

Islamic Waqf, Maqashid Shariah, and SDG-11

Aam Slamet Rusydiana¹, Nisful Laila², Hakan Aslan³

¹*SMART Indonesia*

²*FEB Airlangga University, Indonesia*

³*Sakarya Universitesi, Turkiye*

This study aims to determine the opinions and recommendations of experts regarding the waqf model integrated with sustainable development (SDGs) in goal 11, namely sustainable cities and communities. This research will explain the priority of the waqf model in achieving SDG 11 goals by considering Maqashid Shariah indicators. The data were analyzed using the Delphi method to find the main priorities and agreement of the experts. The results show that all variables have been agreed upon by experts. Furthermore, on the SDGs aspect, the environment element is the top priority with an average score of 8.07. In the maqashid shariah aspect, the element of preserving bi'ah (environment) is the top priority with an average score of 7.53. As for the waqf model aspect, the Waqf & Sukuk model is the top priority with an average score of 7.73. This research can be utilized as a reference in the implementation of waqf models that can support the realization of the eleventh goal of the SDGs by considering Maqashid Shariah with priorities according to the findings. This research is the first to comprehensively calculate the experts' assessment of waqf models for the achievement of SDG 11 using the Delphi method and its priority recommendations.

Keywords: Waqf, SDG-11, Sustainable Cities, Maqashid Shariah, Delphi

OPEN ACCESS

*Correspondence:
Aam Slamet Rusydiana
aamsmart@gmail.com

Received: 11 September 2023
Accepted: 29 November 2023
Published: 31 December 2023

Citation:
(2023) Islamic Waqf, Maqashid Shariah
and SDG-11.
International Journal of Waqf
3.2.

INTRODUCTION

Sustainable cities and communities are important to the lives of people and countries because they aim to make cities and human settlements inclusive, safe, resilient and sustainable. (National Geographic, 2023; United Nations, 2023). Targets under SDG 11 also provide urban planning guidance to support cities with growing populations. (National Geographic, 2023). Achieving SDG 11 sets the stage for reaching targets in many other SDG goals (United Nations, 2023). For example, success in providing access to safe, affordable, accessible and sustainable transport systems for all by 2030 improves road safety and expands public transport with special attention to the needs of those in vulnerable situations such as women, children, people with disabilities and the elderly. (UNWomen, 2023).

SDG 11 also aims to ensure access for all to adequate, safe and affordable housing and basic services by upgrading slums. By scaling up inclusive and sustainable urbanization by 2030 through participatory integrated human settlements planning and management in all countries, SDG 11 can help reduce poverty. In addition, supporting positive economic, social and environmental linkages between urban areas can strengthen national development planning. (UNEP, 2023).

Furthermore, achieving SDG 11 is also important as it addresses issues such as poverty, inequality, climate change and disaster risk reduction. Cities are home to more than half of the world's population and are responsible for more than 70% of global greenhouse gas emissions. Making cities sustainable is therefore critical for climate change mitigation. This is because failure to achieve SDG 11 can have serious implications such as increased poverty levels, environmental degradation, lack of access to basic services, and increased inequality between countries with higher indices compared to countries with lower indices (Filho et al., 2020; Kleespies & Dierkes, 2022).

However, achieving the goals of SDG 11 often faces various challenges and obstacles, among the significant challenges are financial constraints, given the large amount of financial investment required to achieve the set goals, which some countries do not have (Filho et al., 2020). Another challenge is the diversity of elements involved in achieving SDG 11. Scholars and practitioners refer to this fact as a barrier to achieving SDG 11 (Filho et al., 2020). In addition, there are overlaps and contradictions between SDG 11 and Smart Cities. The discourse on SDG 11 usually focuses on

physical infrastructure projects in cities, including environmental benefits and risks. At the same time, there is a growing literature on SDG 11 involving Information and Communication Technology (ICT) components under the theme of Smart Cities (Sengupta & Sengupta, 2022).

To address this, national and local development planning should be strengthened to support positive economic, social and environmental linkages between urban, peri-urban and rural areas. (UNWomen, 2023). Disaster risk reduction strategies should also be implemented at the local government level. (United Nations, 2023). Furthermore, achieving the SDGs by 2030 requires innovative forms of financing, and Islamic finance can contribute to achieving the SDGs through waqf, which provides social benefits such as education, health, and housing (OECD, 2020). (OECD, 2020). Waqf can provide affordable housing for low-income families and support infrastructure development in urban areas.

Furthermore, waqf, as an Islamic social finance instrument, can be used to achieve this goal by providing a sustainable source of income for the community (Misbah et al., 2022; Rusydia et al., 2023). In addition, the waqf integrated income generation model (WIIGM) has been proposed as one way to increase the effectiveness of waqf in achieving SDG 11 (Ibrahim et al., 2022). Good waqf governance is also important for achieving SDG 11 as it can generate wealth for Muslim countries and contribute to economic growth and sustainability to create sustainable cities and settlements as per SDG 11 goals (Latif et al., 2019; Tok et al., 2022).

Previous studies on waqf and SDGs for the example can be found at Abdullah (2018), Zobair & Hoque (2019), Ali & Kassim (2020), Rusydia et al., (2023), Yasin et al., (2023), Hai et al., (2021), and also Dukhan et al., (2021). Of all these studies, there are very few studies that specifically examine waqf, maqashid and SDG-11. This study attempts to fill some of that research gap.

This paper examines the prioritization of SDGs aspects, Maqashid Syariah aspects and waqf model aspects in the development of waqf for the achievement of the eleventh SDG goal of sustainable cities and communities in order to determine the waqf model and the elements of each that need to be prioritized based on the opinions of experts. This prioritization can be used in determining the most effective waqf model in providing access to equal and quality settlements, and can help improve the level of community welfare.

LITERATURE REVIEW

Sustainable Development Goal (SDG) 11 aims to make cities and human settlements inclusive, safe, resilient and sustainable. (United Nations, 2023). The goal is measured by a number of individual targets and indicators. Success in achieving targets under SDG 11 lays the foundation for achieving targets in many other SDG goals. For example, Target 11.7 on providing safe, inclusive and accessible public and green spaces especially for women and children, seniors and people with disabilities, will contribute to the NCD target under SDG 3 (Ensure healthy lives) by providing places for people to engage in physical activity. Green spaces can help contribute to SDG 7 (Ensure energy for all) by lowering city temperatures. (United Nations, 2023).

Achieving SDG 11 is particularly important as cities are where people seek opportunities for higher education and employment. (United Nations, 2023). The particular importance of realizing SDG 11 for people is highlighted by the fact that more than half of the world's population lives in cities (SDG Academy Library, 2019). Cities are centers of economic growth, innovation and cultural exchange. They offer opportunities for higher education and employment (United Nations, 2023). In addition, realizing SDG 11 is also important for countries because it can bring several benefits, for example, making cities more sustainable can reduce greenhouse gas emissions and improve air quality, can improve access to basic services such as water, sanitation, and energy and making cities more inclusive can promote social cohesion and reduce inequality and improve people's well-being. (UN SDGs, 2023).

Waqf is an Islamic social fund that has a sustainable nature because the ownership of property is returned to Allah and the benefits are given to those in need. Waqf is one part of the maqashid Shariah that fulfills the elements of protecting religion, soul, mind, offspring, property and the environment, in accordance with the allocation of each waqf model. (Chowdhury et al., 2011; Ismail and Mohsin, 2011; Kholid et al., 2005; Rahim and Wahab, 2007).

Furthermore, correlated with sustainable development or SDGs, it is found that waqf can help realize the goals of SDGs, including the eleventh goal of sustainable cities and communities. SDGs can be a part of waqf goals, although not all SDGs goals are relevant to waqf or Shariah maqashid. There are some parts of SDGs that have no relation to Shariah maqashid and waqf, including the goal of gender equality, which in Islam, although men and women have the same role as servants of Allah, there are some rights and obligations

that are specific to each gender. In addition, in SDGs, there are no religious goals, which is different from maqashid Shariah and waqf, which have an Islamic spirit so that they are based on the Al-Quran and Sunnah agreed upon by Muslims. (Ascarya and Tanjung, 2021; Dukhan et al., 2021; Fauziah et al., 2021; Hassan et al., 2021; Hassan and Noor, 2021).

Another aspect of this research is related to the SDGs, which consist of three elements: economic, social and environmental. The first SDGs goal is to support inclusive social development, encourage intercultural dialog, and promote ethical principles around the world. (Hudaei et al., 2021; Sutrisno and Haron, 2020; Yahaya and Ahmad, 2018). Furthermore, the economic element ensures that everyone has a good life and economic, social, and technological progress is carried out in a way that does not damage the environment. The SDGs are expected to continue to take into account the welfare of people in the present and future in addition to paying attention to social and environmental aspects. (Ali et al., 2019; Khan and Badjie, 2020; Marrone et al., 2020). The last element is the environment. The environmental element pays attention to SDGs programs that include safeguarding natural resources, climate change, water issues, biodiversity and ecosystems and the circular economy, environmentally friendly waste disposal, and all goals related to the environment. (Filho et al., 2018; Jaelani et al., 2020; Jannah et al., 2021).

DATA AND METHODOLOGY

This research aims to find the priority elements in the SDGs aspect, the Maqashid Shariah aspect and the waqf model aspect in realizing the 11th SDG goal, namely sustainable cities through waqf instruments. The data used are the results of interviews with academics, practitioners and regulators in the field of Islamic economics and finance in general. The total number of expert respondents is 15 experts. The software application used as a tool is Microsoft Excel. The method used is the Delphi technique which is a qualitative method based on interviews with experts.

The Delphi method is a group process that involves interaction between a researcher and a group of experts related to a specific topic, and through the help of a questionnaire. This method is used to gain common ground on future trends using a structured information gathering process. This method is useful when the opinions and judgments of experts and practitioners are needed in solving problems.

This research will use 3 statistical indicators that are most widely used in the application of the Delphi

method, namely the mean value (average), standard deviation value, and interquartile range or IR value. The first measure of convergence assessment is when the answers or assessments of all respondents have a

standard deviation value of less than 1.5 (<1.5). The standard deviation notation formula as already known is as follows.

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}} \quad \text{or} \quad \sqrt{\frac{\sum x_i^2 - \frac{(\sum x_i)^2}{n}}{n-1}}$$

where:

x = respondent A's answer to the instrument n

\bar{x} = average of respondents' answers to the instrument n

The next measure of consensus or convergence assessment is when the answers or assessments from all respondents have an Interquartile Range (interquartile range) or IR value of less than 2.5 (<2.5). The calculation

of the IR value is the difference between the upper quartile and the lower quartile ($IR = Q_3 - Q_1$), where the quartile value formula is as follows.

$$Q_1 = \frac{x_{(\frac{n-1}{4})} + x_{(\frac{n+3}{4})}}{2}$$

$$Q_2 = x_{(\frac{2(n+1)}{4})}$$

$$Q_3 = \frac{x_{(\frac{3n+1}{4})} + x_{(\frac{3n+5}{4})}}{2}$$

The measurement to declare convergence or the level of consensus on all variables is when the standard deviation value is <1.5 and the interquartile range value is <2.5 . If one of the indicators does not meet the requirements, then the variable is declared not converging or not agreed upon (divergent). Meanwhile, for variables that have reached the requirements, the next step is to rank with the highest average value for each variable or element that reaches consensus (convergent).

RESULT AND DISCUSSION

Based on the literature study, there are at least three aspects that will be taken into account in SDG 11 research, namely the Sustainable Development Goals (SDGs) aspect, the Maqashid Syariah aspect and the

waqf model aspect. The first aspect, namely the SDGs aspect, consists of three elements; (1) Economic, (2) Social, and (3) Environment.

The second aspect, namely Maqashid Shariah, consists of six elements; (1) Hifdzu Diin (protecting religion), (2) Hifdzu Nafs (protecting the soul), (3) Hifdzu Nasl (protecting offspring), (4) Hifdzu Aql (protecting the mind), (5) Hifdzu Maal (protecting wealth), and (6) Hifdzu Bi'ah (protecting the environment). The third aspect, namely the waqf model, consists of five elements; (1) Waqf-Zakat, (2) Waqf-Takaful, (3) Waqf-Microfinance, (4) Waqf-Bank, and (5) Waqf-Sukuk.

The following are the results of the questionnaire in the form of weights given by 15 expert respondents.

Table 1. Results of Expert Respondents

No.	Waqf-SDG11	Informant/Expert														
	Attention	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15
1	Economic	8	9	7	8	7	4	7	8	7	8	7	7	8	7	7
2	Social	8	8	8	7	8	5	8	8	8	7	9	8	9	6	8
3	Environment	9	7	9	9	8	6	9	9	6	9	8	6	9	8	9
1	Diin	6	7	5	6	5	4	8	7	7	8	8	6	8	8	6
2	Nafs	6	8	5	5	7	5	5	7	6	7	8	7	7	7	7
3	Nasl	7	6	5	5	8	9	7	8	9	7	9	6	7	8	8
4	Aql	6	5	5	8	8	8	6	7	5	8	7	6	7	5	7
5	Maal	8	4	8	7	8	6	6	7	8	9	7	8	7	6	6
6	Bi'ah	8	9	9	7	7	7	9	7	4	9	7	5	9	9	7
1	Waqf-Zakat	5	8	3	4	7	3	8	6	5	7	3	3	7	5	5
2	Waqf-Takaful	5	7	4	5	7	4	6	5	6	7	3	3	7	5	6
3	Waqf-MFI	6	6	7	7	9	5	7	7	7	6	9	4	6	5	7
4	Waqf-Bank	7	7	8	6	8	6	5	7	9	5	8	5	7	7	8
5	Waqf-Sukuk	8	9	9	7	7	7	9	9	8	4	8	6	9	8	8

This research weights SDG 11, namely sustainable cities and communities, on three aspects, namely SDGs, waqf model and maqashid Shariah. Maqashid Shariah is a broad concept that consists of several objectives to be achieved by Shariah so that human welfare can be realized. Maqashid Shariah has many instruments, including all commands and prohibitions in Islam, including things that are permissible, one part of which is in terms of muamalah Maliyah (relations between people in matters of property), namely Islamic social funds. (al-Raysuni, 2005; Ashur, 2013; Auda, 2007, 2008). There are many instruments of Islamic social funds, and waqf is one of them.

There are five commonly used and developed waqf models based on the literature (Ascarya *et al.*, 2017; Hossain, 2019; Kamal and Ating, 2020; Khaliq *et al.*, 2019; Musari, 2016; Pitchay *et al.*, 2018; Rana *et al.*, 2019; 2020; Sulaiman *et al.*; Sulistiani *et al.*, 2019; Ubaidillah *et al.*, 2020), viz:

1. Waqf-Zakat: this model is a fully social type of waqf, where waqf is collaborated with other social fund instruments such as zakat, infaq and shadaqah. The utilization of this model instrument is intended for social purposes, making it suitable for providing short-term benefits.
2. Waqf-Takaful: This model is a type of waqf that is both social and commercial, where the social dimension is greater than the commercial dimension. The cooperation between waqf and insurance provides social impact while still containing commercial elements.
3. Waqf-Microfinance: this model is a waqf that contains both commercial and social aspects, with the commercial component equal to the social component. The collaboration between waqf and microfinance enhances waqf as a financial institution while maintaining its social mission.
4. Waqf-Bank: this model is a waqf that has both commercial and social objectives, with more emphasis on the business side. While the relationship between waqf and bank institutions helps financial institutions, waqf maintains a social function through various bank products.
5. Waqf-Sukuk: this model is a fully commercial type of waqf, where waqf is collaborated with sukuk for various developments. Waqf can contribute to the economy of society and the state through various developments using sukuk instruments.

However, of these contemporary waqf models, none specifically address SDGs goal 11, sustainable cities and communities. SDG 11 seeks to ensure access

for all to decent, safe, affordable housing and basic services and to organize slums.

Table 2. Delphi Calculation Result

No.	Waqf-SDG11 Attention	Mean	Std. Deviation	Rank	Q1	Q2	Q3	IR (Interquartile Range)	Evaluation	
									Std. Dev	IR
1	Economic	7,27	1,06	3	7	7	8	1	Convergent	Convergent
2	Social	7,67	1,01	2	7.5	8	8	0.5	Convergent	Convergent
3	Environment	8,07	1,18	1	7.5	9	9	1.5	Convergent	Convergent
1	Diin	6.60	1.25	4	6	7	8	2	Convergent	Convergent
2	Nafs	6.47	1.02	6	5.5	7	7	1.5	Convergent	Convergent
3	Nasl	7.27	1.29	2	6.5	7	8	1.5	Convergent	Convergent
4	Aql	6.53	1.15	5	5.5	7	7.5	2	Convergent	Convergent
5	Maal	7.00	1.21	3	6	7	8	2	Convergent	Convergent
6	Bi'ah	7.53	1.50	1	7	7	9	2	Convergent	Convergent
1	Waqf-Zakat	5.27	1.77	5	3.5	5	7	3.5	Divergent	Divergent
2	Waqf-Takaful	5.33	1.35	4	4.5	5	6.5	2	Convergent	Convergent
3	Waqf-Microfin	6.53	1.31	3	6	7	7	1	Convergent	Convergent
4	Waqf-Bank	6.87	1.20	2	6	7	8	2	Convergent	Convergent
5	Waqf-Sukuk	7.73	1.34	1	7	8	9	2	Convergent	Convergent

In the application of the Delphi method, there are three statistical indicators that are most widely used, namely the mean (average) value, standard deviation value, and interquartile range or IR value. Based on table 2 above, in general, from the three aspects studied, all variables have been agreed upon by experts (convergent) except for the waqf-zakat variable on the aspect of the waqf model which is not agreed upon (divergent).

SDG 11 is about making cities and settlements inclusive, safe, resilient and sustainable. SDG 11 aims to create safe and sustainable cities, which means ensuring access to safe and affordable housing and improving slums. It also involves investing in public transportation, creating green spaces for the public, and improving inclusive and inclusive urban planning and regulation. Creating sustainable cities and communities can help reduce resource use and environmental impacts, support positive economic, social and environmental linkages between urban, peri-urban and rural areas by strengthening national and regional development planning, and resource-efficient cities can combine greater productivity and innovation at lower costs with

increased benefits for residents. (UNEP, 2023; UNWomen, 2023; Global Goals, 2023).

Ab Rahman (2022) explained that achieving SDG 11 became more complex when the world was hit by the COVID-19 pandemic since early 2019. It was reported that more than 90 percent of COVID-19 cases occurred in urban areas, putting people living in these areas at greater risk of exposure to the coronavirus, and slum areas were the riskiest urban locations that recorded the highest number of infections. This is because people find it difficult to practice personal hygiene due to the lack of basic facilities and equipment to clean themselves. Waqf is therefore proposed as a sustainable Islamic social fund instrument that can help realize this target.

The first result of the Delphi on the SDGs aspect shows the priority ranking of the SDGs elements consisting of three elements: economic, social and environmental. The ranking results are presented from questionnaire assessments by experts which are then accumulated in determining the weight value of each criterion. Based on the accumulated results, the element

in the SDG aspect with the highest weight value is occupied by the environment criteria with an average of 8.07 and a standard deviation of 1.18 and convergent-convergent evaluation. Therefore, the environment element is ranked first in the top priority aspects of SDGs. This is followed by the social element with an average of 7.67 and a standard deviation of 1.01 in the second priority, and finally the economic criteria with an average of 7.27 and a standard deviation of 1.06 as the third priority.

Environmental aspects are crucial in achieving the goals of SDG 11, which relates to reducing the adverse environmental impact per capita of cities by paying special attention to air quality and urban waste management. In addition, the importance of environmental aspects in buildings in a broader sense is represented by considering the environmental efficiency of the construction process, as well as the production of building materials for the calculation of building pollutant emissions (Abastante et al., 2021). The second SDG criterion is the social aspect related to inclusiveness, which includes aspects of equality, justice and diversity, which are the basis for creating a harmonious and respectful society. In addition, social aspects are also related to the security of cities and settlements, where this security includes aspects of physical security such as the security of roads, buildings, and public facilities and social security such as the security of the community in interacting and communicating.

As for economic criteria, the SDGs seek to provide a framework for understanding how resources can be used efficiently while also promoting social justice. By considering economic aspects when developing city plans, it is possible to create cities that are more sustainable and better equipped to meet the needs of their citizens. Sustainable urban development requires investment and economic growth, which can improve people's quality of life and help reduce poverty and the impact of disasters. It is evidenced by Abastante et al (2021) that the use of financial support measures is a powerful tool in achieving the goals of urban innovation and overall sustainability. More importantly, in essence, waqf is an Islamic social instrument to address the problems of the community and the general public interest. (Darus et al., 2017). Moreover, the role of waqf is also in line with the SDGs proposed by the United Nations for sustainable development worldwide (Ibrahim et al., 2022).

Furthermore, the Maqashid Syariah aspect is used in formulating the waqf model. This aspect is expected

to support the SDGs while generating *maslahat* (goodness and benefit) in realizing sustainable cities and settlements. It also ensures that the objectives and processes remain shariah-compliant, especially in the evolving waqf models.

Based on the table of Maqashid Syariah aspects, it is found that the Maqashid Syariah elements are all convergent, with the highest weight value being the preservation of *bi'ah* (environment) with an average value of 7.53 so that it becomes an element with the first priority ranking. Furthermore, the second priority rank is occupied by the preservation of offspring (*nasl*) with an average value of 7.27. In the third priority rank, there is the preservation of *maal* (property) with an average value of 7.00. The fourth priority rank is the preservation of religion (*diin*) with an average value of 6.60. Then the fifth priority rank is the preservation of reason (*aql*) with an average value of 6.53. Finally, the sixth priority ranking is the preservation of the soul (*nafs*) with an average value of 6.47.

Stewardship of the *bi'ah* (environment) ranks first in importance for a Muslim to prioritize given that Islam considers sustainability an important part of its teachings, and humans are considered entrusted custodians of nature who must coexist harmoniously with all living things (Bsoul et al., 2022). Islam also encourages its followers to preserve the environment, greening such as planting trees, and revitalizing the earth (Khan & Haneef, 2022). This can be applied in cities by prioritizing green spaces such as parks and gardens as SDG target 11.7 which discusses the importance of green spaces and public spaces in cities and settlements. Therefore, protecting the environment (*bi'ah*) is an essential aspect of Islamic teachings that can help realize SDG 11, and Muslims have a responsibility to do so by preserving the environment and helping to promote green spaces such as parks in cities. Furthermore, social welfare and economic growth are closely intertwined and greatly influenced by environmental conditions. A healthy and happy society will be more productive and able to make a positive contribution to economic growth, while sustainable economic growth will create social welfare for society. This indirectly explains that a preserved environment can improve the quality of life of people in urban areas and strengthen social and economic resilience (Khairina et al., 2020).

The last aspect more specifically shows the Delphi weighting results of the five alternative waqf models. Starting from the waqf model whose social ratio compared to commercial ratio is higher to the lowest, namely Waqf & ZIS, Waqf & Takaful, Waqf &

Microfinance, Waqf & Bank and Waqf & Sukuk. The five models have different weight values. Four elements of the waqf model were found to be convergent and one element of the model, Waqf Zakat, was found to be divergent. The divergent result shows that the waqf zakat model is not agreed by the experts to be considered in its implementation.

Based on the weight assessment, the first rank that is the top priority in implementing the waqf model is the Waqf & Sukuk model with an average value of 7.73. Furthermore, the second rank is Waqf & Bank with an average value of 6.87. Then the third rank is Waqf & Microfinance with an average value of 6.53. Finally, the fourth rank is Waqf & Takaful with an average value of 5.33.

The objective of the top-priority waqf model, Waqf & Sukuk, seeks to make cities and settlements inclusive, safe, resilient, and sustainable so as to create community welfare. This can be done by financing infrastructure projects such as affordable housing and public transportation systems that are essential for sustainable urban development and other public facilities. Furthermore, the Waqf & Sukuk model itself is an innovative financial instrument that involves the issuance of sukuk by waqf institutions, where the proceeds are used for social and economic development projects in line with the SDGs (Ibrahim et al., 2022). The Waqf & Sukuk model offers several advantages over traditional financing models, including greater transparency, accountability, and social impact, as well as providing opportunities for socially responsible investors to support sustainable development initiatives and to earn a return on their investment (Rahman et al., 2022).

One example of the application of this waqf model is the waqf sukuk in Indonesia issued to fund the construction of affordable housing for low-income families. (OECD, 2020). With this waqf model, all people, especially those with low income, have access to quality housing. In the long run, waqf-sukuk funds are expected to be developed productively in increasing the number of people who own housing to create sustainable cities and settlements as the goal of SDG 11. In addition, this waqf model can be used to finance sustainable infrastructure development, such as roads, bridges, and public transportation.

Other waqf models can also be used to realize the goals of SDG 11, such as waqf-bank by lending funds for housing development projects, waqf-microfinance in providing business capital for the poor, and waqf-takaful by providing reconstruction and development insurance.

However, the waqf-sukuk model is the most prioritized since sukuk is closely related to investments that can finance sustainable development projects in cities and settlements and encourage people to participate in sustainable development projects.

CONCLUSION

Based on the research results, in general, from the three variable aspects of achieving SDG 11, namely sustainable cities and communities, all variables have been agreed upon by experts except for one variable on the aspect of the waqf model, namely the waqf-zakat model which is not agreed upon. The results of the calculation using the Delphi method show that the top priority order in the SDGs aspect is the environment element, because sustainable cities and settlements have a close relationship with the environmental aspect as an area of development and help everyone get better housing opportunities. Then in the Maqashid Shariah aspect, the top priority element is preserving the Bi'ah because Islam considers sustainability as an important part of its teachings, and humans are considered as entrusted custodians of nature who must coexist harmoniously with all living things. As for the waqf model, the main priority is the Waqf-Sukuk model that can be utilized for various developments in urban and residential development, so that it can be used to form better and more sustainable cities and settlements.

REFERENCES

- Abastante, F., Lami, I. M., & Gaballo, M. (2021). Pursuing the SDG11 targets: the role of the sustainability protocols. *Sustainability*, 13(7), 3858. <https://doi.org/10.3390/su13073858>
- Ab Rahman, N. H. (2022). Accelerating SDG 11 Achievements During Covid-19 Crisis: Protecting Children Living in Slums' Rights. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(11), e001986-e001986. <https://doi.org/10.47405/mjssh.v7i11.1986>
- Abdullah, M. (2018). Waqf, sustainable development goals (SDGs) and maqasid al-shariah. *International Journal of Social Economics*, 45(1), 158-172.
- Abubakar, G.N. and Rahman, A.A. (2021), "The Role of Waqf in the Youth Empowerment to Attain the Quality Education in Kano for Sustainable Development Goals", *Islamic Wealth and the SDGs*, pp. 345-358.
- al-Raysuni, A. (2005), *Imam Al-Shatibi's Theory of the Higher Objectives and Intent of Islamic Law*, The International Institute of Islamic Thought.

- Ali, K.M., Hassan, M.K. and Ali, A. elrahman E.S. (2019), Revitalization of Waqf for Socio-Economic Development, Revitalization of Waqf for Socio-Economic Development, Volume I, Vol. I, available at: <https://doi.org/10.1007/978-3-030-18449-0>.
- Ali, K. M., & Kassim, S. (2020). Waqf forest: How waqf can play a role in forest preservation and SDGs achievement. *Etikonomi*, 19(2), 349-64.
- Anuar, A.S., Bahari, Z., Doktoralina, C.M., Indriawati, F. and Nugroho, L. (2019), "The Diversity of Waqf Implementations for Economic Development in Hugher Education", *Ikonomika*, Vol. 4 No. 1, pp. 13-34.
- Arshad, M.N.M. (2014a), "Tertiary Education Sector: How Efficient are Malaysia and the OIC Countries?", Seminar on Sustainable Higher Education Model Based on Waqf.
- Arshad, M.N.M. (2014b), "Efficiency of Secondary Education in Selected OIC Countries", *Global Education Review*, Vol. 1 No. 4, pp. 53-75.
- Ascarya, Rahmawati, S. and Sukmana, R. (2017), "Cash Waqf Models of Baitul Maal wat Tamwil in Indonesia", *Al-Awqaf: Journal of Waqf and Islamic Economics*, Vol. 10, pp. 115-126.
- Ascarya and Tanjung, H. (2021), "Structures of Healthcare Waqf in Indonesia to Support SDGs", *Islamic Wealth and the SDGs*, pp. 305-324.
- Ashur, I. (2013), *Treatise on Maqashid Shariah*, The International Institute of Islamic Thought.
- Auda, J. (2007), *Maqasid Al-Shari'ah as Philosophy of Islamic Law A Systems Approach*, The International Institute of Islamic Thought, available at: <https://doi.org/10.2307/j.ctvkc67tg.8>.
- Auda, J. (2008), *Maqasid Al-Shari'ah a Beginner's Guide*, The International Institute of Islamic Thought.
- Azha, L., Baharuddin, S., Sayurno, Salahuddin, S.S., Afandi, M.R. and H., H.A. (2013), "The Practice and Management of Waqf Education in Malaysia", *Procedia - Social and Behavioral Sciences*, Elsevier B.V., Vol. 90 No. InCULT 2012, pp. 22-30.
- Bahroni, I. (2012), *Streamlining Education Institution Through Waqf Enlargement: An Experience of Gontor System*, At-Ta'dib, Vol. 7, available at: <https://doi.org/10.21111/AT-TADIB.V7I2.79>.
- Bakar, R., Sakinah, W., Zaini, R.M. and Sarmin, F. (2019), "Corporate Waqf University: A Sustainability Model", *Journal of Emerging Economies & Islamic Research*, Vol. 7 No. 1, pp. 24-36.
- Bakhtari, S. and Meisami, H. (2010), "An empirical investigation of the effects of health and education on income distribution and poverty in Islamic countries", *International Journal of Social Economics*, Vol. 37 No. 4, pp. 293-301.
- Barnes, J.L. (1987), *An International Study of Curricular Organizers for the Study of Technology*, Virginia Tech.
- Bsoul, L., Omer, A., Kucukalic, L., & Archbold, R. H. (2022). Islam's Perspective on Environmental Sustainability: A Conceptual Analysis. *Social Sciences*, 11(6), 228. <https://doi.org/10.3390/socsci11060228>
- Chowdhury, S.R., Fahmi, M. and Ibrahim, M.F. (2011), "Economics of Cash WAQF management in Malaysia: A proposed Cash WAQF model for practitioners and future researchers", Vol. 5 No. 30, pp. 12155-12163.
- Dalkey, N.C. (1969), *The Delphi Method: An Experimental Study of Group Opinion*, Rand Corp Santa Monica, Rand Corp Santa Monica CA, available at: <https://doi.org/10.4324/9781351106450-3>.
- Dalkey, N.C. and Helmer, O. (1962), "An Experimental Application of the DELPHI Method to the Use of Experts", *Management Science*, Santa Monica, CA: The Rand Corporation, Vol. 9 No. 3, pp. 458-467.
- Darus, F., Ahmad Shukri, N.H., Yusoff, H., Ramli, A., Mohamed Zain, M. and Abu Bakar, N.A. (2017), "Empowering social responsibility of Islamic organizations through Waqf", *Research in International Business and Finance*, Elsevier B.V., Vol. 42, pp. 959-965.
- Don, M.A.M., Zabidi, M.M., Ahmad, M.F., Sujak, S.F. and Sulaiman, R. (2019), "Integrated Education Waqf Fund Management Model: A Case Study in the State of Johore, Malaysia", *International Journal of Academic Research in Business and Social Sciences*, Vol. 9 No. 4, pp. 245-254.
- Dukhan, B., Mohammed, M.O. and El Amri, M.C. (2021), "Contributions of Waqf Investments in Achieving SDGs", *Islamic Wealth and the SDGs*, pp. 501-520.
- Fauziah, N.N., Rabiah, E., Engku, A. and Bacha, A.M. (2021), "An Analysis of Cash Waqf Linked Sukuk for Socially Impactful Sustainable Projects in Indonesia", *Journal of Islamic Finance*, Vol. 10 No. 1, pp. 001-010.

- Filho, W.L., Azeiteiro, U., Alves, F., Pace, P., Mifsud, M., Brandli, L., Caeiro, S.S., et al. (2018), "Reinvigorating the sustainable development research agenda: the role of the sustainable development goals (SDGs)", *International Journal of Sustainable Development and World Ecology*, Taylor & Francis, Vol. 25 No. 2, pp. 131-142.
- Filho, W. L., Wolf, F., Lange Salvia, A., Beynaghi, A., Shulla, K., Kovaleva, M., & Vasconcelos, C. R. (2020). Heading towards an unsustainable world: some of the implications of not achieving the SDGs. *Discover Sustainability*, 1, 1-11. <https://doi.org/10.1007%2Fs43621-020-00002-x>
- Firdaus, M., Rusli, M. and Abideen, A. (2017), "A Waqf Concept Applied in Higher Education: An Exploratory Study on the Practice of the IIUM Endowment Fund", *Journal of Islamic Finance*, Vol. 6 No. 2, pp. 013-023.
- Global Goals. (2023, March 8). Global Goals. Retrieved from GOAL 11 Sustainable cities and communities: <https://www.globalgoals.org/goals/11-sustainable-cities-and-communities/>
- Gupta, U.G. and Clarke, R.E. (1996), "Theory and applications of the Delphi technique: A bibliography (1975-1994)", *Technological Forecasting and Social Change*, Vol. 53 No. 2, pp. 185-211.
- Hai, A., Kassim, S., & Mohtesham, M. M. J. (2021). An Innovative Sukuk-Waqf for Islamic Microfinance Institutions: Integrating Maqasid Al-Shariah, SDGs and Waqf. *Tazkia Islamic Finance and Business Review*, 15(1).
- Haq, I.U. and Tanveer, M. (2020), "Status of Research Productivity and Higher Education in the Members of Organization of Islamic Cooperation (OIC) Digital Commons @ University of Nebraska - Lincoln Library Philosophy and Practice (e-journal) Libraries at University of Nebraska-Lincoln", *Library Philosophy and Practice (e-Journal)*, No. February.
- Harun, F.M., Possumah, B.T., Shafiai, M.H.B.M. and Nor, A.H.M. (2016), "Issues and Economic Role of Waqf in Higher Education Institution: Malaysian Experience", *Al-Iqtishad: Journal of Islamic Economics*, Vol. 8 No. 1, pp. 149-168.
- Hasan, R., Hassan, M.K. and Rashid, M. (2019), "The Role of Waqf in Educational Development - Evidence from Malaysia", *Journal of Islamic Finance*, Vol. 8 No. 1, pp. 001-007.
- Hasan, Z. (2020), "Higher education performance of Muslim countries Islamic economics as an illustrative case", *Journal of Economic Cooperation and Development*, Vol. 41 No. 1, pp. 179-192.
- Hassan, R., Ali, J. and Noor, F.M. (2021), "Cash Awqaf: How It May Contribute to the SDGs?", *Islamic Wealth and the SDGs*, pp. 559-577.
- Hassan, R. and Noor, F.M. (2021), "How Corporate Awqaf Can Support SDGs?", *Islamic Wealth and the SDGs*, pp. 539-557.
- Hong, K.S. and Songan, P. (2011), "ICT in the changing landscape of higher education in Southeast Asia", *Australasian Journal of Educational Technology*, Vol. 27 No. 8, pp. 1276-1290.
- Hossain, B. (2019), "Islamic Microfinance and Rehabilitation Model for the Slum and Floating Population by Waqf Funds, the Case of Bangladesh: A Proposal for Muslim Countries", *JKAU: Islamic Econ.*, Vol. 32 No. 2, pp. 139-160.
- Hudaefi, F.A., Wahid, H. and Caraka, R.E. (2021), "Zakāh Administration in Times of COVID-19 Pandemic in Indonesia: A Knowledge Discovery via Text Mining", *International Journal of Islamic and Middle Eastern Finance and Management*, No. April, available at: <https://doi.org/10.1108/IMEFM-05-2020-0250>.
- Ibrahim, S. S., Daud, D., Hidayah, K., Shaharuddin, A., & Al-Amin, A. A. M. (2022). Waqf integrated income generating model (WIIGM) for enhancing sustainable development goals (SDGS) in Malaysia: an evaluation of behavioral intention. *International Journal of Ethics and Systems*, (ahead-of-print). <https://doi.org/10.1108/IJOES-02-2022-0030>
- Ismail, M. and Mohsin, A. (2011), "Financing through cash-waqf: a revitalization to finance different needs", available at: <https://doi.org/10.1108/IMEFM-08-2013-0094>.
- Jaelani, A., Layaman, Fatmasari, D., Salikin, A.D. and Dz, A. (2020), "Energy conservation and energy management for industry in Indonesia in islamic economic perspective", *International Journal of Energy Economics and Policy*, Vol. 10 No. 3, pp. 239-249.
- Jannah, M., Ali, K.M., Fatria, B.L., Sarkawi, A.A. and Othman, J. (2021), "Enhancing Waqf Forest

- Sustainability Through Agrofo", *ISLAM REALITY: Journal of Islamic & Social Studies*, Vol. 7 No. 1, pp. 57-71.
- Kabbashi, N.A. (2015), "Engineering Education in OIC Countries: Direction to Move", *FEIIC-International Conference on Engineering Education and Research*, pp. 19-21.
- Kamal, S. and Ating, R. (2020), "Proposed Waqf Model for an Affordable Housing Mechanism in Malaysia", *International Journal of Advanced Research in Economics and Finance*, Vol. 2 No. 2, pp. 87-109.
- Khairina, E., Purnomo, E. P., & Malawani, A. D. (2020). Sustainable Development Goals: Environmentally Sound Policies to Maintain Environmental Resilience in Bantul Regency, Yogyakarta Special Region. *Journal of National Resilience*, 26(2), 155-181. <http://dx.doi.org/10.22146/jkn.52969>
- Khalik, A., Hussin, N., Tahir, M. and Haji, S. (2019), "Waqf Unit Trust As an Alternate Model To Realize Waqf Sustainability", *European Journal of Islamic Finance*, Vol. 0 No. 13, pp. 1-9.
- Khan, F., & Haneef, M. A. (2022). Religious responses to sustainable development goals: An islamic perspective. *Journal of Islamic Monetary Economics and Finance*, 8(2), 161-180. <https://doi.org/10.21098/jimf.v8i2.1453>
- Khan, T. and Badjie, F. (2020), "Islamic blended finance for circular economy impactful smes to achieve SDGs", *Singapore Economic Review*, available at: <https://doi.org/10.1142/S0217590820420060>.
- Kholid, M., Sukmana, R. and Hassan, K.A.K. (2005), "Waqf through Sukuk Al-Intifa'a: A Proposed Generic Model", *Awqaf Journal*, pp. 1-16.
- Kleespies, M. W., & Dierkes, P. W. (2022). The importance of the Sustainable Development Goals to students of environmental and sustainability studies-a global survey in 41 countries. *Humanities and Social Sciences Communications*, 9(1), 1-9.
- Latif, S. A., Din, N. M. N., & Mustapha, Z. (2019). Good Waqf Governance and its Contribution in Sustainable Development. *Journal of ASIAN Behavioural Studies*, 4(12), 37-47.
- Linstone, H.A. and Turoff, M. (2011), "Delphi: A brief look backward and forward", *Technological Forecasting and Social Change*, Vol. 78 No. 9, pp. 1712-1719.
- Loë, R.C. de, Melnychuk, N., Murray, D. and Plummer, R. (2016), "Advancing the State of Policy Delphi Practice: A Systematic Review Evaluating Methodological Evolution, Innovation, and Opportunities", *Technological Forecasting and Social Change*, Vol. 104, pp. 78-88.
- Mahrouzadeh, T. (2019), "Tertiary Education of Women in Islamic Countries (OIC) and the Status of Gender-Balanced Approach", *Iranian Journal of Comparative Education*, Vol. 2 No. 1, pp. 23-39.
- Marrone, M., Linnenluecke, M.K., Richardson, G. and Smith, T. (2020), "Trends in environmental accounting research within and outside of the accounting discipline", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 8, pp. 2167-2193.
- Melander, L. (2018), "Scenario development in transport studies: Methodological considerations and reflections on delphi studies", *Futures*, Vol. 96, pp. 68-78.
- Mitroff, I.I. and Turoff, M. (1973), "Technological forecasting and assessment: Science and/or mythology?", *Technological Forecasting and Social Change*, Vol. 5 No. 2, pp. 113-134.
- Misbah, H., Johari, F., Mat Nor, F., Haron, H., Shahwan, S., & Shafii, Z. (2022). Sustainable Development, Regional Planning, and Information Management as an Evolving Theme in Waqf Research: A Bibliometric Analysis. *Sustainability*, 14(21), 14126. <https://doi.org/10.3390/su142114126>
- Musari, K. (2016), "Waqf-Sukuk, Enhancing the Islamic Finance for Economic Sustainability in Higher Education Institutions", *2nd World Islamic University Leaders Summit*, pp. 1-16.
- Mustofa, I., Santoso, D. and Rosmalinda, U. (2020), "the Implementation of the Regulation of Cash Waqf Management in Higher Educational Institutions in Indonesia and Malaysia (a Study of Legal System Theory)", *Humanities & Social Sciences Reviews*, Vol. 8 No. 4, pp. 69-77.
- National Geographic. (2023, March 9). National Geographic Education. Retrieved from Sustainable Development Goal 11: Sustainable Cities and Communities: <https://education.nationalgeographic.org/resource/sustainable-development-goal-11-sustainable-cities-and-communities/>
- Nyoni, C.N. and Botma, Y. (2020), "International Journal of Africa Nursing Sciences Integrative review on sustaining curriculum change in higher education: Implications for nursing education in

- Africa", *International Journal of Africa Nursing Sciences*, Elsevier, Vol. 12 No. January, p. 100208.
- OECD. (2020). How Islamic Finance Can Help Achieve the Sustainable. OECD Policy Paper, 10-40.
- Pitchay, A.A., Thaker, M.A.M.T., Mydin, A.A., Azhar, Z. and Latiff, A.R.A. (2018), "Cooperative-waqf model: a proposal to develop idle waqf lands in Malaysia", *ISRA International Journal of Islamic Finance*, Vol. 10 No. 2, pp. 225-236.
- Rahim, A. and Wahab, A. (2007), "Islamic Takaful: Business Models, Shariah Concerns, and Proposed Solutions", Vol. 49 No. June, pp. 371-396.
- Rahman, Z. A., Jensen, D., & Lim, A. (2022, September 7). International Federation of Accountants (IFAC). Retrieved from Facilitating SDGs with Islamic Finance (Part 1) Malaysia's Leadership in Sukuk: <https://www.ifac.org/knowledge-gateway/developing-accountancy-profession/discussion/facilitating-sdgs-islamic-finance-part-1-malaysias-leadership-sukuk>
- Rana, M.S., Rahman, M.K., Alam, M.R. and Hoque, M.N. (2020), "Waqf-Based Microfinance: An Alternative Solution to Poverty Reduction", *Selangor Business Review*, Vol. 5 No. 1, pp. 40-54.
- Rusydiana, A. S., Sukmana, R., & Laila, N. (2023). Waqf and Partnerships for the Goals (SDG-17): A Maqashid Framework. *Maqashid al-Shariah Review*, 2(1).
- Rusydiana, A. S., & Al Farisi, S. (2016). How far has our wakaf been researched?. *Etikonomi*, 15(1), 31-42.
- SDG Academy Library. (2019, August 20). SDG Academy Library. Retrieved from Why Cities: The Importance of SDG 11: https://sdgacademylibrary.mediaspace.kaltura.com/media/Why+CitiesA+The+Importance+of+SDG+11/1_b0pn3pe9
- UN SDGs (2023, March 9). UN SDGs: Department of Economic and Social Affairs Sustainable Development. Retrieved from Make cities and human settlements inclusive, safe, resilient and sustainable: <https://sdgs.un.org/goals/goal11>
- Sengupta, U., & Sengupta, U. (2022). SDG-11 and smart cities: Contradictions and overlaps between social and environmental justice research agendas. *Frontiers in Sociology*, 7, 203. <https://doi.org/10.3389/fsoc.2022.995603>
- Spencer-Cooke, B. (1989), "Conditions of Participation in Rural, Non-Formal Education Programmes: A Delphi Study", *Educational Media International*, Vol. 26 No. 2, pp. 115-124.
- Sulaiman, S., Hasan, A., Mohd Noor, A., Ismail, M.I. and Noordin, N.H. (2019), "Proposed models for unit trust waqf and the parameters for their application", *ISRA International Journal of Islamic Finance*, Vol. 11 No. 1, pp. 62-81.
- Sulistiani, S.L., Yunus, M. and Bayuni, E.M. (2019), "The Role and Legality of Micro Waqf Bank in Pesantren Based Poverty Alleviation in Indonesia A . Introduction social society is an important thing", *Journal of Islamic Bimas*, Vol. 12 No. 1, pp. 1-26.
- Sutisna, Hasanah, N., Dewi, A.P., Nugraha, I., Katmas, E., Mutakin, A., Nurhadi, et al. (2021), *Panorama of Maqashid Syariah*, CV. Media Sains Indonesia.
- Sutrisno and Haron, R. (2020), "Increasing the Role of Zakat Institutions in Poverty Reduction Through Productive Zakat Programs in Indonesia", *Humanities & Social Sciences Reviews*, Vol. 8 No. 3, pp. 1243-1250.
- Tok, E., Yesuf, A. J., & Mohamed, A. (2022). Sustainable Development Goals and Islamic Social Finance: From Policy Divide to Policy Coherence and Convergence. *Sustainability*, 14(11), 6875. <https://doi.org/10.3390/su14116875>
- Ubaidillah, M., Ismail, M.A. and Noor, M.A.M. (2020), "The Waqf Integrated Financial Instrument of Pension Model in Malaysian Social Security: A Conceptual Proposition", *The Journal of Muamalat and Islamic Finance Research*, Vol. 17 No. 1, pp. 33-55.
- UNEP. (2023, March 8). UN Environment Programme. Retrieved from GOAL 11: Sustainable cities and communities: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-11>
- United Nations. (2020a), *E-Handbook on Sustainable Development Goals Indicators*.
- United Nations. (2020b), *E-Government Survey 2020 - Digital Government in the Decade of Action for Sustainable Development: With Addendum on COVID-19 Response*, United Nations E-Government Surveys, Vol. 1, available at: <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2020>.
- United Nations. (2020c), *The Sustainable Development Goals Report 2020*, The Sustainable Development Goals Report, available at: https://doi.org/10.29171/azu_acku_pamphlet_k3240_s878_2016.

- United Nations. (2023, March 9). United Nations. Retrieved from Goal 11-Cities Will Play an Important Role in Achieving the SDGs: <https://www.un.org/en/chronicle/article/goal-11-cities-will-play-important-role-achieving-sdgs>
- UNWomen. (2023, March 3). UNWomen. Retrieved from SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable: <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-11-sustainable-cities-communities>
- Wahab, A.A.O.A. and Kefeli, Z. (2017), "Modeling the Effect of Healthcare Expenditure and Education Expenditure on Labor Productivity: A Study on OIC Countries", *Journal of Business and Economics Review*, Vol. 2 No. 2, pp. 31-37.
- Yahaya, M.H. and Ahmad, K. (2018), "Financial Inclusion through Efficient Zakat Distribution for Poverty Alleviation in Malaysia: Using FinTech & Mobile Banking", *Proceeding of the 5th International Conference on Management and Muamalah*, Vol. 2018 No. September 2000, pp. 15-31.
- Yasin, Y., Helmy, M. I., Ma'yuf, A., & Arwani, A. (2023). Waqf and sustainable development law: models of waqf institutions in the Kingdom of Saudi Arabia and Indonesia. *Ijtihad: Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 23(1), 93-114.
- Yokhaneh, M. and Baghoumian, R. (2014), "A study on the impact of the quality of management education on the new economy-knowledge: Evidence from members of OIC countries", *Management Science Letters*, Vol. 4 No. 8, pp. 1655-1660.
- Zobair, M. A., & Hoque, M. A. (2019). Role of Waqf to Attain the "SDG-1: Ending Poverty" in Bangladesh. *Revitalization of Waqf for Socio-Economic Development, Volume II*, 15-34.
- Zou'bi, M.R. (2015), "Science Education in the Islamic World: A Snapshot of the Role of Academies of Sciences", *Procedia - Social and Behavioral Sciences*, Elsevier B.V., Vol. 192 No. 2004, pp. 359-363.