

# Pilot Study *Waqf* Pesantren Gontor and Poverty Reduction: A Study by Using Smart PLS-SEM Approach

Andi Triyawan

Centre for Islamic Economic Studies, Faculty of Economics and Management, Universitas Darussalam Gontor

E-mail: [anditriyawan@unida.gontor.ac.id](mailto:anditriyawan@unida.gontor.ac.id)

## Abstract

*This paper aims to examine waqf Pesantren Gontor affecting the poverty alleviation in Indonesia. The pilot project is based on a sample of 30 responsible In several business units in Pesantren Gontor such as Gontor's Taylor unit, Gontor's Supermarket, Gontor's Bakery and Gontor's food court. The study used partial least squares structural equation modelling tool to analyze data which provide evidence of realibility and validity. The empirical results show that Waqf business units (source of fund, profitability, Business Capital, Product Innovation, market need) are significantly positive affected with Human Resources Development and Waqf Pesantren Gontor. Moreover, Waqf Pesantren Gontor are significantly positive affected with poverty alleviation. The finding of the study will be a bench mark or the board for policy makers and implementers in torching the avenue of Waqf Pesantren improvement and Poverty alleviation.*

**Keywords:** *Structural Equation Modelling, Waqf Pesantren Gontor, Poverty alleviation, Indonesia*

## Introduction

Indonesia has a vast number of potential Islamic charity funds known as Waqf. According to the CAF World Giving Index 2018, Indonesia has surpassed the United States as the world's most charitable country. This shows that this country has a strong desire to contribute and share with others. According to the data from the Indonesian Waqf Board, the amount of potential Waqf assets every year approaches \$139 billion, with Waqf land area exceeding 420,000 hectares (Bintoro & Aji, 2020).

According to the Directorate of Zakat and Waqf Empowerment, donated land in Indonesia's 34 provinces was 52,829.55 hectares in 2021. However, Waqf land development in Indonesia underwent substantial growth between 1980 and 2017. In 1980, the size of Waqf land was 63 million square meters; by 2017, it had increased to 440 million square meters with an economic worth of \$ 25.746 billion. Additionally, cash Waqf in Indonesia has great potential, exceeding \$180 trillion, but only around 0.2 percent, or roughly IDR391 billion in 2020, has been realized.

Despite its enormous potential, Waqf's actual impact is still far from what it could be in poverty reduction. This demonstrates that the Waqf endowment has not yet realized its full potential. As a result, there is a significant disparity between its potency and impact.

The Central Statistics Agency data revealed 24.79 million impoverished people in Indonesia in 2019. The rural poor outnumbered the urban poor by 13.20 percent and 7.26 percent, respectively (Arham et al., 2020). This demonstrates that poverty is still a concern in Indonesia and raises the optimism that there is a way to overcome it. One way to alleviate poverty is by the establishment of endowment Waqf. In general, Waqf in Indonesia has not yet aided in economic empowerment (Winarsih et al., 2019). Pesantren Gontor, on the other hand, has been able to manage the Waqf endowment to alleviate poverty.

As a Pesantren, Gontor has built Islamic boarding schools by investing in and managing Waqf assets through modern management-based business units. In 1958, the Pesantren Gontor possessed approximately 18.59 hectares of land; by 2009, the land asset had grown to approximately 825,184 hectares. Endowments, donations, trades, and purchases provide the land assets. Additionally, Pesantren Gontor owns around 50 company units invested as Waqf assets (Triyawan. A., et. al. 2022). This Pesantren has spent over 20 of its Waqf holdings in productive business units (Huda & Santoso, 2020; Syamsuri et al., 2020). Pesantren is responsible for managing the institutions' assets, most of which are Waqf endowments. As a result, Pesantren is developed into an institution capable of assisting society's socio-economic development through community development programs (Medias & Pratiwi, 2019).

The aim of this study is to examine the factors affecting the poverty alleviation in Indonesia. The specific objectives of the study are:

- to examine the association between Waqf business units and Human Resources Development;
- to examine the association between Human Resources Development and Waqf Pesantren Gontor;
- to examine the association between Waqf business units and Waqf Pesantren Gontor.
- to examine the association between Waqf Pesantren Gontor and poverty alleviation.

## Literature review

### *Waqf Model and Poverty Alleviation*

Several studies have highlighted the waqf model that is used in many countries. Ascarya et al., (2022) attempt to formulate several simple, productive Waqf models and select the best Waqf model suitable for the Indonesian waqf institutions. He discovered that productive waqf models in Indonesia include cash-waqf and self-managed, Islamic bank financing and self-managed, Sukuk and external partnership, cash-waqf and external partnership, and cash-waqf co-financing and external partnership. According to Ascarya et al., (2022), the best waqf model is cash-waqf and self-managed, followed by cash waqf and external partnerships, where they could achieve the most in all socioeconomic variables, well-being compliance, and moral/ethics within the theory of unity of knowledge, Tawhid. However, the simple and productive waqf models proposed are not exhaustive since there are

so many model variations. Because the case and respondents are all Indonesian, the results are only applicable to Indonesia.

Meanwhile, Haneef et al., (2014) developed an integrated waqf-based Islamic microfinance paradigm for poverty alleviation in Bangladesh. The integrated waqf-based Islamic microfinance strategy was built based on literature and intellectual discussions. The difficulty of microfinance institutions was hampered by the high cost, excessive interest rate and inadequate human resource quality of the beneficiaries. Islamic microfinance organisations have been formed to solve these financial, ethical and human capital shortcomings suffered by the conventional financial institutions. In this study, Haneef et al., (2014) mentioned that the integrated waqf-based Islamic microfinance approach is demonstrated through six constructs: waqf resources, Islamic microfinance, takaful, project financing, human resource development, and poverty reduction. Additionally, structural equation modelling was used to examine the relationship between the constructs. There are significant connections between Islamic microfinance and takaful, waqf resources and human resource development, Islamic microfinance and human resource development, and waqf resources and project financing. Additionally, the findings indicate that poverty reduction is possible through integrating these components.

Mohd Thas Thaker et al. (2016) offered a viable alternative form of finance for micro-firms in Malaysia, dubbed the integrated cash waqf microenterprises investment model. According to the authors, micro firms account for the lion's share of Malaysian SMEs. On the other hand, micro firms suffer difficulties in obtaining external financing from both private and public sources. They are a high-risk segment of the market. As a result, severe loan criteria have been imposed on them, including collateral, sufficient support documentation, and a track record of a successful business. Unfortunately, the majority of them cannot meet these criteria and therefore find it difficult with finance. Thus, the integrated cash-waqf microenterprise investment model was developed to solve microenterprises' financial constraints and accelerate their development and contribution to national income. Experts have indicated that waqf usage could be a viable option for promoting microenterprises (Shaikh., 2017; Alpay & Haneef, 2015).

Raimi (2014) employs a faith-based paradigm to combine corporate social responsibility, the waqf system, and the zakat system as a strategy for poverty alleviation. This strategy is quite helpful in reducing poverty. Kachkar (2017) devised a waqf model that can be utilised to assist impoverished refugees. The cash waqf refugee microfinance fund is established so that it can lend microfinance to prospective refugee micro entrepreneurs. To address the absence of collateral required for microfinance, a cash waqf refugee microfinance fund has been established with a takaful unit (cooperation) via which refugees can guarantee one another. Additionally, the approach has been built to address the issue of institutional sustainability for the microfinance institution. As a result, a reserve fund has been incorporated into the concept.

The Hamdard Foundation is another example of waqf development. Hayat & Naeem (2014) observed that Hamdard Waqf operates across India and Bangladesh, a unique indication of the organization's essence. The management of Hamdard has put aside 85 percent of its profits for the needy, health development, education, and other humanitarian projects.

## Methodology

This study utilizes both primary and secondary data sources. Primary data were collected from respondents, while secondary data were gained from books and scientific publications. Using SmartPLS 4.0 software, the Partial Least Square (PLS) approach is used to analyze the data. The model employs variables with measurable indicators. These are the variables and indicators:

### A. Human Resources.

The indicators used are Attitude / Good Manner, Qualified Human Resources, Skill Needed, Work Experience and Quality of Work.

### B. Waqf Business Units.

The indicators used are Source of Fund, Profitability, Business Capital, Product Innovation, Market Need.

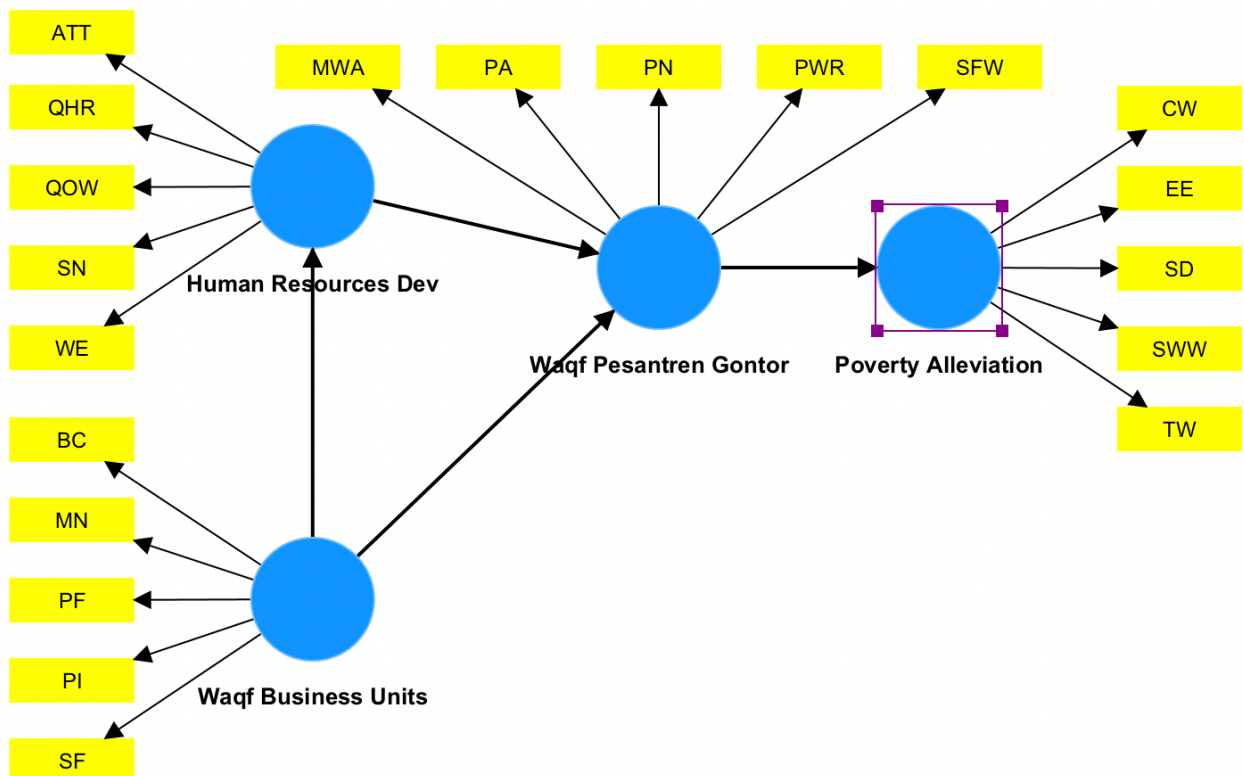
### C. Waqf Islamic Boarding School Gontor.

The indicators used are Potential of Assets, Professional Nadzir, Productive Waqf Regulation, Supporting factor of Waqf, Management of Waqf Assets.

### D. Poverty Alleviation.

The indicators used are Community Welfare, Staff Worker Welfare, Economic Empowerment, Supporting Da'wah, Teachers Welfare.

The concept of the model is described as follows:



### Figure 1. Model of influencing poverty Alleviation

In this study, the following hypotheses were used:

Hypothesis 1: Waqf Business Units will have a significant influence on the Human Resources Development.

Hypothesis 2: Human Resources Development will have a significant influence on Waqf Pesantren Gontor.

Hypothesis 3: Waqf business units will have a significant influence on waqf pesantren Gontor.

Hypothesis 4: Waqf Peantren Gontor will have a significant influence on Poverty alleviation.

Several reasons for using PLS-SEM have been well examined in the methodological literature (Hair et al., 2014). The two most commonly cited justifications for employing PLS-SEM in research were a limited sample size and non-normal data distribution. Another reason discussed was the simultaneous estimate of various interdependent relationships between variables and the use of latent concept measurement. To examine the hypothesis, this research utilized Smart PLS 4.0 which is a complete SEM tool. This software developed by Christian Ringle and his team at the University of Hamburg in Germany.

## Data Analysis and Discussion

### *Realibility and Validity test*

#### 1. Cronbach's alpha

Cronbach's alpha is utilized in the process of doing reliability study for the scales. In most cases, the dependability coefficient of Cronbach's alpha falls somewhere in the range of 0 to 1. According to Hair et al. (2013), a good scale has a value that is greater than or equal to 0.80, an acceptable scale has a value of 0.70, and a scale used for exploratory purposes has a value of 0.60. Results of Cronbach's alpha indicate that Variable of Human Resourch development (0.858), variable of Waqf Business Units (0.828), variable of Waqf Pesantren Gontor (0.902), variable Poverty alleviation (0.908). Thus, these indicators satisfied the required.

#### 2. Composite reliability

Composite reliability is favored over Cronbach's alpha as a convergent validity test in a reflective model. Because Cronbach's alpha may overestimate or underestimate scale dependability, it may be favored as a measure of reliability. Estimated composite reliability ranges from 0 to 1, with 1 representing complete reliability. Composite reliabilities

should be equal to or greater than 0.6 for exploratory models (Chin, 1998; Hock et al., 2010); equal to or greater than 0.70 is considered adequate for confirmatory models (Henseler et al., 2015); and equal to or greater than 0.80 is considered good for confirmatory studies (Daskalakis and Mantas, 2008).

**Table 1. Results of Composite Reliability**

<b>Variables</b>	<b>Composite Reliability</b>	<b>Cronch's Alpha</b>	<b>Explanation</b>
Human Resources Development (X1)	0.899	0.858	Reliable
Waqf Business Units (X2)	0.843	0.828	Reliable
Waqf Pesantren Gontor (X3)	0.906	0.902	Reliable
Poverty Alleviation (Y1)	0.919	0.908	Reliable

Results shows that the composite reliability value of Variable of Human Resourch development (0.899), variable of Waqf Business Units (0.843), variable of Waqf Pesantren Gontor (0.906), variable Poverty alleviation (0.919) prove that all reflective paradigms exhibit higher levels of internal consistency reliability.

### 3. Average variance extracted

Average variance extracted (AVE) can be utilized as a convergent and divergent validity test. In a reflective model, AVE reflects the average communality of each latent factor. In a suitable model, the AVE should be more than 0.5 (Chin, 1998; Hock and Ringle, 2006) and greater than the cross-loadings, which means that factors should account for at least half of the variance of their respective indicators. If AVE is less than 0.50, the standard error exceeds the explained variance.

Fit Structural equation model

- PLS algorithm; and
- Bootstrapping

Figures 2 and 3 depict the structural models for this research, where  $R^2$  denotes the value of any endogenous and predicted latent variable.  $R^2$  is 0.862 for dependent variable, i.e. Poverty alleviation. It indicates that the three independent variables (Waqf Pesantren Gontor) adequately account for 86.2% of the variance in Poverty alleviation.

Table 2. Convergent Validity Test

Variables	Indicators	Outer Loading	AVE	Explanation
<b>Human Resources Development (X1)</b>	H1	0.795	0.636	VALID
	H2	0.738		VALID
	H3	0.729		VALID
	H4	0.837		VALID
	H5	0.878		VALID
<b>Waqf Business Units (X2)</b>	B1	0.784	0.586	VALID
	B2	0.769		VALID
	B3	0.712		VALID
	B4	0.823		VALID
	B5	0.735		VALID
<b>Waqf Pesantren Gontor (X3)</b>	W1	0.840	0.719	VALID
	W2	0.805		VALID
	W3	0.910		VALID
	W4	0.853		VALID
	W5	0.828		VALID
<b>Poverty Alleviation (Y1)</b>	P1	0.956	0.735	VALID
	P2	0.911		VALID
	P3	0.843		VALID
	P4	0.790		VALID

P5	0.772	VALID
----	-------	-------

Table 3. R-Square

Variables	R-Square	R-Square Adjusted
Human Resources Development	0.284	0.259
Waqf Pesantren Gontor	0.692	0.669
Poverty Alleviation	0.862	0.857

*Research hypothesis testing*

In this study, Bootstrapping was utilized to determine the statistical significance of the path coefficient and to obtain the t-values. Each determined value is displayed in Table III.

The t-values of the hypothesized path of Waqf business units and Human Resources development is 4.245, which above 2.57 ( $\alpha=0.01$ ; two-sided test) and p-values is 0.000. Therefore, the hypothesized path of Waqf business units and Human Resources development of the inner model is statistically significant.

The t-values of the hypothesized path of Human Resources Units and Waqf Pesantren Gontor is 1.056, which below 2.57 ( $\alpha=0.01$ ; two-sided test) and p-values is 0.291. Therefore, the hypothesized path of Human Resources Units and Waqf Pesantren Gontor of the inner model is not statistically significant.

The t-values of the hypothesized path of Waqf business units and Waqf Pesantren Gontor is 9.947, which above 2.57 ( $\alpha=0.01$ ; two-sided test) and p-values is 0.000. Therefore, the hypothesized path of Waqf business units and Waqf Pesantren Gontor of the inner model is statistically significant

Table 4. Research hypothesis testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Hyphotesis1	0.533	0.558	0.126	4.245	0.000
Hyphotesis 2	0.112	0.115	0.106	1.056	0.291
Hyphotesis 3	0.767	0.771	0.077	9.947	0.000



<b>Hypothesis 4</b>	0.929	0.932	0.028	32.830	0.000
---------------------	-------	-------	-------	--------	-------

The t-values of the hypothesized path of Waqf Pesantren Gontor and Poverty Alleviation is 32.830, which above 2.57 ( $\alpha=0.01$ ; two-sided test) and p-values is 0.000. Therefore, the hypothesized path of Waqf pesantren Gontor and Poverty Alleviation of the inner model is statistically significant.

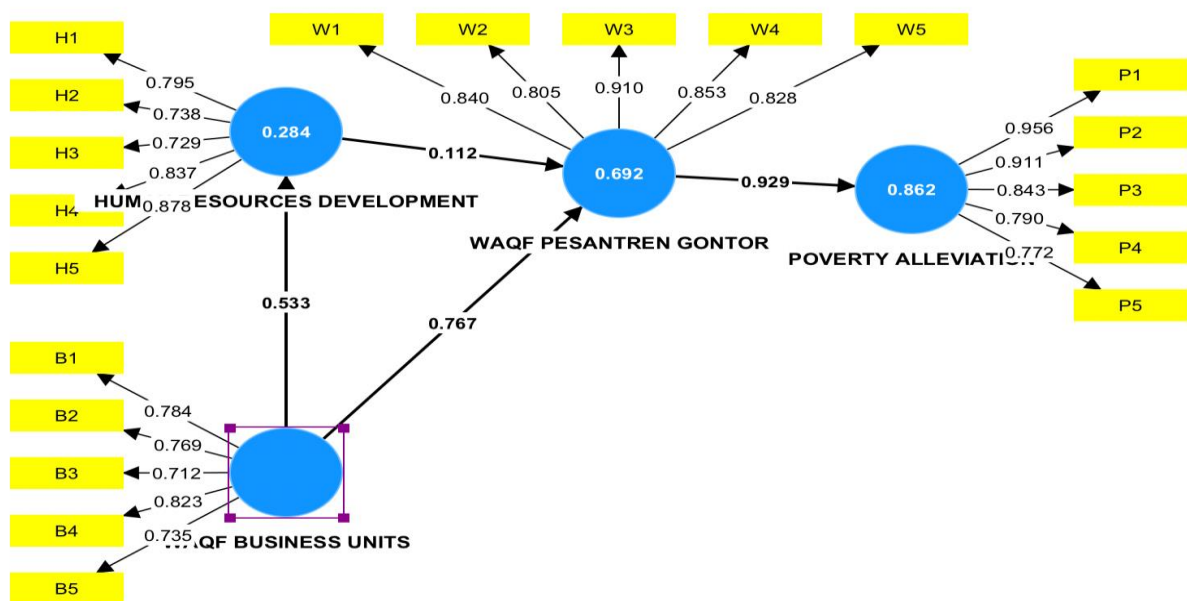


Figure 2. Structural Equation Model (PLS algorithm)

## Conclusion

The result show that waqf pesantren Gontor is statistically significant with poverty alleviation. Also, Waqf business units is statistically significant with Human resources development and waqf pesantren Gontor. However, only variable Human resources development is not statically significant with Waqf Pesantren Gontor.

Overall, the findings of this pilot study contribute to the existing literature by providing empirical evidence on Waqf pesantren Gontor affecting in poverty reducing. Therefore, the findings of this pilot study have important implications for strengthening the research.

## References

Alpay S and Haneef MA. (2015), "Integration of Waqf and Islamic Microfinance for Poverty Reduction: Case Studies of Malaysia, Indonesia and Bangladesh." The

- Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) and International Islamic University Malaysia (IIUM), Ankara.
- Arham, M. A., Fadhli, A., & Dai, S. I. (2020). Does Agricultural Performance Contribute to Rural Poverty Reduction in Indonesia?, 13(1), 69–83.
- Ascarya, A., Hosen, M. N., & Rahmawati, S. (2022). Designing simple productive waqf models for Indonesia. *International Journal of Ethics and Systems*. <https://doi.org/10.1108/IJOES-07-2020-0101>
- Bintoro, G., & Aji, P. (2020). Productive Waqf and People Economic Empowerment in Indonesia. *Journal of Islamic Business and Economic Review*, 3(2), 62–71.
- Chin, W.W. (1998), "The partial least squares approach for structural equation modeling", *Modern Methods for Business Research*, Lawrence, London, pp. 295-336.
- Daskalakis, S. and Mantas, J. (2008), "Evaluating the impact of service-oriented framework for healthcare interoperability", *eHealth beyond the Horizon-Get IT There*, Vol. 136, pp. 285-290
- Hair, F. Sarstedt, J. Hopkins, M. Kuppelwieser, V. (2014). Partial least squares structural equation modelling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2013), "Editorial-partial least squares structural equation modeling: rigorous applications, better results and higher acceptance", *Long Range Planning*, Vol. 46 Nos 1/2, pp. 1-12.
- Haneef, M.A., Pramanik, A.H., Mohammed, M.O., Fouad, M. Bin Amin., & Muhammad, A.D. (2014). Integrated Waqf Based Islamic Microfinance Model (IWIMM ) for Poverty Alleviation in OIC Member Countries. *Middle East Journal of Scientific Research*, 19(2).
- Hayat, N., & Naeem, A. (2014). Corporate Waqf: A Case of Hamdard (Waqf) Pakistan. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2487713>
- Henseler, J., ; Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135
- Hock, C., Ringle, C.M. and Sarstedt, M. (2010), "Management of multi-purpose stadiums: importance and performance measurement of service interfaces", *International Journal of Services Technology and Management*, Vol. 14 Nos 2/3, pp. 188-207
- Huda, M., & Santoso, L. (2020). The construction of corporate Waqf models for Indonesia. *International Journal of Innovation, Creativity and Change*, 13(6), 720–734.
- Kachkar, O. A. (2017). Towards the establishment of cash waqf microfinance fund for refugees. *ISRA International Journal of Islamic Finance*, 9(1), 81–86. <https://doi.org/10.1108/IJIF-07-2017-007>
- Medias, F., & Pratiwi, E. K. (2019). Evaluation of Muhammadiyah Waqf Assets Utilization in Magelang Regency. *Iqtishadia*, 12(1), 101.
- Mohd Thas Thaker, M.A.B., Mohammed, M.O., Duasa, J. and Abdullah, M.A. (2016), "Developing cash waqf model as an alternative source of financing for micro enterprises in Malaysia", *Journal of Islamic Accounting and Business Research*, Vol. 7 No. 4, pp. 254-267. <https://doi.org/10.1108/JIABR-09-2014-0029>
- Shaikh, S. A., Ismail, A. G., & Mohd Shafiai, M. H. (2017). Application of waqf for social and development finance. *ISRA International Journal of Islamic Finance*, 9(1), 5–14. <https://doi.org/10.1108/IJIF-07-2017-002>

- Syamsuri, Syamsuddin Arif, Alfarid Fedro, V. F. W. (2020). Critic Analysis of Responsibility Practices of Waqf Institution: Tsaqofah, 16(1), 1–20.
- Triyawan, A. et. al. (2022). The Implementation of Productive Waqf in Pesantren Gontor. Proceedings of of The 10th Islamic Banking, Accounting and Finance International Conference 2022 (iBAF2022) 13th-14th September 2022, p. 263-267.
- Winarsih, R., Masrifah, A. R., & Umam, K. (2019). the Integration of Islamic Commercial and Social Economy Through Productive Waqf To Promote Pesantren Welfare. Journal of Islamic Monetary Economics and Finance, 5(2), 321–340. <https://doi.org/10.21098/jimf.v5i2.1065>.