



## Analysis of Sustainable Development in the Sarbagita Area Analisis Pembangunan Berkelanjutan di Kawasan Sarbagita

NGAKAN GEDE AGUNG KHRISNA WIRYANANDA\*, I GEDE ANDY ANDIKA PARAHITA

Environmental Engineering Study Program, Faculty of Engineering, Udayana University, Bukit Jimbaran-Badung Bali, Indonesia, 80361

\*khrisna.wiryananda@unud.ac.id

### INFORMASI ARTIKEL

#### Article history:

Received 7 May 2023

Accepted 13 May 2024

Published 31 July 2024

#### Keywords:

Berkelanjutan

Sarbagita

Ekonomi

Sosial

Lingkungan

### ABSTRAK

Provinsi Bali memiliki kawasan metropolitan yang disebut dengan Kawasan Sarbagita (Denpasar, Badung, Gianyar, Tabanan). Sektor pariwisata menjadi sektor terbesar yang berpengaruh terhadap kinerja keuangan di Kawasan Sarbagita. Kontribusi positif dari sektor pariwisata terhadap perekonomian di Kawasan Sarbagita berbanding terbalik dengan kondisi dari aspek sosial dan lingkungan. Penelitian ini bertujuan untuk menganalisis aspek ekonomi, sosial, dan lingkungan serta merumuskan strategi pembangunan berkelanjutan di kota dan kabupaten yang ada pada Kawasan Sarbagita. Metode yang digunakan dengan pendekatan kuantitatif dan studi literatur. Teknik analisis yang digunakan yaitu analisis tren, perhitungan indeks keberlanjutan, dan deskriptif. Hasil penelitian menunjukkan bahwa Kabupaten/Kota yang ada di Kawasan Sarbagita cenderung mengarah pada tidak berkelanjutan. Hal tersebut ditandai dengan belum seimbangannya ketiga aspek berkelanjutan, yaitu ekonomi, sosial, dan lingkungan. Kinerja ekonomi dan lingkungan di Kota Denpasar, Kabupaten Badung, dan Kabupaten Tabanan cenderung mengalami penurunan, sedangkan kinerja sosial cenderung stagnan selama periode 2017–2019. Kinerja aspek ekonomi, sosial, dan lingkungan di Kabupaten Gianyar cenderung stagnan selama kurun waktu 2017–2019. Strategi yang dapat diterapkan untuk mencapai pembangunan berkelanjutan di Kawasan Sarbagita adalah dengan meningkatkan peran Desa Adat. Desa Adat telah terbukti berhasil memberikan dampak positif terhadap pembangunan ekonomi, sosial, dan lingkungan.

### ARTICLE INFO

#### Histori artikel:

Diterima 7 Mei 2023

Disetujui 13 Mei 2024

Diterbitkan 31 Juli 2024

#### Kata kunci:

Sustainable

Sarbagita

Economic

Social

Environment

### ABSTRACT

The Bali Province has a metropolitan area called the Sarbagita Area (Denpasar, Badung, Gianyar, Tabanan). The tourism sector is the largest sector that influences financial performance in the Sarbagita Area. The positive contribution of the tourism sector to the economy in the Sarbagita Area is inversely proportional to the conditions from the social and environmental aspects. This research aims to analyze economic, social, and environmental aspects and formulate sustainable development strategies in cities and districts in the Sarbagita Area. The method used is a quantitative approach and literature study. The analysis techniques used are trend analysis, sustainability index calculation, and descriptive. The results of the study show that the regencies/cities in the Sarbagita Area tend to lead to unsustainability. This is indicated by the unbalanced three aspects of sustainability, namely economic, social, and environmental. Economic and environmental performance in Denpasar City, Badung Regency, and Tabanan Regency tended to decline, while social performance tended to stagnate during the 2017–2019 period. The performance of economic, social, and environmental aspects in Gianyar Regency tends to be stagnant during the 2017–2019 period. The strategy that can be implemented to achieve sustainable development in the Sarbagita Area is increasing the role of Adat Villages. Adat Villages have been proven successful in providing a positive impact on economic, social, and environmental development.

1. INTRODUCTION

1.1 Background

The Bali Province has a metropolitan area called the Sarbagita Area. The area consists of four cities and regencies, namely Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency. Normatively, the Sarbagita Area has been regulated in Presidential Regulation Number 45 of 2011 concerning the Spatial Plan for Denpasar, Badung, Gianyar, and Tabanan Urban Areas. This policy places the Sarbagita Area as a National Activity Center as well as a National Strategic Area. One of the objectives of the Presidential Regulation is to create a sustainable Sarbagita Area.

The inclusion of sustainable elements means that there are three interrelated aspects, namely economic, social, and environmental. Related to the economy, the tourism sector is still the largest. The tourism sector has a significant effect on regional financial performance in the Province of Bali, especially in the Sarbagita Area (Widiastuti, 2013; Pratama & Jember, 2020). The positive contribution of the tourism sector to the economy in the Sarbagita Area is inversely proportional to the conditions from the social and environmental aspects.

Increased tourism activities are represented by the construction of restaurants and hotels in the Sarbagita Area, where which will encourage an increase in the intensity of families living in slums in the village (Yuliandari et al., 2014). In addition, the rapid growth of tourism in the Sarbagita Area will have an impact on the conversion of paddy fields. There has been a decrease in the area of paddy fields from 10,810.18 hectares in 2009 to 10,565.82 hectares in 2016 (Sriartha & Windia, 2019). The tendency for the conversion of paddy fields that occurred before was more prevalent in the south, but slowly began to head north. Based on the previous explanation, there are problems related to three aspects of sustainable development in the Sarbagita Area.

1.2 Objectives

This research aims to analyze three aspects of sustainable development, namely economic, social, and environmental, in cities and districts in the Sarbagita Area. This research also aims to analyze strategies for achieving sustainable development in the Sarbagita Area.

2. METHODS

2.1 Research Approach and Location

This study uses a quantitative approach because most of the data used in the study have measurable values and variables. It also uses a literature study approach. The research locations are in Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency, which are in the Sarbagita Area.

2.2 Research Data

The research data used is related to economic, social, and environmental aspects (Table 1). The economic aspect data used are economic growth and the Gini ratio. Social aspect data use poverty and human development index. Data related to environmental aspects, namely paddy field area.

The research data source is secondary data obtained from related agencies and literature studies.

Table 1. Data requirements.

Requirements	Type	Region	Source	Year
Economic Growth	Secondary	Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency	Central Statistics Agency and Regional Development Planning Agency	2017–2019
Gini Ratio	Secondary	Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency	Central Statistics Agency and Regional Development Planning Agency	2017–2019
Poverty	Secondary	Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency	Central Statistics Agency and Regional Development Planning Agency	2017–2019
Human Development Index	Secondary	Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency	Central Statistics Agency and Regional Development Planning Agency	2017–2019
Paddy Fields Area	Secondary	Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency	Ministry of Agriculture, Department of Public Works and Spatial Planning	2017–2019

2.3 Data Analysis

This research begins by collecting economic, social, and environmental data. Data processing using Microsoft Excel. The processing results are then analyzed by trend analysis to see development trends that occur. In addition, the data will also be compared with the targets that have been set. The next stage is to look at related references to support the analysis that has been done. The final step is to include each economic, social, and environmental data into the index to determine the sustainability of each aspect. The assumption of sustainability from each aspect is if the index value tends to increase. Calculation of the sustainability index uses the formula, namely (Sari & Prabatmodjo, 2013):

$$index(k) = weight \times \sum \frac{X^{(i)} Achievements}{X^{(i)} Target} \dots \dots \dots (1)$$

Explanation:

- Index (k) = Index value (k) (k= economic, social, environmental)
- Weight = 1/N(k)
- N(k) = The number of indicators in the index k (k=economic, social, environmental)
- X(i) Achievements = Achievement value for the i index constituent indicators (i=1,2,3.. etc)
- X(i) Target = Target value for the i index constituent indicators (i=1,2,3.. etc)

After obtaining the sustainability index value, a strategy analysis is carried out to achieve sustainable development. The analysis used is descriptive analysis with literature study.

### 3. RESULTS AND DISCUSSION

#### 3.1 Economic Aspect

The economic aspects that will be reviewed in this study are economic growth and the gini ratio of regencies/cities in the Sarbagita Area. In general, economic conditions in Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency experienced fluctuations during the period from 2017 to 2019. Badung Regency has the highest economic growth among other Regencies/cities in the Sarbagita Area in 2017–2018, namely respectively 6.09 percent and 6.73 percent. However, in 2019, the highest economic growth was in Denpasar City at 5.82 percent. During 2017–2018, only Badung Regency was able to exceed the economic growth target. In 2019 all Regencies/cities in the Sarbagita Region have yet to be able to achieve the planned economic growth targets.

The most significant contribution from the regency/city economy in the Sarbagita Area is from the tourism sector (providing lodging and eating and drinking). In 2019, the most significant contribution to the provision of lodging and food and drink was in Badung Regency at 28.53 percent, Denpasar City at 28.08 percent, Gianyar Regency at 26.03 percent, and Tabanan Regency at 21.91 percent (Statistics of Denpasar City, 2022; Statistics of Badung Regency, 2022; Statistics of Gianyar Regency, 2022; and Statistics of Tabanan Regency, 2022). Based on the level of economic growth and economic structure in the Regencies/cities in the Sarbagita Area, Denpasar City and Badung Regency are the highest among the other two districts. The results in economic growth that have been described are in line with research conducted

by Purwanti & Setyari (2021), which states that the Denpasar City and Badung Regency have a higher rate of economic growth among the Regencies/cities in the Sarbagita Area. This is because Denpasar City and Badung Regency (Kuta Urban Area) are core urban areas that function as centers of main activities and drivers of the development of the surrounding urban areas. In addition, Denpasar City is the capital of the Province of Bali, has become the center of government as well as economic and social activities. Badung Regency is the center of tourism destinations in Bali and has the most destinations compared to other regencies/cities (Purwanti & Setyari, 2021). Denpasar City and Badung Regency, as the Core Areas, have not been able to have a positive impact on the surrounding areas, namely Gianyar Regency and Tabanan Regency.

In general, the Gini ratio for regencies/cities in the Sarbagita Area is in a low category. Gianyar Regency has the lowest Gini ratio compared to the Regencies/cities in the Sarbagita Area during the period 2017 to 2019. The Gianyar Regency's Gini ratio fluctuated from 0.26 in 2017, 0.30 in 2018, and 0.29 in 2019. Denpasar City has the highest gini ratio among other Regencies/cities. Denpasar City's gini ratio tends to increase from 0.34 in 2017 to 0.35 in 2019. Denpasar City and Tabanan Regency have yet to be able to achieve the target gini ratio that has been planned for the 2017–2018 period. Badung Regency and Gianyar Regency have succeeded in achieving the Gini ratio target set during the 2017–2018 period. In 2019, only Badung Regency succeeded in achieving the predetermined Gini ratio target. The high Gini ratio rate in Denpasar City compared to other urban regencies tends to be influenced by the high unemployment rate in Denpasar City. During the period from 2017 to 2018, Denpasar City had the highest unemployment rate, followed by Tabanan Regency, Gianyar Regency and Badung Regency. Denpasar City's unemployment rate was 2.63 percent in 2017, 1.87 percent in 2018, and 2.29 percent in 2019 (Statistics of Bali Province, 2022). This is in line with research conducted by Amrullah (2020), namely, the City of Denpasar has a high Gini ratio because a high unemployment rate also causes it. In addition, there is also a theory that supports these results, which states that inequality between regions is caused by natural resource and demographic factors, which include unemployment problems (Sjarfizar, 2012). Detailed targets and achievements of economic growth and the Gini ratio can be seen in Table 2.

Table 2. Targets and achievements of economic growth (%) and gini ratio, 2017–2019.

No	Description	2017		2018		2019	
		Target*	Achievements**	Target*	Achievements**	Target*	Achievements**
1	Economic Growth						
A	Denpasar	6.70	6.05	6.79	6.42	6.85	5.82
B	Badung	5.98	6.09	6.10	6.73	6.15	5.81
C	Gianyar	7.18	5.46	7.26	6.01	6.03	5.62
D	Tabanan	6.45	5.37	6.55	5.71	6.70	5.58
2	Gini Ratio						
A	Denpasar	0.30	0.34	0.27	0.34	0.24	0.35
B	Badung	0.32	0.32	0.34	0.34	0.33	0.32
C	Gianyar	0.35	0.26	0.34	0.30	0.27	0.29
D	Tabanan	0.30	0.31	0.28	0.33	0.25	0.31

Source: \* Regional Development Planning Agency of Denpasar, Badung, Gianyar, and Tabanan, 2022

\*\* Statistics of Denpasar, Badung, Gianyar, and Tabanan, 2022

### 3.2 Social Aspect

The social aspects that will be reviewed in this study are poverty and the human development index (HDI). The poverty rate in Regencies/cities in the Sarbagita Area tends to decrease during the 2017–2019 period. Denpasar City and Badung Regency have poverty rates below three percent, while Tabanan Regency and Gianyar Regency have poverty rates above 3 percent during 2017–2019. The lowest poverty rate is in Badung Regency, namely 2.06 percent in 2017 and tends to decrease to 1.78 in 2019. Meanwhile, the highest poverty rate is in Tabanan Regency, which was 4.92 percent in 2017 and tends to decrease to 4.21 percent in 2019. During the 2017–2019 period, only Denpasar City did not reach the planned poverty rate target.

Denpasar City and Badung Regency are two regencies/cities with lower poverty levels compared to Gianyar Regency and Tabanan Regency. This tends to be caused because the City of Denpasar and Badung Regency are more developed, especially from the tourism side. This can be seen in higher economic growth, especially from the tourism sector in Denpasar City and Badung Regency. This is by following research from Ratih *et al.* (2017), which states that increased economic growth will improve people's welfare and reduce poverty levels. The high level of poverty in Gianyar Regency and Tabanan Regency tends to be because the two Regencies have not been able to maximize the potential of the area they have, for example, Gianyar Regency has the potential for religious tourism, arts and Tabanan Regency has the potential for the agricultural sector (Ratih *et al.*, 2017). In

addition, Tabanan Regency with the highest poverty rate among the Regencies/cities in the Sarbagita Area is affected by the lowest economic growth rate and the second-highest unemployment rate. This is by following the theory, which states that economic growth and unemployment affect poverty (Dewi, 2020).

The Human Development Index (HDI) in all regencies/cities in the Sarbagita Area has increased during the 2017–2019 period. This means that human development in the District/City of the Urban Area of Sarbagita is getting better and residents have succeeded in accessing the results of development to obtain health, education and income. Denpasar City, Badung Regency, and Gianyar Regency have been able to achieve the HDI targets set for the 2017–2019 period. Tabanan Regency, in the 2018–2019 period, has not been able to achieve the planned HDI target. Denpasar City has the highest HDI value among other Regencies/cities in the Sarbagita Urban Area and is included in the high category during 2017–2019. The HDI value of Denpasar City in 2017 was 83.01 and increased to 83.68 in 2019. Tabanan Regency had the lowest HDI dissolving in other Regencies/cities, namely 74.86 in 2017 and increased to 76.16 in 2019. The increasing trend in the HDI has an effect on the decreasing poverty rate in the Sarbagita Area. This is by following per under the theory that states that there is a link between declining poverty levels and increasing HDI (Mirza, 2012). Detailed targets and achievements of the poverty rate and human development index can be seen in Table 3.

Table 3. Targets and achievements of poverty rate (%) and HDI, 2017–2019.

No	Description	2017		2018		2019	
		Target*	Achievements**	Target*	Achievements**	Target*	Achievements**
1	Poverty Rate						
A	Denpasar	2.12	2.27	2.10	2.24	2.07	2.10
B	Badung	2.25	2.06	2.15	1.98	2.00	1.78
C	Gianyar	5.25	4.46	4.85	4.19	4.45	3.88
D	Tabanan	5.55	4.92	5.25	4.46	5.00	4.21
2	HDI						
A	Denpasar	82.91	83.01	83.24	83.30	83.57	83.68
B	Badung	80.30	80.54	80.80	80.87	81.37	81.59
C	Gianyar	75.69	76.09	76.21	76.61	76.81	77.14
D	Tabanan	74.84	74.86	76.01	75.45	77.01	76.16

Source: \* Regional Development Planning Agency of Denpasar, Badung, Gianyar, and Tabanan, 2022

\*\* Statistics of Denpasar, Badung, Gianyar, and Tabanan, 2022

### 3.3 Environmental Aspect

The area of regency/city paddy fields in the Sarbagita Area tends to decrease during the 2017–2019 period. Tabanan Regency has the largest paddy field area among other Regencies/cities. The area of paddy fields in Tabanan Regency in 2017 reached 19,729 ha and tended to decrease to 19,611 in 2019. The smallest area of paddy fields was Denpasar City, which was 2,287 ha in 2017 and tended to decrease to 2,132 in 2019. Badung Regency has an area of paddy fields that amounted to 9,365 in 2017 and tends to decrease to 9,105 in 2019. The area of paddy fields in Gianyar Regency tends to remain at 3,814 during 2017–2019. The City of Denpasar has

exceeded the target set for the area of paddy fields during the 2017–2019 period. Meanwhile, Badung Regency, Gianyar Regency, and Tabanan Regency still need to meet the targets set for the 2017–2019 period.

The trend of decreasing the area of district/city paddy fields in the Sarbagita area is caused by several main factors, namely economic factors, rapid tourism and development, population increase, environment, social, technology and institutions (Sidiq *et al.*, 2020; Widyastuty, 2019; Wiryananda *et al.*, 2018; Widiarsa & Suartika, 2018; Dewi & Sarjana, 2015; Dipayana & Sunarta, 2015). Details of targets and achievements from paddy fields can be seen in Table 4

Table 4. Targets and achievements of paddy field area (Ha), 2017–2019.

No	Description	2017		2018		2019	
		Target*	Achievements**	Target*	Achievements**	Target*	Achievements**
1	Denpasar	1,564	2,287	1,564	2,131	1,564	2,132
2	Badung	9,737	9,365	9,737	9,068	9,737	9,105
3	Gianyar***	4,217	3,814	4,217	3,814	4,217	3,814
4	Tabanan	25,731	19,729	25,731	19,230	25,731	19,611

Source: \* Spatial Planning of Denpasar, Badung, and Tabanan

\*\*Ministry of Agriculture, 2020

\*\*\*Department of Public Works and Spatial Planning Gianyar Regency, 2022

### 3.4 Sustainability Index

Based on the results of the sustainability index, all regencies/cities in the Sarbagita area tend to be unsustainable. Denpasar City tends to lead to unsustainability, which is characterized by the imbalance of the three aspects of sustainability. Economic and environmental performance tended to decline, while social performance tended to stagnate during the 2017–2019 period. The economic aspect shows the

lowest performance. The development that occurred in Badung Regency during 2017–2019 also tended to be unsustainable. An imbalance between economic, social, and environmental aspects characterizes this. Economic and environmental performance tended to decline, while social performance tended to stagnate during the 2017–2019 period.

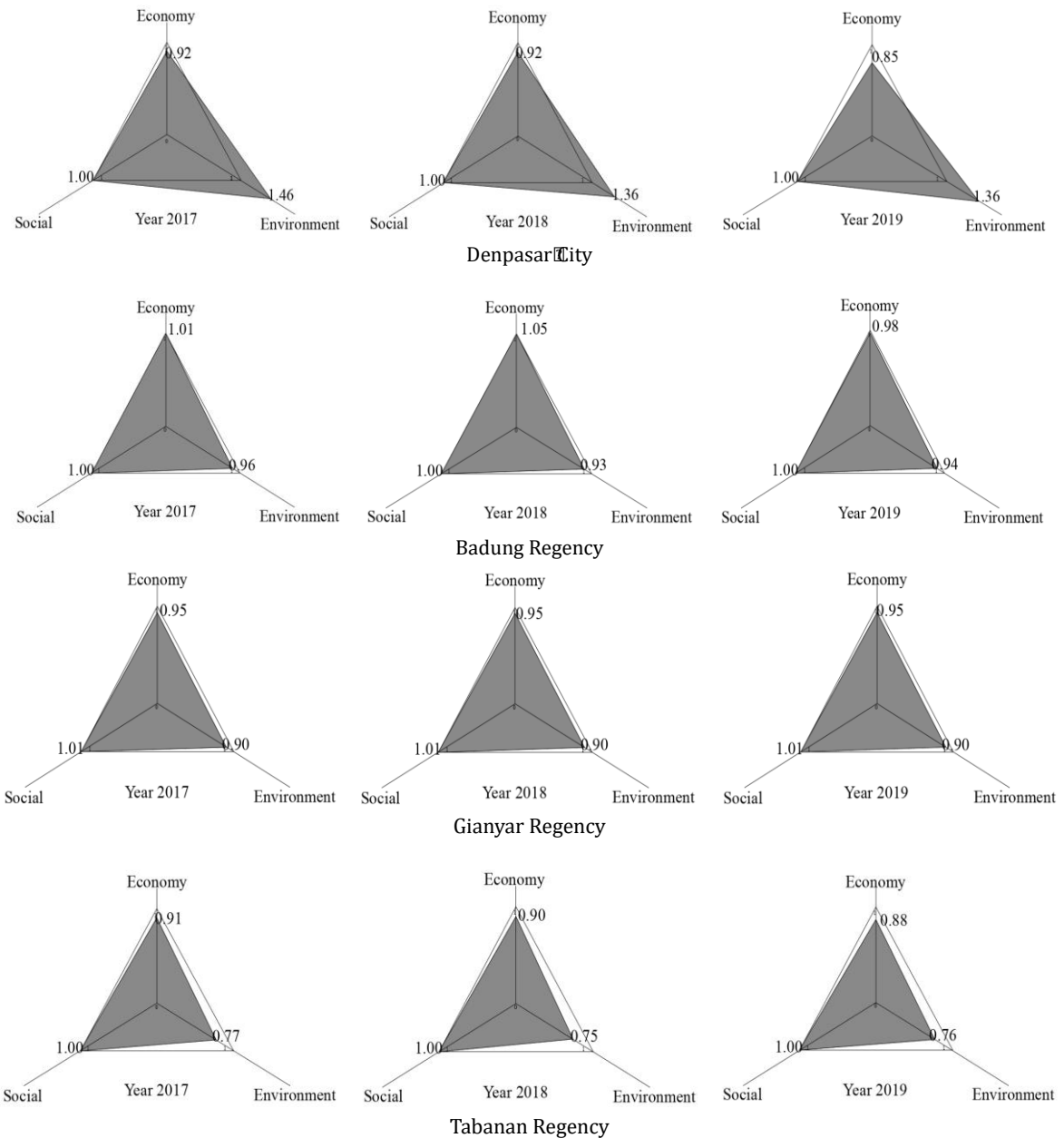


Figure 1. Sustainability Index for Denpasar City, Badung Regency, Gianyar Regency, and Tabanan Regency, 2017–2019  
Source: analysis results, 2022



Environmental performance looks the worst among other performances. The performance of the economic, social, and environmental aspects in Gianyar Regency is also not balanced, so the development that occurs tends to lead to unsustainability. The three performance indicators show stagnant results during the 2017–2019 period, and environmental performance appears to be the lowest among other performances. Tabanan Regency tends to be unsustainable. This can be seen from the performance of the three aspects, namely economic, social, and environmental, which still need to show balance. The economic and environmental performance showed a decline, while social performance tended to stagnate during the 2017–2019 period. Environmental performance looks the worst among the social and economic performance. Detailed sustainability indexes from Denpasar City, Badung Regency, Gianyar Regency and Tabanan Regency can be seen in Figure 1.

### 3.5 Strategy to Achieve Sustainable Development

Cities and regencies in the Sarbagita Area show an unsustainable trend. For this reason, a strategy needs to be implemented so that the Sarbagita Area can achieve its goal of being sustainable. The approach that has been implemented so far has not been able to realize sustainable development in the Sarbagita Area. There is one approach that has yet to be widely implemented, namely using the advantages possessed by the City and Regency in the Sarbagita Area. The advantage in question is increasing the role of Adat Villages/Pakraman Villages in realizing sustainable development. Increasing the role of Adat Villages also means giving them the freedom to develop development based on their respective natural-social characteristics without having to duplicate and impose development patterns in other regions that are not relevant to their own region (Hannan, 2018). The role of Adat villages is vital important so that development remains steady and sustainable (Mudana, 2018). Adat Villages have also had legality starting from 2001 and until now with the issuance of Bali Provincial Regulation Number 4 of 2019 concerning Adat Villages in Bali.

Adat Villages can play a role in alleviating poverty, inequality and unemployment. Poverty, inequality and unemployment are problems of sustainable development that occur in the Sarbagita area. The relevant poverty alleviation program model developed among urban poor communities is by optimizing the basic social and cultural modalities of society. This refers to the placement of Adat villages as the core of all lines of command and coordination for handling poverty because Adat villages are a symbol of community customs and culture (Lasmawan & Suryadi, 2012). To increase the role of Adat Villages in alleviating poverty, related institutions, especially the Adat Village Council and the Government, need to increase the understanding and abilities of Adat Village administrators in the form of training or upgrading. In the future, Adat Villages can play a role in the entire development process, from planning and implementation to supervision (Research Institutions and Community Service of Udayana University and Regional Development Planning Agency of Bali Province, 2015). Poverty reduction through Adat Villages is entirely achievable, as seen in Kutuh Adat Village, Badung Regency.

The strategy implemented by the Kutuh Adat Village is to manage the Village's potential (natural resources and human resources) and form an Adat Village Owned Enterprise (Ramadhanti, 2020). In this case, natural potential has been managed well, and human resources have been managed by opening employment opportunities and scholarship programs to improve the quality of society. There were no longer any unemployed persons in the Adat Village because of the effectiveness of this strategy. Kutuh Adat Village is an example related to implementing sustainable development, namely improving economic, social, and environmental aspects by managing the potential of natural resources and human resources.

Adat Villages also have an important role in reducing conflict and the rate of land conversion. Land conversion is a problem in the Sarbagita area. One of the Adat villages that has succeeded in resolving the land conversion conflict is the Tunjung Adat Village. The land conversion conflict that occurred in the Tunjung Adat Village was resolved by making an Adat regulation (*perarem*) which contained a prohibition on developers entering the Tunjung Adat Village area (Dewi, 2016). Apart from that, Adat Villages also have potential related to controlling spatial utilization. This can be accomplished by organizing a task force that will subsequently conduct out patrols to spatial control, coordinating with related agencies (Wiryananda et al., 2018). Another thing that can be done is to collaborate with the Village Credit Institution (LPD) and also the Subak organization, related to including prohibitions on land conversion in their respective regulations. Based on the description and several examples of the success of Adat Villages in development, it is important to carry out a strategy to strengthen the role of Adat Villages in creating sustainable development in the Sarbagita Area.

## 4. CONCLUSION

The sustainability index of all districts/cities in the Sarbagita area tends towards unsustainability. Performance in economic and environmental aspects tends to decline, while social performance tends to stagnate. The strategy that can be implemented to achieve sustainable development in the Sarbagita Area is increasing the role of Adat Villages. Adat Villages have been proven successful in providing a positive impact on economic, social, and environmental development. Adat villages can play a role in the entire development process. The research contribution provides knowledge about the sustainability of economic, social, and environmental aspects in cities and districts in the Sarbagita area. Another contribution is that it can be used as an initial mapping regarding sustainable development in cities and districts in the Sarbagita area. The strategies offered can be an alternative for achieving sustainable development based on the characteristics of each region.

## ACKNOWLEDGEMENT

The author would like to thank Udayana University for funding this research with the DIPA PNB of Udayana University for Fiscal Year 2022.

## REFERENCES

- Amrullah, M. (2020). Studi Komparasi Distribusi Pendapatan Antar Kabupaten/Kota di Provinsi Bali. Tesis, Universitas Brawijaya Malang.
- Dewi, I. A. L., & Sarjana, I. M. (2015). Faktor-faktor pendorong alih fungsi lahan sawah menjadi lahan non pertanian (kasus: subak kerdung, kecamatan Denpasar selatan). *Jurnal Manajemen Agribisnis*, 3, 2.
- Dewi, N. M. L. L. K. (2016). Peran desa pakraman dalam pembentukan perarem terkait penyelesaian konflik alih fungsi lahan (Studi kasus di desa pakraman tunjuk, kabupaten tabanan). *Jurnal Magister Hukum Udayana*, 5, 3, 435-446
- Dipayana, A & Sunarta, I. N. (2015). Dampak pariwisata terhadap alih fungsi lahan di desa tibubeneng kecamatan kuta utara kabupaten badung (studi sosial-budaya). *Jurnal Destinasi Pariwisata*. 3. 2.
- Hannan, A. (2018). Strategi Penguatan Pembangunan Madura Yang Berkelanjutan Melalui Pemberdayaan Nilai Kearifan Lokal. *Simulacra*, 1, 1. 19-42.
- Lasmawan, I. W. & Suryadi, M. (2012). Pengembangan model pengentasan kemiskinan berbasis nilai-nilai nyamabraya (ajaran tatwamasi) pada masyarakat perkotaan di provinsi bali. *Jurnal Ilmu Sosial dan Humaniora*, 1, 1, 55-67.
- Ministry of Agriculture. (2020). *Agricultural Land Statistics 2015-2019*. Ministry of Agric.
- Mirza, D. (2012). Pengaruh kemiskinan, pertumbuhan ekonomi, dan belanja modal terhadap indeks pembangunan manusia di Jawa Tengah tahun 2006-2009. *Economic Development Analysis Journal*, 1(1).
- Mudana, I. G. A. M. G. (2018). Eksistensi Pariwisata Budaya Bali Dalam Konsep Tri Hita Karana. *Jurnal Ilmiah Hospitality Management*, 8, 2. 61-68.
- Pratama, A., & Jember, I. (2020). Analisis perkembangan pariwisata di wilayah sarbagita provinsi bali. *E-Jurnal Ekonomi Pembangunan Universitas Udayana*, 9(3), 473-503.
- Presidential Regulation Number 45 of 2011 concerning Spatial Planning for Denpasar, Badung, Gianyar and Tabanan Urban Areas. Indonesia: 27 July 2011.
- Purwanti, P. A. P., & Setyari, N. P. W. (2021). Pertumbuhan ekonomi dan ketimpangan wilayah di kawasan strategis SARBAGITA (Denpasar, Badung, Gianyar, Tabanan). *Jurnal Dinamika Ekonomi dan Bisnis*, 18(2), 189-200
- Ramadhanti, R. A. (2020). Strategi Desa Adat Dalam Mengentaskan Kemiskinan Di Desa Adat Kutuh Kecamatan Kuta Selatan Kabupaten Badung Provinsi Bali. S1 thesis, Universitas Muhammadiyah Yogyakarta.
- Ratih, G., Utama, M., & Yasa, I. (2017). Pengaruh investasi, pengeluaran pemerintah, tenaga kerja terhadap produk domestik regional bruto dan tingkat kemiskinan pada wilayah sarbagita di Provinsi Bali. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 6(1),
- Regional Development Planning Agency of Badung Regency. (2022). Gini ratio, human development index, economic growth, poverty level.
- Regional Development Planning Agency of Denpasar City. (2022). Gini ratio, human development index, economic growth, poverty level.
- Regional Development Planning Agency of Gianyar Regency. (2022). Gini ratio, human development index, economic growth, poverty level.
- Regional Development Planning Agency of Tabanan Regency. (2022). Gini ratio, human development index, economic growth, poverty level.
- Regional Regulation of Badung Regency Number 26 of 2013 concerning Badung Regency Spatial Planning for 2013-2033. Mangupura: 30 December 2013.
- Regional Regulation of Bali Province Number 4 of 2019 concerning Traditional Villages in Bali. Denpasar: 28 May 2019.
- Regional Regulation of Denpasar City Number 27 of 2011 concerning Denpasar City Spatial Planning for 2011-2031. Denpasar: 30 December 2011.
- Research Institutions and Community Service of Udayana University and Regional Development Planning Agency of Bali Province. (2015). *Laporan Hasil Penelitian Kontribusi Desa Pakraman di Bali Dalam Penanggulangan Kemiskinan*.
- Sari, I., & Prabatmodjo, H. (2013). Evaluasi keberlanjutan kota Bandung. *Jurnal Perencanaan Wilayah dan Kota*, 2(3).
- Sriartha, I., & Windia, W. (2015). Efektifitas implementasi kebijakan pemerintah daerah dalam mengendalikan alih fungsi lahan sawah subak: studi kasus di kabupaten badung, bali. *Jurnal Kajian Bali*, 5(2), 327-346.
- Statistics of Badung Regency. (2022). GRDP Distribution Based on Constant Prices, Gini ratio, human development index, economic growth, poverty level.
- Statistics of Bali Province. 2022. Unemployment Rate of District Cities in Bali Province.
- Statistics of Denpasar City. (2022). GRDP Distribution Based on Constant Prices, Gini ratio, human development index, economic growth, poverty level.
- Statistics of Gianyar Regency. (2022). GRDP Distribution Based on Constant Prices, Gini ratio, human development index, economic growth, poverty level.
- Statistics of Tabanan Regency. (2022). GRDP Distribution Based on Constant Prices, Gini ratio, human development index, economic growth, poverty level.
- Widiarsa, I., & Suartika, G. (2018). Pengendalian alih fungsi lahan pertanian di kawasan perkotaan mangupura kabupaten badung. *Ruang*, 5(2), 111-134.
- Widiastuti, N. (2013). Pengaruh sektor pariwisata terhadap

kinerja keuangan daerah dan kesejahteraan masyarakat kabupaten/kota di provinsi bali. *E-Jurnal Ekonomi dan Bisnis*, 2(5), 292–311.

Wiryananda, N., Hasibuan, S., Madiasworo, T. (2018). Kajian pemanfaatan ruang kota berkelanjutan. *Jurnal Teknik Sipil*, 15(1), 31–41.

World Commission on Environment and Development. (1987). *Our common future*. United Nations.

Yuliandari, Y. R. D., Martha, L. F., Widodo, D. R. (2014). Analisis Geospasial Dampak Perkembangan Kegiatan Pariwisata Terhadap Permukiman Kumuh Wilayah Sarbagita, Bali. *Journal of Social Welfare*. 1. 2.