determining respondents was done by stratified random sampling. The strata are carried out based on the scale of the tile industry. Methods of data analysis using: (1) likert scale and (2) GIS. The results showed that (1) the community had quite positive attitudes and moderate perception categories regarding the policy of determining rural industrial area of Pejaten Village and (2) the spatial structure of common space had adapted from a rural space structure to an urban spatial structure. It is necessary to conduct a more intensive approach to increase moderate perception of the community.

1. Introduction

Pejaten is a unique village located in 18 km from Denpasar city, Bali. Administratively, this village located at Kediri District, Tabanan Regency, Bali Province and has 8 banjar or small community resident, namely Banjar Dukuh, Pejaten, Simpangan, Baleran, Dalem, Pamesan, Badung and Pangkung. The landscape is flat at 300 asl. It is a village with a mixed area, does not have a watershed although it is located between two rivers.

Pejaten is very well known not only in Bali but also abroad as the center for the pottery industry. The total village area is 217 Hectares (Ha) with the largest land use as rice fields and plantations. However, the agriculture sector does not contribute significantly to rural community and household income. Most of rural community income comes from the pottery industry sector [1]. Recently, Tabanan Regency has designated this village as rural industrial area. Although the uniqueness design and quality have recognized worldwide but pride in recognition alone is not sufficient enough because there is a responsibility inherent in that recognition. There was a negative impact arise from its industry. Effort to reduce this require community involvement in future rural planning

Many studies have been carried out in Pejaten Village, but the research was conducted partially and lack of community involvement so that the risk of negative environmental impact is relatively high and finally take effect on sustainability of this rural business. The involvement plays an important role and



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

Published under licence by IOP Publishing Ltd

depend on their knowledge, behavior and attitude toward the policy. There are two problem formulations that require careful such as: in what level was the community's knowledge and attitude toward the rural industrial estate policy? and how was the spatial structure of rural industrial area based on the Hindu's concept of balance called *Tri Hita Karana*? Based on the problem, the aims of this research are as follow:

1. Assessing community perceptions and attitude of the designation of Pejaten Village as a rural Industrial Area Policy (KIP).
2. Analysing the spatial structure of rural industrial area based on the Hindu's concept of balance called *Tri Hita Karana*.

2. Theoretical Framework

2.1 *Rural Industrial Estates: Utilization of Space.* As stated in Government Regulation Number 24 of 2009 [2] that the aim of industrial estate development are to accelerate industrial growth in the regions, provide convenience for industrial activities, encourage industrial activities to be located in industrial areas, and increase industrial development efforts that are environmentally sound. In addition, it is also stated that an Industrial Estate is an area where industrial activities are concentrated which is equipped with supporting infrastructure and facilities which are developed and managed by an Industrial Estate Company that already has an Industrial Estate Business License. Companies in industrial areas are required to provide / control land, prepare land site plans, prepare technical area plans, Amdal, order industrial areas, develop land, and build infrastructure including installation of necessary installations / equipment.

The determination of rural industrial areas does provide an increase in community income but is also accompanied by direct influence on the surrounding environment (water and air pollution), or indirectly (flooding). Environmental pollution consists of air, water and soil pollution. Not every industry causes these three contaminants. This depends on the type of industry, for example the textile industry has a major contribution to water pollution. In addition, there are also industries that cause pollution in the form of smoke, odors, wastewater, chemical reactions and noise that reduce environmental quality. It has been stipulated that:

- a. Industrial companies are required to carry out efforts to balance and conserve natural resources and prevent damage and pollution to the environment as a result of their industrial activities.
- b. The government shall arrange and provide guidance in the form of guidance and counseling regarding the implementation of preventing damage and overcoming pollution of the environment due to industrial activities.

In assessing the feasibility of developing industrial estates, the variables of consideration can be grouped into 2 factors, namely internal and external factors.

2.1.1. *Internal Factors.* Internal factors are defined as factors that take into account the feasibility of industrial development from the point of view of industrial activities alone, as follows: (a) The amount of land demand; (b) The trend of growing industry types, (c) Various environmental problems that arise as a result of existing industrial growth; (d) Availability of infrastructure; (e) Availability of Human Resources (HR)

2.1.2. *External Factors.* Several external factors that are considered in the assessment of the feasibility of developing industrial estates are as follows:

- a. Hinterland conditions
- b. Competition with Other Regions
- c. Strategic Location of the Macroeconomic System

2.2 Perceptions and Attitudes of the Community. According to [3], attitude is a person's closed response to certain stimuli or objects that already involve the opinion and emotional factors concerned (happy-displeased, agree-disagree, good-bad, and so on). Meanwhile, according to [4] opinion, attitude is a tendency that comes from within an individual to behave in certain patterns, towards an object due to his stance and feelings towards that object. Based on the opinion of [5] attitude is an organization of opinions, one's beliefs about objects or situations are relatively steady, which is accompanied by a certain feeling and provides a basis for the person to make a response or behave in a certain way he chooses.

2.2.1. Components of Attitude. The attitude that is shown by an individual towards the object has a structure consisting of several components. The components in the attitude structure, namely:

- (1) The cognitive component, which is an individual's belief and understanding of an object through the process of seeing, hearing and feeling. The belief and understanding that is formed provides information and knowledge about these objects.
- (2) The affective component, which is the component related to the subjective emotional problems of the individual towards something.
- (3) Behavioral or conative components, namely the tendency to behave in an individual towards the object it faces.

2.2.2. Nature of Attitude. Attitudes can be positive and negative:

- (1) A positive attitude, there is a tendency for action to approach, like, expect certain objects.
- (2) Negative attitude, there is a tendency to stay away, avoid, hate, dislike certain objects.

Attitude measurement can be done directly or indirectly. It can be directly stated how the respondent's opinion or statement on an object. Indirectly, it can be done by using hypothetical questions and then asking the respondent's opinion through a questionnaire.

3. Research Method

This research used the mixed method in analyzing data related to spatial structure and community perceptions of the rural industrial area policy. Respondents were determined used stratified random sampling starting from determination of the location of the *banjar* and followed by the determination of respondents by proportional random sampling. Total amount of respondents are 250 people and they were asked to complete a questionnaire by choosing the most appropriate answer that best fits their opinion. Each option has a specific value. The value of the expected choice is 3 otherwise the answer that is not expected is 1. Perception analysis was carried out using a *likert* scale as follow: low, moderate, high level of perception and negative, neutral and positive attitude.

4. Result and Discussion

Pejaten Village tends to have the characteristics of an urban area compared to a village area indicated by the existence of various public facilities such as educational, economic and health facilities as an indicator component of the Human Development Index. The total population of Pejaten Village is 4,098 people, consisting of 2,099 men and 2,059 women including 1,190 families. The biggest source of livelihood for people is industry (entrepreneurship). Although most of the land use is for agriculture, there are only 58 farmers in Pejaten Village. This strengthens the designation of Pejaten Village as a Rural Industrial Area surrounded by agricultural villages.



Figure 1. Pejaten Village Map

Most of the population of productive age, but not all work because there are 1,460 people who are still in school or are looking for work. The number of poor families is 157 of the existing 1150 families. This condition certainly must be a concern so that the number of poor families can be reduced continuously. The structure of the population according to livelihoods shows that most of the population depends on the craftsmen sector (27.2%), the private sector at 12.1%, followed by farm laborers at 0.8% for productive age at 61.6%, while non earning 38.4%.

Economic sectors that are developing in addition to the industrial sector are the trade sector, the manufacturing sector, the tourism sector and the service sector such as carpenters, tailors, blacksmiths, odd shops and suppliers of building materials. In the service sector, what stands out is the growth of microfinance institutions / institutions in the form of cooperatives, Village Credit Institutions (LPD), and BUM-Desa as supporters of the village economy. Village markets have an important role in supporting increased community income.

The population structure according to the level of education shows the quality of human resources owned by Pejaten village. As much as 66 percent of the population is at the age of 7 to 18 years of primary education (primary and secondary school education, 9.2 percent have tertiary education, 16.2 percent are not yet in school.

Educational infrastructure and facilities in Pejaten Village are available in a fairly good category. Pejaten Village has 1 early childhood education institution (*PAUD*), 2 Kindergarten Education institutions. In addition, it also has 3 elementary schools and has 1 junior high school. The social life of the Pejaten village community is based an agrarian society lifestyle. Familiarity among the members of the community is still visible in everyday life. For example, some residents still adhere to the principle of mutual cooperation, such as holding community service two days before the full moon, they will help each other in cleaning the entire area of the temple and the area of each banjar. Please help the people of Pejaten village not only when someone is happy but also if there are some among the residents who experience grief or *Ngaben*.

4.1. Community Perception and Attitude. The results showed that the knowledge of the people of Pejaten Village on the policy of rural industrial areas (KIP) is in the moderate category. Likewise, the attitude of the people belonging to the positive category. Table 1. Showed that 89.2 percent respondent have a moderate level of knowledge. According to demography characteristic, most of respondent are 84 percent responden are under 45 years old that make a good access to KIP information suitable with [6] that stated community understand about the importance's of environment sustainability for their livelihood.

Table 1. Respondent distribution based on knowledge of KIP Policy, 2021

No	Catagory	Freqwency	Percentage (%)
1	high	22	8.8
2	moderate	223	89.2
3	low	5	2.0
Total		250	100

Most of respondent have a positive attitude toward KIP policy. The attitude assessment emphasize on the respondent act toward KIP program. The result indicated that collective action plays an important role in policy implementation at grassroot level [7],[8].

Table 2. Respondent Distribution based on Level of Attitude toward KIP Policy

No	Catagory	People Attitude	Percentage (%)
1	Positive	243	97.2
2	Neutral	7	2.8
3	Negative	0	0
Jumlah		250	100

The younger generation is less interested in developing the industrial sector, they are more interested in the world of tourism. Table 3 showed that the average value of people's attitudes at the age of 41-55 years is the highest compared to younger ages. Likewise, men have a higher average score than women, indicating that there is a tendency for men to have a more positive attitude. Most of tile factory workers (85%) are migrants from Java and Lombok Island. The business scale was categorized as a small business scale or a household business that lack of modern management and technology.

Table 3. Demography Characteristic of Respondent, 2021

Demography Variable		Total Respondent	Attitude	
			Mean	Standar Deviasi
Age	17-29 year	136	57,36	2,16
	30-42 year	74	65,25	3,15
	43-55 year	40	70,50	0,71
Sex	Male	164	64,70	5,76
	Female	86	63,08	5,85

4.2. The spatial structure of rural industrial estate ¹based on the Hindu's concept of balance called *Tri Hita Karana*.

There are 2 concepts in its management which are referred to as the DUWE concept. Natural resources in the village are divided into 3, namely private, communal and government resources. Each group has its own characteristics and is different for each type of soil and water resources. The Pejaten Village community manages the *duwe* for the greatest amount of community welfare with *perarem* (unwritten agreement) and *awig awig* (written agreement).

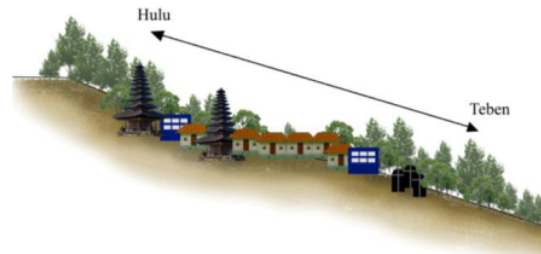


Figure 2. Hulu-Teben (Head and Tail) Concept

The concept of Ulu Teben (Head-Tail), as a form of division of village space/region which can be distinguished as follows [9]:

- 1 Upstream Zone (southwest of the settlement), the village spiritual activity facilities.
- 2 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 *Teben* (tail) Zone, is the lowest part which is used as a cemetery (*setra* area, *Prajapati* temple and plantation).



Figure 3. Spatial Map Village, 2021

The main village road that extends from north to south is a confirmation of the linear pattern of the village which functions as the main circulation route. The main village road is the core of the Spatial Pattern which functions as a center for public space orientation during the implementation of traditional ceremonies (ritual ceremonies) [10]. Village streets and alleys are the orientation direction of each yard which is perpendicular and intersects symmetrically. Road tracks are formed from environmental patterns that are adapted to village conditions and the height and low of the site. The yard functions more as a place to live to hold ceremonies and relate to the family, while in an effort to fulfill their daily needs they cultivate gardens outside the village (basic residence) [11], [12], [13]. Limited land and the desire to be close to the main road led to housing development towards *luanan/ulu*, head of spatial structure, but still no building in the *luanan* temple area, before head area. The residential area is in the village core zone which is in the area around the village's main road which stretches obliquely from the southwest to the northeast. The outermost area of the village is filled with residents' plantation.

5. Conclusion. There are two conclusions of this research as follow:

- 1 The community had quite positive attitudes and moderate perception categories regarding the policy of determining rural industrial area of Pejaten Village.
- 2 The spatial structure of common space had adapted from a rural space structure to an urban spatial structure.

References

- [1] Statistik K. Monography Pejaten 2020 2019;2019(37):1–16. Available from: [http://sippa.ciptakarya.pu.go.id/sippa_online/ws_file/dokumen/rpi2jm/DOCRPIJM_1536548764Bab_2-Profil_KabKota_\(tbn\)_2018.pdf](http://sippa.ciptakarya.pu.go.id/sippa_online/ws_file/dokumen/rpi2jm/DOCRPIJM_1536548764Bab_2-Profil_KabKota_(tbn)_2018.pdf)
- [2] Government Regulation No 24, year 2009 1390; pp 99–117
- [3] Notoatmodjo S. Promosi Kesehatan & Ilmu Perilaku. Jakarta: Rineka Cipta. 2012.
- [4] Koentjaraningrat 2013 *Pengantar Ilmu Antropologi*. pp 43
- [5] Walgito B 2013 *Pengantar Psikologi Umum*. Rajawali Perss. pp 252
- [6] Nanlohy H, Bambang AN, Ambaryanto A, and Hutabarat S 2014 Analisis Persepsi Masyarakat terhadap Pengelolaan Kawasan Mangrove Teluk Kotania. *Jurnal Wilayah dan Lingkungan*. **2** 1:89
- [7] Vipriyanti, N.U, Emy Handayani, Yulianti Sapanca, and Dewa Ayu Puspawatu. Model Penguatan Subak Di Era New Normal: Analisis Peran Collective Action Pada Penerapan Sistem Terintegrasi Itik Padi Di Tabanan-Bali: <http://ojs.uho.ac.id/index.php/JIMDP/article/view/14166>
- [8] Surata SPK, and Vipriyanti NU 2018 The subak cultural landscape as environmental education: Knowledge, attitudes, and experiences of Balinese teachers, student teachers, and students. *Journal Environment Education*. **49** 1 pp 59–70
- [9] Suyasa, I. W. A, I Komang Gede Santhyasa, and Wahyudi Arimbawa 2019 Tata Ruang Pemukiman Sentra Industri Genteng di Desa pejaten Tabanan. *Jurnal SPACE*. **1** 2 pp 28–34. Fakultas Teknik UNHI.
- [10] Parashita, N.LL, and I Made Adi Kampana 2017 Perkembangan Desa Wisata Pangsan sebagai Destinasi Pariwisata di Kecamatan Petang Badung. *Jurnal Destinasi Pariwisata* **5** 1 pp 34–39. p-ISSN: 2338-8811, e-ISSN: 2548-8937. Universitas Udayana.
- [11] Kasuma, I Putu Agus Wira 2009 Persepsi Masyarakat Adat sebagai Dasar Perumusan Konsep Tata Ruang Desa Adat Penglipuran, Bali. Tugas Akhir Program Studi Perencanaan Wilayah dan Kota ITS. Surabaya.
- [12] Suyasa, I Nyoman 2006 Strategi Pelestarian Pusat Kota Bangli Berdasarkan Prinsip-Prinsip Ruang Tradisional Bali. Tugas Akhir Program Studi Perencanaan Wilayah dan Kota ITS, Surabaya.

- [13] Kasuma, I Putu Agus Wira, and Iwan Suprijanto 2012 Karakteristik Ruang Tradisional pada Desa Adta Penglipuran, Bali. *Jurnal Permukiman* **7** 1 (2012) pp 40-50. p-ISSN: 1907-4352

Spatial Structure and Community Perception of Pejaten Village on Policy Determining Rural Industry Area in Tabanan, Bali

ORIGINALITY REPORT

20%
SIMILARITY INDEX

13%
INTERNET SOURCES

8%
PUBLICATIONS

10%
STUDENT PAPERS

PRIMARY SOURCES

1 www.granthaalayahpublication.org 3%
Internet Source

2 Submitted to Universitas Pamulang 2%
Student Paper

3 repository.unusa.ac.id 2%
Internet Source

4 St Sabahannur, Suraedah Alimuddin, St Subaedah, Nurul Wahdaniya, Firda Yunita Faharuddin. "The Effect of Cocoa Butter Substitute (CBS) Produced from Palm Kernel Oil and Virgin Coconut Oil (VCO) on The Quality of Milk Chocolate", Research Square Platform LLC, 2023 2%
Publication

5 M Roveri, F Gherardi, S Goidanich, D Gulotta, V Castelvetro, R Fischer, L Winandy, J Weber, L Toniolo. "Self-cleaning and antifouling nanocomposites for stone protection: properties and performances of stone-nanomaterial systems", IOP Conference 1%

Series: Materials Science and Engineering, 2018

Publication

6	repository.ubaya.ac.id Internet Source	1 %
7	Fitriana Ritonga. "The Relationship of Knowledge Level and Adolescents About Reproductive Health with Adolescent Reproductive Health Behavior", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2020 Publication	1 %
8	Submitted to Radboud Universiteit Nijmegen Student Paper	1 %
9	jqph.org Internet Source	1 %
10	Submitted to School of Business and Management ITB Student Paper	1 %
11	Submitted to President University Student Paper	1 %
12	Submitted to Rutgers University, New Brunswick Student Paper	1 %
13	journals.ums.ac.id Internet Source	1 %

14	Submitted to Forum Perpustakaan Perguruan Tinggi Indonesia Jawa Timur II	1 %
Student Paper		

15	ijphs.iaescore.com	1 %
Internet Source		

16	www.semanticscholar.org	1 %
Internet Source		

17	Submitted to Intercollege	<1 %
Student Paper		

18	pertambangan.fst.uinjkt.ac.id	<1 %
Internet Source		

19	www.scilit.net	<1 %
Internet Source		

20	logista.fateta.unand.ac.id	<1 %
Internet Source		

Exclude quotes On

Exclude matches Off

Exclude bibliography On