

ANALYZING THE RELATIONSHIP BETWEEN TOTAL RICE CROP AREA, FARMERS' INCOME, AND PADDY ZAKAH CONTRIBUTIONS

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Abstract: *This study aims to analyze the linkages between the total rice crop areas, farmers' income, and the amount of paddy Zakah payment that they contribute as participants of the Large-Scale Smart Sawah Lembaga Zakat Negeri Kedah Program. By exploring this relationship, the research intends to shed light on the factors influencing Zakah payment in the context of agricultural practices and income. This study was conducted in Kampung Padang Lumat, Yan, Kedah. The study sample selected consisted of participants in the Large-Scale Smart Paddy Program for ASNAF (Recipients of Zakat) by the Kedah State Zakat Board (LZNK) from the first to the fourth season. Questionnaires were distributed to the selected participants through Universiti Utara Malaysia (UUM) research representatives. Data collection resulted in a total of 69 successful respondents obtained. we can conclude that total rice crop area and farmers' income play a crucial role in increasing agriculture zakat payments among farmers. The findings will provide insights into the dynamics of agricultural Zakah contributions within the program's framework.*

Keywords: *Farmers' Income, Paddy Zakah Contribution, Total Rice Crop Area*

INTRODUCTION

Zakat, often called "Zakah," is one of the Five Pillars of Islam, the fundamental acts of worship and practices considered mandatory for all Muslims to follow. Zakat is an obligatory form of charity or almsgiving in Islam. In Arabic, Zakat means purification or growth. Zakat involves contributing a portion of one's wealth to those in need. This act purifies one's wealth, alleviates poverty, and supports the less fortunate. The giving of Zakat is seen as a way to fulfil a religious duty and to promote social and economic equity within the Islamic community. The rules and calculations for Zakat are specified in Islamic jurisprudence. They are based on a percentage (usually 2.5%) of a person's accumulated wealth and assets, including savings, investments, jewellery, and other valuables. The intention behind giving Zakat is crucial, as it is meant to be an act of worship and compassion rather than simply a financial transaction. Zakat is distributed to specific categories of people, as defined in Islamic teachings, including the poor and needy, those in debt, travellers in need, and those employed to collect and distribute Zakat. It is typically given annually, and many Muslims choose the month of Ramadan as a time to fulfil this obligation.

The land is one of the greatest blessings created by Allah S.W.T. The land is entrusted to humankind to make it fertile and produce crops and fruits. Indeed, all plants and fruits that grow on this earth are the blessings of Allah S.W.T. and not of human origin. So, when Allah directs humans to show gratitude for the bestowed blessings, it is inevitable that the believing Islamic community fulfils it by giving Zakat a portion of their agricultural yields. The obligation to pay agricultural Zakat has been clearly and explicitly mentioned in the Quran from surah al-An'am verse 141, which means:

“...And it is He (Allah) who produces gardens trellised and untrellised, and date palms, and crops of different shape and taste (its fruits and its seeds) and olives, and pomegranates, similar (in kind) and different (in taste). Eat of their fruit when they ripen, but pay the due thereof (its Zakat) on the day of its harvest, and waste not by extravagance. Verily, He likes not Al-Musrifun (those who waste by extravagance)...”

(Surah al-An'am: Verse 141)

Rasulullah SAW has said through a hadith that means:

“...Regarding crops that are irrigated by rainwater, natural springs, or underground water sources, their zakat is one-tenth (10%). As for crops that are irrigated by human labor, their zakat is one-twentieth (5%)...”

(HR Bukhari)

According to Dr Yusuf Al-Qaradawi, he has explained that all types of plants are subject to Zakat, and it is based on the viewpoint and opinion of Imam Abu Hanifah, which is derived from the affirmation of Caliph Umar bin Abdul Aziz and the Mujtahid scholars Hamad, Daud, and al-Nakhai. The general principle from the words of Allah in Surah Al-Baqarah, verse 267, means:

“...and [give] from what We have produced for you...”

(Surah Al-Baqarah: 267)

The words of Allah from Surah Al-An'am verse 141 which mean:

“...and give its due [zakat] on the day of harvest. earth...”

(Surah Al-An'am: 141)

However, the majority of Jumhur Ulama believe that plants are not subject to Zakat until they reach the quantity of five camel loads (5 Awsuq), based on the saying of the Prophet Muhammad S.A.W., which means

“...And there is no zakat for less than five Awsuq (equivalent to 363 Malaysian bushels)...”

(HR Bukhari)

Compared to other types of wealth that are subject to Zakat, agricultural Zakat is exempt from the requirement of "haul" (a waiting period) because the Zakat on agricultural produce is collected when the time of harvesting arrives, based on Allah S.W.T:

“...And give out its due (its zakat) on the day of harvest, and do not waste it...”

(Surah Al-An'am (6): 141)

Plants that reach sufficient nisab must have their Zakat paid based on a percentage of their yield. The rate of payment depends on the methods of cultivation. Plants cultivated with human labour or other means, such as animals or machinery, or with substantial expenses have a zakat rate of 5% or 1/20. On the other hand, plants that rely solely on rainfall or natural water sources like rivers or streams have a zakat rate of 10% or 1/10. Meanwhile, an alternative rate of 7.5% has been established for plants that utilize the abovementioned methods. This approach is derived from a clear hadith narrated by Jabir:

“...What is carried by rivers and rain is ten percent, and what is carried by camels is five percent...”

(HR Muslim)

Overall, Zakat is a significant aspect of Islamic practice that emphasizes sharing one's blessings and wealth with the less fortunate, fostering social responsibility and community support within the Islamic faith.

History of the establishment of the Kedah State Zakat Institution

The establishment of Zakat Kedah took place on 19 Jamadil Akhir 1355, corresponding to September 5, 1936. However, various issues arose, including public complaints about incomplete distribution and failure to reach the deserving asnaf (beneficiaries). Therefore, in 1955, the Zakat law was enacted (the Kedah State Zakat Department Enactment) stipulating that 100% or 8/8 of the paddy (rice) tithe should be paid to appointed amils (collectors). The collection of this zakat continued, but the focus was solely on paddy tithe.

Later, from 1984 to 1997, Dato' Syeikh Mahmood Naim expanded the payment of zakat from paddy tithe to wealth tithe. In 2015, the Kedah State Zakat Board Enactment (LZNK) was introduced to replace the Kedah State Zakat Department Enactment (JZNK). This enactment marked the continued excellence of LZNK's management, ensuring the protection of more Asnaf out there. The distribution scope of zakat by the Kedah State Zakat Board (LZNK) is based on eight categories of asnaf, as explained in Surah At-Taubah verse 60.

“...Indeed, the charities (zakat) are meant only for the poor, the needy, those who administer the zakat, those whose hearts are to be reconciled, for freeing slaves, for those in debt, for the cause of Allah, and for the wayfarer - an obligation [imposed] by Allah. And Allah is Knowing and Wise...”

Surah At-Taubah; Ayat 60

Therefore, there are 8 categories of recipients eligible to receive zakat. These categories are known as:

- a. Fakir: Individuals or families with insufficient income to meet the basic needs of food, clothing, and shelter for themselves and their families.
- b. Miskin: Individuals who can work for a living for themselves and their families but do not have enough to meet their needs completely.
- c. Amil: Appointed by K.D.M.M Tuanku Sultan to carry out zakat management tasks, including collection and distribution.
- d. Muallaf: Someone who has recently embraced Islam someone whose heart has been softened among those who have not embraced Islam yet, or someone who needs to be sympathized with towards Islam or hopes to defend Muslims or needs protection against harm to Muslims.
- e. Hamba: Enslaved individuals without personal freedom, including freeing Muslims, held captive by non-Muslims.
- f. Gharimin: Muslims in debt to meet their basic needs and responsibilities or for the welfare of society, with no ability to repay.
- g. Fisabilillah: Struggle, effort, and activities aimed at upholding and defending the religion of Allah.
- h. Muslims who run out of funds while starting a journey or during a journey that brings benefits and is following Sharia law.

Large-Scale Smart Sawah Lembaga Zakat Negeri Kedah Program

The Zakat Board of the State of Kedah has allocated a certain amount of funds to these eight categories of recipients to ensure their continued livelihood. The zakat distribution to these eight categories has been increasing throughout the year. However, according to statistics from the Zakat Board of the State of Kedah, it only involves 7 categories of asnaf, excluding the amil category. Diagram 1 below shows the percentage distribution of zakat to the 7 asnaf categories for the year 2016. Based on this data, the percentage of zakat recipients for the Ar-Raqib category is zero. This statistical data was obtained from the official website of the Zakat Board of the State of Kedah.

Lembaga Zakat Negeri Kedah's (LZNK) ambitious venture to revolutionize farming practices in Kedah is indeed a remarkable and forward-thinking initiative. Their state-of-the-art smart field showcases a commitment to modernizing agriculture while ensuring sustainability and efficiency. Some key features and technologies are involved in this revolutionary farming project. The first Feature and technology is a Sensor Network. LZNK has deployed a comprehensive network of sensors throughout their smart field. These sensors continuously monitor crucial parameters such as soil moisture, temperature, nutrient content, and pH. This real-time data helps farmers make informed decisions about irrigation, fertilization, and other essential tasks. The following features are drones. Drones are used for aerial surveillance of the entire field and are equipped with high-resolution cameras and multispectral imaging; these drones provide valuable insights into crop health and growth patterns. They can identify areas of stress, disease, or pest infestation, allowing farmers to take timely corrective actions. Besides drones, autonomous vehicles, such as tractors and harvesters, are integral to the smart field. These machines have advanced GPS and mapping

technology, enabling precise and efficient planting, harvesting, and farming operations. They can work day and night without human intervention, optimizing productivity.

Effective weather monitoring is crucial. Weather plays a significant role in agriculture. LZNK has integrated weather stations into their smart field to gather real-time meteorological data. This information helps farmers anticipate weather changes, plan accordingly, and protect crops from adverse conditions. Moreover, LZNK's commitment to minimizing environmental impact is commendable. Using data to optimize resource allocation, they can reduce water and fertilizer usage, decrease the need for pesticides, and lower overall energy consumption. This approach promotes sustainable farming practices. Finally, To ensure the success of this initiative, LZNK may also provide education and training to local farmers. They can learn how to operate and maintain smart farming equipment, interpret data, and implement best practices. This knowledge transfer helps the broader agricultural community benefit from these innovations.

In conclusion, Lembaga Zakat Negeri Kedah's smart field is a testament to their dedication to modernizing agriculture sustainably and efficiently. By harnessing the power of sensors, drones, autonomous vehicles, and data analytics, they empower local farmers to make informed decisions and optimize crop production while minimizing environmental impact. This initiative can potentially serve as a model for future agricultural practices in Kedah and other regions looking to enhance food production and sustainability.

This paper aims to analyze the Relationship Between Total Rice Crop Area, Farmers' Income, and Paddy Zakah Contributions in the Context of the Large-Scale Smart Sawah Program Implemented by Lembaga Zakat Negeri Kedah. The following is a breakdown of the structure of this study: The second section overcomes the initial empirical study on empowerment paddy zakah findings. The data, model specifications, and methodological approaches are described in the next section. The fourth section discusses the empirical results, while the final section offers concluding remarks and makes recommendations for the future.

LITERATURE REVIEW

Agriculture plays a pivotal role in the economic well-being of individuals and nations alike, primarily driven by cultivating fertile land and crops. This abundance can lead to prosperity for those involved in agriculture. Within the framework of Islamic finance, it is incumbent upon those who benefit from the land's produce to fulfil their religious duty by paying Zakat, specifically agricultural Zakat. Generally, agricultural Zakat mandates a payment of either 10% or 5% (dependent on the irrigation method) of specific farm yields, either upon harvest or after assessment, provided the yield surpasses five *ausuq* (Muhammad Ikhlas et al., 2014). The payments align with Zakat's core concept, which requires a specific portion of one's wealth to be allocated to particular groups at designated times.

The empowerment of Zakat plays a critical role in achieving economic equilibrium within the Muslim community. This empowerment extends beyond economics; it is a global and humanitarian economic mechanism enhancing the well-being of humanity (Zarina Kadri, Sanep Ahmad, 2012). Strengthening the Zakat system results in an improved standard of living and more excellent stability within the Muslim community. Given Malaysia's active promotion of the agricultural sector, there are ample opportunities to enhance agricultural Zakat in the country.

Several strategies can be employed to bolster agricultural Zakat in Malaysia. The first strategy is increasing the production of crops. Increasing crop production can enhance agricultural revenues and can help to increase agricultural zakat collection. Besides increasing crop production, farmers' awareness of the importance of paying Zakat is crucial to enhancing agricultural Zakat collection (Rahim et al., 2021). The understanding of agriculture zakat is low among farmers. Farmers do not implement the rules that are applied in an agricultural zakat. They still followed the tradition that sadaqah and Zakat are the same things, where The farmers assumed that sadaqah was already accomplishing the obligations to pay agricultural Zakat (Pada et al., 2022).

Furthermore, conducting an assessment or evaluation of plants was very important. The assessment conducted on crops is to determine the amount that needs to be subjected to Zakat by farmers at an earlier stage (Ismail et al., 2013). Assessing crops is considered necessary and even recommended by Islamic jurists (fuqaha'). Therefore, the government should establish officials or workers to perform assessment tasks. The most apparent objective in conducting assessments is to allow owners to manage any matters related to their agricultural yields. It is recommended in Malaysia to conduct assessments on all eligible agricultural resources for Zakat. This assessment can streamline agricultural zakat accounting, ensure farmers' accuracy in zakat payments, facilitate farmers in managing their agricultural yields, and simplify zakat collectors' tasks in zakat implementation matters.

Finally, In Malaysia, the practice of leasing and renting land has been long-standing, including the leasing of agricultural land. Therefore, the question arises as to who should pay Zakat, the landowner due to their ownership of the land and the profit they receive from the rent, or the tenant because they are cultivating the land and its crops and obtaining the produce from the land. Islamic jurists (Ulama-ulama fiqh) also have differing opinions on this issue. There are two main views on this matter. The first opinion comes from Imam Abu Hanifah: Imam Abu Hanifah believes Zakat is only imposed on the landowner (al-Kasani) because agricultural Zakat ('usyr) is obligatory on the land that produces the yield, not on the seeds or agricultural products (al-Sarakhsi). Another reason is that 'usyr is imposed on the benefit derived from the land, and the benefit from the land is transferred to the tenant in the form of rent payment, and rent is a substitute for the benefit obtained from the land. Therefore, Zakat is imposed on the landowner based on the legal principle of substituting the rule of the substituted matter (al-Sarakhsi). However, according to Jumhur's Opinion, Most scholars also believe that Zakat should only be imposed on tenants because Zakat is obligatory on agricultural produce, not on the land that produces the crops. According to these fundamental differences between Imam Abu Hanifa and the majority, Ibn Rushd clarified that the disagreement between these two groups is about whether Zakat is the right of the land, the right to agricultural produce, or both. Therefore, it is reasonable for Zakat to be imposed on both tenants and landowners because it can increase zakat collection in Malaysia to enhance the economy of the Muslim community. Al-Qaradawi also agrees with Ibn Rushd's opinion that agricultural Zakat is obligatory on both the land and the produce, meaning landowners and tenants must pay for agricultural Zakat (Ismail et al., 2013).

METHODOLOGY

This study utilizes a questionnaire as the instrument for collecting primary data, which is distributed randomly to provide an opportunity for every element to become a sample in the population involved in the four regions. Secondary data sources are obtained through

references to the library by examining past and recent studies conducted on Zakat from various aspects. Meanwhile, the laws and importance of Zakat are derived from primary and fixed sources, namely the Quran and the Sunnah.

This study was conducted in Kampung Padang Lumat, Yan, Kedah. The study sample selected consisted of participants in the Large-Scale Smart Paddy Program for ASNAF (Recipients of Zakat) by the Kedah State Zakat Board (LZNK) from the first to the fourth season. Questionnaires were distributed to the selected participants through Universiti Utara Malaysia (UUM) research representatives. Data collection resulted in a total of 69 successful respondents obtained. This study uses a quantitative descriptive analysis and multiple regression method.

RESULT

The level of awareness of farmers in making agricultural zakat payments can be seen from how farmers participate in agricultural zakat payments. The level of participation is measured by looking at the reasons they are willing to participate in agricultural zakat payments, either because of their total rice crop area measured by using Relung or farmers' income.

Descriptive Analysis

Table 1 provides a descriptive correlation analysis. The mean results show that Farmers' Income generated a high value of 1538.85. The standard deviation analysis showed that Farmers' Income contributes the most volatile variable, with the highest deviation of 649.95. A summary of the descriptive analysis is as follows.

Table 1: Descriptive Statistics and Correlation

	Paddy Zakat	Relung	Income
Mean	649.95	8.3794	1538.85
Std. Dev.	271.70	1.3262	910.84
N	69	69	69
Correlation			
	Paddy Zakat	Relung	Income
Paddy Zakat	1.0000	0.1392	0.9651
Relung	0.1392	1.0000	0.0642
Income	0.9651	0.0642	1.0000

Table 1 also shows the correlation matrix of all variables. The above correlation table illustrates that all variables positively correlate with Paddy Zakat.

Multiple Regression

This study analyzed the relationship between total rice crop area, farmers' income, and paddy zakah contributions within the context of the large-scale smart sawah program implemented by Lembaga Zakat Negeri Kedah, utilizing multiple linear regression. A simplified model was derived with an R-squared value of 0.936. Although only slightly surpassing the threshold of 0.5, the R-squared value supports its suitability for this analysis. Linear models offer the advantage of simplicity and ease of interpretation. The t-test results highlight that total rice crop area and farmers' income are the primary variables influencing paddy zakah contributions. These findings are presented in Table 2 below.

Table 2: Model summary and Fisher's exact test Model

Model	R	R ²	Adjusted R ²	Std. error	Sum of Square	Df	Mean Square	F	p-value
Regression	0.968	0.936	0.570	69.1329	7742165.14	2	3871082.57	809.96	0.0000
Residue					525729.31	110	4779.36		
tot					8267894.45	112			

Table 3 illustrates the linkages between total rice crop area, farmers' income, and paddy zakat contributions. The findings reveal a positive and significant relationship between total rice crop area and farmers' income, substantially impacting paddy zakat contributions. Precisely, a 1 percent increase in the total rice crop area corresponds to a corresponding increase in farmers' paddy zakat contributions. Next, Similarly, a 1 percent increase in farmers' income results in an equivalent increase in their paddy zakat contributions.

Table 3: Standardized and Unstandardized coefficients with P-values

Variables	Unstandardized Coefficients		Standardized Coefficients	t	P-Value
	B	Std Error			
Intercept	77.412	42.618		1.816	0.072
Relung	15.754	4.936	0.077	3.192	0.002
Income	0.286	0.007	0.960	39.832	0.000

CONCLUSION

Zakat is an essential aspect of Islam. It is not only an act of worship as a sign of obedience to Allah, but it also brings benefits to the life of the Muslim community. Strengthening Zakat is akin to strengthening the Muslim community. The empowerment of Zakat can provide several benefits, including improving the socio-economic status of Muslims, ensuring the circulation of wealth among the people, helping those in need, especially the poor, and so on.

Based on this study, we can conclude that total rice crop area and farmers' income play a crucial role in increasing agriculture zakat payments among farmers. The large-scale smart paddy field program implemented by the Lembaga Zakat Negeri Kedah (LZNK) is seen as significantly assisting farmers in improving agricultural yields, which can enhance farmers' income. Furthermore, the utilization of paddy fields under the LZNK is considered a worthy effort to continue in order to help these farmers break free from the shackles of poverty and become contributors to agricultural zakat.

POLICY RECOMMANDATION

The Lembaga Zakat Negeri Kedah (LZNK) can expand the Large-Scale Smart Paddy Field Program throughout the state of Kedah with the main objective of helping farmers break free from the shackles of poverty and increasing the overall state zakat revenue in Kedah, as well as agricultural zakat revenue specifically.

REFERENCES

- Isamail, M. Z., Md Ariffin, M. F., Haji Abdullah, L., & Rosele, M. I. (2013). Zakat Pertanian Di Malaysia: Satu Kajian Pemeriksaan. *Labuan E-Journal of Muamalat and Society (LJMS)*, 7(June), 33–47. <https://doi.org/10.51200/ljms.v7i.3010>
- Latif, I. A., Mohamed, Z., Sharifuddin, J., Abdullah, A. M., & Ismail, M. M. (2014). A Comparative Analysis of Global Halal Certification Requirements. *Journal of Food*

Products Marketing, 20(November 2014), 85–101.
<https://doi.org/10.1080/10454446.2014.921869>

- Muhammad Ikhlas, R., Ramli, M. A., Mohamad Zaim, I., & Mohd Farhan, M. A. (2014). Zakah on Agriculture Reformation: An Analysis in Malaysia. *Sains Humanika*, 3(1), 47–53.
- Pada, S., Padi, P., & Plumbungan, D. (2022). Analisis Praktik Pelaksanaan Pembayaran Zakat Pertanian (Studi Pada Petani Padi Desa Plumbungan). *Jurnal Ekonomika Dan Bisnis Islam*, 5, 65–77.
- Rahim, A., Dangnga, M. S., & B, A. (2021). Tingkat Kesadaran Petani Terhadap Pembayaran Zakat Pertanian Di Desa Lunjen Kabupaten Enrekang. *Jurnal Ekonomi Islam*, 4(2), 111–127. <https://doi.org/10.26618/jei.v4i2.6151>
- Weinberger, K. (2004). Micronutrient intake and labour productivity: Evidence from a consumption and income survey among Indian agricultural labourers. *Outlook on Agriculture*, 33(4), 255–260. <https://doi.org/10.5367/0000000042664800>
- Zarina Kadri, Sanep Ahmad, M. A. & M. A. M. N. (2012). Zakat sebagai Pemangkin Pembangunan Ekonomi : Ke Arah Negara Berpendapatan Tinggi Zakat as A Catalyst to Economics Development : Towards High-Income Country. *Prosiding Perkem VII*, 2, 1263–1273.