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The Impact of Village Head Leadership and Village Fund Allocation on the Environmental Quality of Village Settlements

Alinursal Noer¹, Syamsul Amar² and Hasdi Aimon³

Abstract

This study aims to analyze the impact of village head leadership and the allocation of village funds on the quality of the village settlement environment. Ecological standards are needed by living creatures for the sustainability of their lives. This can be a good ecosystem and requires an ecological label to balance economic interests and ecological preservation. With regional autonomy, it is hoped that it can improve the economy through development activities in various sectors, several environmental problems emerged during the regional autonomy era, including: a) air pollution caused by energy consumption; b) increasing amount of waste due to increasing population; and c) exploitation of natural resources such as logging and burning of forests, fishing with explosives, and uncontrolled exploitation of natural mineral resources. This study was conducted in Padang Pariaman Regency, which is in West Sumatra Province, involving 103 villages in Padang Pariaman Regency. The Smart PLS application is used to process and analyze data. The results of the study show that village head leadership has a significant influence on the quality of the village settlement environment and the allocation of village funds has a significant impact on the quality of the village settlement environment.

Keywords: Fund Allocation, Leadership, Environmental Quality

INTRODUCTION

Ecological standards are needed by living creatures for the sustainability of their lives. This can be a good ecosystem and requires an environmental label to balance economic interests and ecological preservation. With regional autonomy starting in 2000 and the 2014 village law, regions are expected to improve their economy through development activities in various sectors. (Widodo, 2004) identified several environmental problems that emerged during the regional autonomy era, including a) air pollution caused by energy consumption from power plants, industrial furnaces, and vehicle engines; b) increasing amount of waste due to increasing population; and c) exploitation of natural resources such as logging and burning of forests, fishing with explosives, and uncontrolled exploitation of natural mineral resources.

Environmental pollution in Padang Pariaman has tended to increase in the last two years, namely, water pollution increased significantly by 225% in 2018 compared to the previous year, while land pollution increased by 200%. However, there was a significant reduction in air pollution of 39 percent compared to levels observed in 2017.

Village funds budgeted from 2014 to 2018 in West Sumatra Province can be seen in table 1 below.

¹ Doctoral Program of Environmental and Development Studies, Faculty of Economics, Padang State University, Indonesia E-mail: alinursalnoer@gmail.com

² 1Doctoral Program of Environmental and Development Studies, Faculty of Economics, Padang State University, Indonesia E-mail: syamsul_amar2@yahoo.co.id

³ 1Doctoral Program of Environmental and Development Studies, Faculty of Economics, Padang State University, Indonesia E-mail: hasdiaimons3dkpl@gmail.com

Table 1. Details of Village Fund Allocation of West Sumatra Province in 2014-2018

No	Region Name	Number of Villages	Village Fund 2014	Village Fund 2015	Village Fund 2016	Village Fund 2017	Village Fund 2018
	Provinsi Sumatera		0	0	0	0	
	Barat		· ·	V	O	O	
1	Kab. Limapuluh Kota	79	13.393.202	23.740.813	53.280.090	67.781.118	64.968.666
2	Kab. Agam	82	13.901.804	24.751.325	55.566.447	70.772.851	63.978.696
3	Kab. KepulauanMentawai	43	7.289.971	14.962.271	33.580.998	41.619.399	45.266.896
4	Kab. Padang Pariaman	103	10.172.052	18.823.668	42.269.545	84.644.728	81.944.437
5	Kab. Pasaman	37	5.425.094	11.629.286	25.551.224	35.950.811	38.829.156
6	Kab. Pesisir Selatan	182	30.855.224	50.359.931	112.965.690	143.905.954	145.715.752
7	Kab. Sijunjung	61	10.341.586	18.156.858	40.677.753	51.629.928	49.640.995
8	Kab. Solok	74	12.884.599	22.378.076	50.220.928	64.082.138	62.887.205
9	Kab. Tanah Datar	75	12.715.065	21.830.755	48.999.837	64.469.772	56.799.295
10	Kab. Bukit Tinggi	27	0	0	0	0	0
11	Kota Padang Panjang	55	0	0	0	0	0
12	Kota Padang	19	0	0	0	0	0
13	Kota Payakumbuh	0	0	0	0	0	0
14	Kota Sawahlunto	27	4.577.423	8.191.432	18.396.311	23.665.861	23.447.792
15	Kota Solok	0	0	0	0	0	0
16	Kota Pariaman	55	9.324.381	15.339.016	34.425.075	44.148.673	41.606.563
17	Kab. Pasaman Barat	19	3.221.150	8.782.910	19.617.110	25.253.383	36.711.427
18	Kab. Dharmasraya	52	9.493.915	15.755.270	35.357.315	45.098.231	43.249.031
19	Kab. Solok Selatan	39	6.611.834	12.356.228	27.729.286	35.326.124	35.721.401
	TOTAL	1,029	150.207.300	267.003.839	598.637.609	796.538.971	790.787.312

Source: Ministry of Finance of The Republic of Indonesia, 2019

Based on Table 1 above, it can be seen that the village fund allocation for Padang Pariaman Regency always increases every year, where in 2014 it was IDR 10,172,052,000,- in 2015 it increased to IDR 18,823,668,000,- (85.05%), in 2016 it rose again to IDR 42,269,545,000 (124.55%), in 2017 it rose again to IDR 84,644,728,000 (100.25%), in 2018 it fell to IDR 81,944,437. 000,- (-3.54%).

Based on the information in Table 1, it can be explained that in Padang Pariaman Regency, the allocation of village funds always increases every year, but this is not always accompanied by an increase in environmental quality but instead an increase in the amount of environmental pollution.

Based on the results of the independent evaluation of each village which is guided by Minister of Home Affairs regulation Number 51 of 2017 concerning evaluation of village development, it shows that the majority of villages in Padang Pariaman district are underdeveloped as seen in Table 2 below:

Table 2. Evaluation of Village Development of Padang Pariaman Regency in 2018-2019

No	Description		Evaluation Th 2018 (Number of Villages)			Evaluation Th 2019 (Number of Villages)		
1	Performance/Leadership of Village H (Government)	ead	0	3	100	0	9	94
2	Fund Allocation Management		0	3	100	0	9	94
3	Environmental Conservation (Territoriality)		0	3	100	0	9	94

Source: Community and Village Empowerment Service of Padang Pariaman Regency, 2019 Data processed

From Table 2 above, it can be explained that the leadership of the village head is not good, where in 2018 out of 103 villages, only 3 villages (3%) had good (developed) village head leadership performance, while 100 villages (97%) did not do well (less developed). Furthermore, in 2019, of the 103 villages, only 9 villages (9%) had good mayor leadership, while 94 villages (91%) had poor leadership. Meanwhile, the management of village fund allocations and environmental preservation also shows the same thing as the performance of the village head leadership, namely in 2018 it was 97% unfavorable, and in 2019 it was 91% unfavorable. If it is related to the increase in the village fund allocation, which on average every year is 76.58%, then the increase in the village fund allocation has not been able to improve the mayor's leadership.

This study explores the impact of village head leadership and village fund allocation on the quality of the settlement environment in Padang Pariaman Regency, West Sumatra. There are three research variables, namely village head leadership, village fund allocation, and the quality of the village settlement environment.

The novelty of this research lies in its comprehensive approach to the relationship between the three, something that has never been explored before in similar research or publications.

This study explains the allocation of village funds which has a limited relationship to the leadership of the village head and the quality of the village settlement environment. The uniqueness of this research lies in the exploration of formal and informal roles in village leadership, which has never been explored in Indonesia. This study investigates the comprehensive relationship between village head leadership, village fund allocation, and the quality of the village settlement environment.

Meanwhile, research so far has only been carried out partially between village leadership and village fund allocation, such as research conducted by (Rachmat, 2019). Meanwhile, research (Leung & Rosenthal, 2019; Satterwhite et al., 2015; Ogunade, 2005) only studied the relationship between leadership and environmental quality. Research (Watts et al., 2019), and (He, 2015) only looks at the relationship between village funds and ecological quality.

Framework of Thinking

The concepts of leadership, fiscal decentralization, and environmental quality are used in this study to develop a framework. These three concepts were developed in analyzing the impact of village head leadership and the allocation of village funds on the quality of the village settlement environment. The following is the rationale for this study.

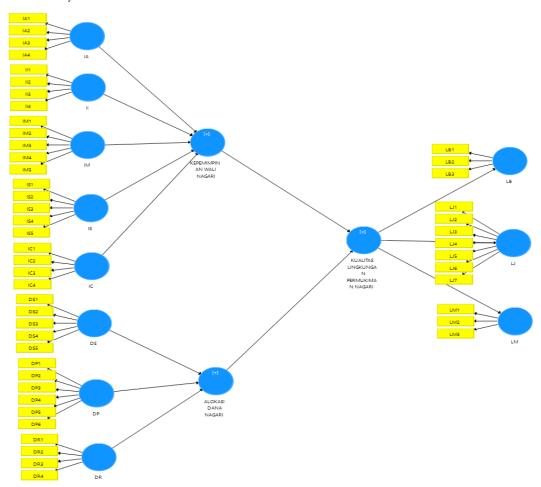


Figure 1. Thinking Framework

Source: Processed Data (SEMPLS)

LITERATURE REVIEW AND RESEARCH HYPOTHESIS

Literature Review

Transformational village head leadership can bring village officials, other people, or the community to do something because they are inspired, motivated, challenged, stimulated, and directed to achieve a common goal. Transformational leadership is one of three concepts according to (Bass & Avolio, 1990), namely: 1) transformational, 2) transactional, and 3) passive/avoidant. According to (Robbins & Judge, 2015) the concept of leadership is classified according to four types of leadership styles, namely: 1) Charismatic Leadership Style, 2) Transactional Leadership Style, 3) Transformational Leadership Style, and 4) Visionary Leadership Style.

Transformational Leadership provides stimulation and inspiration for followers to achieve goals and processes so that their leadership capacity can be developed. Transformational leaders enable followers to succeed as leaders by (1) responding to the needs of individual followers to empower them and (2) aligning the goals and objectives of individual followers, leaders, groups, and the larger organization (Bernard M. Bass and Ronald E. Riggio, 2006).

The concept of village fund allocation is financial assistance from the central, provincial, and district/city governments which is budgeted through the State Revenue and Expenditure Budget and the respective Regional Revenue and Expenditure Budget every year to be used to finance government administration, implementation of development, community development and community empowerment. This is in line with (Robertson et al., 2015) where village fund allocation provides development funds directly to local governments and the community. These funds are used for small-scale infrastructure projects such as bridges and roads connecting villages, drainage, and irrigation. This concept is called village development funds or LDF (Local Development Funds).

Meanwhile (Hussain et al., 2021) call village funds a transfer of power and responsibility from the federal government to subnational governments. These funds are budgeted every year in the APBN (Arifin et al., 2020) to be given to each village to integrated and optimize all existing budget allocation schemes from the Government to villages (Bappenas, 2011), used for infrastructure development (Nugroho et al., 2022) and a potential instrument for conservation and reforestation (Watts et al., 2019).

Village Funds have a significant positive effect on pollution reduction expenditures and pollutant disposal costs, which can help protect the environment (He, 2015). Village Funds allocated for PNPM Green activities have been able to improve environmental quality, namely by reducing emissions from deforestation and degradation (Watts et al., 2019), as well as influencing the level of community welfare in Indonesia because they are used to finance physical, financial development and educational facilities, health, administration, development, and community empowerment (Dwitayanti et al., 2020).

The concept of residential environmental quality is a combination of the condition of residential environmental units including aspects of house condition, ecological sanitation, and basic residential infrastructure. Each component that forms the residential environment is interconnected with one another. Changes in environmental quality are correlated with changes in land use, such as the rapid urbanization of residential areas which leads to an increase in land area with poor eco-environmental quality (Sun et al., 2020), and environmental public spaces (Green Open Space) which maintained security can help improve environmental sustainability (Deng et al., 2015). On the other hand, renewable energy also plays an important role in achieving environmental sustainability (Ike et al., 2020; Gureva, 2018).

The key to preserving the environment is changing human behavior with leadership (Leung & Rosenthal, 2019), and women's leadership is essential for building capacity in society for sustainable development (Barrios et al., 2020). Meanwhile, leadership contributes greatly to the implementation of sustainable cities and determines sustainable city performance (Zhang et al., 2020; Xiao et al., 2010).

Research Hypothesis

Based on this framework of thought, a study was carried out on "The Impact of Village Head Leadership, Village Fund Allocation on the Quality of the Village Settlement Environment (Case Study in Padang

Pariaman Regency, West Sumatra Province). For this reason, the problem is formulated into several hypothesis formulas, as follows:

- 1. Hypothesis 1: Village head leadership has a direct impact on the quality of the village settlement environment.
- 2. Hypothesis 2: Village fund allocation has a direct impact on the quality of the village settlement environment.

MATERIALS AND METHODS

This study was conducted in Padang Pariaman Regency, West Sumatra Province, as one of the areas with a decline in environmental quality based on data from the Central Statistics Agency. This research examines the influence of the village head's leadership and the allocation of village funds on the environmental quality of village settlements.

Population and Research Sample

The population of this study was 103 villages, by using slovin a sample of 83 villages in Padang Pariaman Regency was obtained.

Data Types and Sources

This study used primary and secondary data. Primary data is obtained in the form of questionnaires from villages that have been determined as samples, where each village is given a questionnaire to 1 village head, 2 village devices, 1 person from the Village Consultative Body, and 1 person from the Village Customary Density. Secondary data information is obtained from various literature sources, such as books, journals, previous studies, and the internet.

Data Analysis Methods

This explanatory research aims to test the hypothesis (Panorama, 2017) by explaining how each variable is related to the other. The PLS model consists of two parts: the outer model, also known as the measurement model, and the inner model, also known as the structural model (Henseler et al., 2009).

a. Evaluation of the Measurement Model (Outer Model)

There are two types of relationships between indicators and their constructs outside the model, so testing is carried out according to the nature of the indicators, both as reflective and formative indicators (Ghozali, 2015). Outer model testing is carried out through the PLS Algorithm procedure, where measurements are assessed through validity and reliability tests as the following steps:

- 1. Validity Test
 - a) Convergent Validity
 - b) Discriminant Validity
- Reliability Test 2.
 - a) Composite Reliability
 - b) Cronbach's Alpha
 - c) Multicollinearity Test

Structural Model Evaluation (Inner Model)

The inner model is a framework used to forecast cause-and-effect relationships between hidden variables. Models were evaluated using various statistical measures including Coefficient of determination (R2), Goodness of Fit Test, Effect Size Test (f2), Predictive relevance Q2, and Hypothesis Test (T-Test, Direct Effect, and Indirect Influence).

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- 1. Goodness of Fit
 - a) Coefficient of Determination
 - b) Q-Square
 - c) Uji Effect Size (f 2)
- 2. Uji Hypoplant
 - a) Uji t (t-test)
 - b) Direct Effects
 - c) Indirect Effects
 - d) Full Mediation

RESULTS AND DISCUSSION

Evaluation of Model Measurement (Outer Model)

The external model explains how the measured latent variable is realized or observed through the manifest variable. This model analysis explains precisely the characteristics of the relationship between latent variables and their related indicators. In this research, all constructs are at the second level of order, so the PLS analysis process involves testing outside the model as in Figure 2. Validity and reliability test analysis is part of this process.

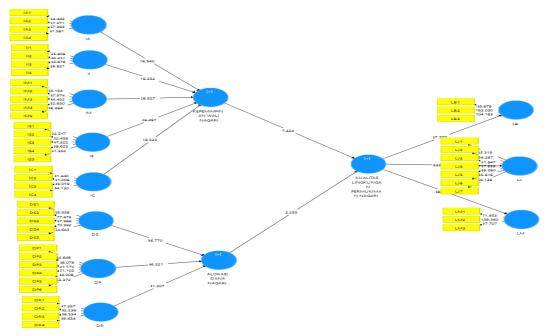


Figure2. Outer Model

Source: Processed Data (SEMPLS)

Validity Test Analysis

Validity tests are used in research to bring out how well each question in the questionnaire represents the variables studied. For this study, two methods were used, and the results of the analysis carried out were as follows:

Convergent Validity a)

The convergent validity value refers to the magnitude of the factor load between the latent variable and its indicators. The main function is to ensure that each indicator of the variable is valid. Individual reflective criteria are considered high quality if they have a correlation of more than 0.7 with the construct being assessed.

b) Discriminant Validity

The discriminant validity check was carried out by evaluating the cross-loading value and the average variance extracted (AVE) value. If the average value (AVE) of each variable used is more than 0.5, it can be concluded that the conditions have been met. The results of the discriminant validity assessment are presented in Table 3 below:

Variable Average Variance Extracted (Ave) Village Fund Allocation 0,63 The Leadership of The Village Head 0,59 Environmental Quality of Village Settlement 0,71

Table 3. Average Variance Extracted

Source: Processed Data (SEMPLS), 2024

Based on Table 3, above, the average value of the village fund allocation variable is more than 0.5 or 0.63, the value of the village head leadership variable is more than 0.5 or 0.59, and the value of the village settlement environment quality variable is more than 0.5 or 0.71.

Reliability Test Analysis

Construct reliability assessment can be done by examining Cronbach's Alpha value and Composite Reliability value on each construct. Composite reliability and Cronbach's Alpha scores must exceed 0.7 for optimal results. However, in the context of development research, the loading factor limit can be lowered to values greater than 0.5. Composite reliability and Cronbach's Alpha are considered acceptable if the value is above 0.5, as long as the criteria of convergent validity and discriminant validity have been met. The reliability test results are presented in the following table:

Cronbach's Alpha Composite Reliability Village Fund Allocation 0.954 The Leadership of The Village Head 0,956 0,960

0,966

Environmental Quality of Village Settlement

Table 4. Reliability Test Results

Source: Primary Data Processing Results, 2024

Based on Table 4 it can be explained that:

- a) The composite reliability value of each variable of the mayoral leadership, the allocation of villagefunds, and the quality of the village settlement environment are all greater than 0.7. Specifically, the composite reliability value in the village head leadership variable is 0.960, the village fund allocation is 0.959, and the quality of the village settlement environment is 0.970.
- b) Cronbach's alpha scores on the variables of mayoral leadership, villagefund allocation, and quality of village settlement environment are all greater than 0.7. Specifically, Cronbach's alpha value for mayoral leadership is 0.956, for the allocation of village funds is 0.954, and for the quality of the village settlement environment is 0.966.

0,970

Multicollinearity Test Analysis

The multicollinearity test considers the VIF value significant if it is less than 3.5-5. The results of the multicollinearity test are shown in Table 5:

Table 5. Multicollinearity Test Results

	Environmental Quality of Village Settlement
Village Fund Allocation	1,71
The Leadership of The Village Head	1,71
Environmental Quality of Village Settlement	

Source: Primary Data Processing Results, 2024

Table 5 shows that Collinearity Statistics (VIF) shows the multicollinearity of the Village Head Leadership and Village Settlement Environmental Quality variables, with an inner value of 1.71. Similarly, the Village Fund Allocation to the Environmental Quality of Village Settlement with an inner value of 1.71.

The results of the analysis showed that the independent variable "Village Head Leadership" had a VIF value below 3.5-5 when viewing its effect on "Village Settlement Environmental Quality". Similarly, the independent variable "Village Fund Allocation" has a VIF value below 3.5-5 when viewed the impact on "Village Settlement Environmental Quality". Therefore, it can be concluded that there is no multicollinearity between these variables.

Structural Model Analysis (Inner Model)

The Inner Model assesses the level of accuracy of estimation of latent variables or constructs. This research will provide a comprehensive analysis of the results obtained by conducting path coefficient testing, determination coefficient analysis, and hypothesis testing. In evaluating structural models using Partial Least Squares (PLS), various methods are used, including:

1. Coefficient of Determination

Table 6. R Square Results

	R Square	R Square Adjusted
Village Fund Allocation	0,998	0,998
The Leadership of Village Head	0,993	0,993
Environmental Quality of Village Settlement	0,308	0,305

Source: Primary Data Processing Results, 2024

The R-Square in Table 6 is used to assess the extent of the impact of the mayoral leadership variables and the allocation of village funds on the environmental quality of village settlements. Based on the data in Table 10. It is known that the village head leadership variable has an R Square value of 0.993 which means this variable can explain the influence of 0.993 or 99.3% and 0.07 is again explained by other variables, for the variable of village fund allocation "shows an influence of 0.998 or 99.8% and 0.02 is explained by other unknown variables and the quality variable of the settlement environment influences 0.308 or 30.8% while 0.692 is explained by variables that are not Used.

Then the assessment of goodness of fit using Q-square with the calculation:

Q square
$$= 1 - [(1-R21) \times (1-of22) \times (1-of33)]$$

$$= 1 - [(1-0.998 \times 1-0.993 \times 1-0.308)]$$

$$= 1 - (0.898 \times 0.893 \times 0.208)]$$

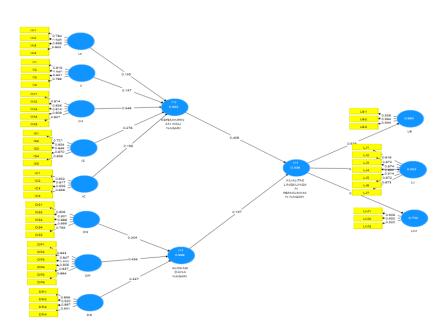
$$= 1 - 0.1686$$

 $= 0.831$

The results of the analysis showed that the Q square value of 0.831 showed that the level of model diversity shown by exogenous variables (Village head leadership and village fund allocation) was 0.831 or 83.1% in explaining the endogenous variables environmental quality of village settlements), and the remaining 0.169 or 16.9% was still influenced by other exogenous variables. Therefore, based on these findings, it can be said that this research model has a goodness of fit.

Hypothesis Test Analysis

Based on PLS with techniques



the results of the model estimation bootstrapping seen in Figure 3.

Figure 3. Path Coefficient Inner Model

Source: SEMPLS (Data Processed by Researchers, 2024)

Hypothesis Test

Testing the coefficient of this path will show how much influence the independent variable has on the dependent variable. This will be done using the schema in the model shown in the figure, as well as the table of path coefficients. Influence will be broken down from the most significant to the smallest.

Table 7. Direct Influence Test Results

Туре	Sample Mean (M)	Standard Deviation (Stdev)	T Statistics (O/Stdev)	P Values
Village Fund Allocation -> Environmental Quality of Village Settlement	0,195	0,059	3,333	0,001
Village Head Leadership -> Environmental Quality of Village Settlement	0,410	0,059	6,863	0,000

Source: Primary Data Processing Results, 2024

Two models in this variable have a positive P-value Coefficient. Therefore, the greater the P-value at the oefficient, the stronger the relationship or influence of the independent variable on the dependent variable.

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This is the conclusion of the explanation. In Table 11, P-Value is used to determine significance; The analysis results obtained were a t table value of 1.96, according to (Ghozali, 2015). Further discussion of hypothesis testing is as follows:

Hypothesis 1: Village head leadership has a direct impact on the quality of the village settlement environment.

The village head leadership variable has a value of 6.863 which shows its influence on the quality of the village settlement environment. This is supported by a statistically significant P value of 0.001. The t value of 6.863 is greater than the critical t value of 1.96, further confirming the significance of this relationship. Additionally, the P value of 0.001 is lower than the threshold of 0.05, providing further evidence of the influence of this variable. Therefore, the village head leadership variable has quite a large influence on the quality of the village settlement environment, causing the null hypothesis (Ho) to be rejected or the alternative hypothesis (H1) to be accepted based on statistical analysis.

Hypothesis 2: Village fund allocation has a direct impact on the quality of the village settlement environment.

The village fund allocation variable has a significant influence on the quality of the village settlement environment. This is supported by a statistical t value of 3.333 which is greater than the t table value of 1.96 and a P value of 0.000 which is smaller than the significance level of 0.05. Therefore, the village fund allocation variable has quite a large influence on the quality of the living environment in the village. As a result, the statistical hypothesis Ho is rejected, and the alternative hypothesis H1 is accepted.

DISCUSSION

Village head leadership is considered most effective if the followers or those being led become inspired, challenged stimulated, and motivated to achieve goals. Village head leadership and the allocation of village funds will be effective if there is an improvement in the quality of the village settlement environment. The results of this research, based on hypothesis testing, are as follows:

Village head leadership has a direct impact on the quality of the village settlement environment in Padang Pariaman.

This study found that village head leadership had a positive and significant impact on the quality of the village settlement environment. This is proven by the fact that with every increase in the village head leadership value by 1 unit, the quality of the village settlement environment will increase by 6,863 units. This can be interpreted as if the village head's leadership is good, which has a good view (vision) and ideas and is inspirational so that there is no conflict with the village apparatus and the community is obedient and loyal to him, then this makes it easier for the village head to influence the community to arrange their buildings well, maintain and maintain the infrastructure network. existing areas as well as maintaining and preserving the residential environment and implementing a clean and healthy lifestyle. In this way, the quality of the village settlement environment will improve (better). The results of this research are supported by research conducted by (Leung & Rosenthal, 2019) which states that the key to preserving the environment is changing human behavior with leadership. Meanwhile, research (Barrios et al., 2020) concluded that women's ability to lead was found to be very important for capacity building in society for sustainable development. Meanwhile (Pujiati et al., 2017) stated that the contribution of leadership is very large in implementing sustainable cities, and as a determinant of sustainable city performance (Xiao et al., 2010).

The allocation of village fundshas a direct impact on the quality of the village settlement environment in Padang Pariaman.

To support this statement, Table 7 shows that the allocation of village funds has a positive and significant impact on the quality of the village settlement environment. In other words, every increase in the value of the village fund allocation by one unit results in a better quality of the village settlement environment. This illustrates that the village funds allocated for infrastructure, human resources and empowerment have been able to improve the quality of the village settlement environment, namely that the community is able to

organize their buildings properly, maintain and preserve the existing infrastructure network and maintain and preserve the settlement environment and implement a clean and healthy lifestyle. This result is in line with the study (Acheampong, 2019) which found that environmental quality is influenced by financial development, and (Ahmad et al., 2022) found that, despite increasing the environmental footprint in the short and long term, environmental quality is influenced by financial development. In addition, this result is also in line with research conducted by (He, 2015), which found that fiscal decentralization is very helpful in reducing the cost of pollutant disposal and pollution reduction, which can help protect the environment. This is also in line with research conducted by (Watts et al., 2019), which found that village funds provided for PNPM Green activities can improve environmental quality by reducing emissions from deforestation and degradation. In addition, it is not in line with research (Dwitayanti et al., 2020) which found that village funds affect the level of community welfare in Indonesia because they are used to finance education, health, administration, coaching, physical development, and community empowerment.

CONCLUSION

Based on the results of this study it can be concluded as follows:

- 1. Village head leadership has a significant impact on the quality of the village settlement environment. Inspirational village head leadership with a clear vision can develop the capacity of the apparatus and community. The impact includes people maintaining buildings, maintaining infrastructure, protecting the environment, and implementing clean and healthy lifestyles.
- 2. The allocation of village funds has a significant impact on the quality of the village settlement environment. Funds allocated for infrastructure, human resources, and community empowerment have been able to organize buildings, maintain infrastructure, protect the environment, and implement a clean lifestyle that can improve the quality of the village settlement environment.

Policy Implications

Some of the policy implications obtained from the conclusions of this study are as follows:

- 1. Transformational village head leadership plays an important role in improving the quality of the settlement environment. To cultivate this leadership, it is necessary to conduct training related to the vision, mission, and goals of the dragon in the medium-term plan. A measurable assessment system from the village head leadership with standard instruments must be applied, including sanctions to the village apparatus that violates standard work procedures. It is also important to make a job description book and conduct daily monitoring for each dragon apparatus.
- 2. The policy of allocating funds for infrastructure network maintenance and improvement programs such as roads, drainage, clean water, toilets, and environmental preservation as well as clean and healthy lifestyle improvement programs needs to be improved.

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