
Sustainable development status of zakat recipients: empirical investigation based on Malaysia's Kedah State

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Abstract: Zakat is compulsory charity in Islam to fight poverty and inequality, but there is a gap in literature concerning the performance of zakat in terms of achieving sustainable development for its recipients. Therefore, this study intends to assess the role of zakat in achieving the sustainable development status for recipients. This study collected primary data through a questionnaire survey among 440 zakat recipients from the Kedah State in Malaysia. The data were analysed using structural equation modelling. The findings reveal that zakat helps to improve the overall sustainable development status of its recipients, but the economic aspect improves more than the social and environmental aspects. Therefore, to ensure the success of zakat in line with the

goals of achieving sustainable development for recipients as advocated by the United Nations, the policymakers and zakat administrators around the world and particularly in Malaysia need to focus on redesigning the zakat management program.

Keywords: zakat; sustainable development; environmental development; social development; economic development; asnaf; poverty; Muslim; Malaysia; structural equation modelling (SEM-PLS).

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1 Introduction

Zakat – the Arabic term for giving charity – is the fifth pillar of Islam, and it is thought to make an important contribution to people's lives in a sustainable way throughout the Muslim world. The principles and practices of zakat are the basis of Islamic economics. Zakat is defined by *The Encyclopedia of Islam* as “the obligatory payment by Muslims of a determinate portion of specified categories of their lawful property for the benefit of the poor and other enumerated classes” (Zysow, 2012). In the holy Quran (6:141), God Himself orders Muslims to give due alms (zakat) on the day of harvest and not waste anything as He does not love those who waste resources. With this binding commitment, a sense of care and responsibility was created among Muslims so that they can look after the poor and needy in the community. Muslims in general consider zakat to be a productive economic instrument that can eradicate poverty and accelerate economic development (Mohsin and Ismail, 2013; Abdelbaki, 2013; Arif, 2017). However, scholars believe that honesty and good judgement in the distribution of zakat can ensure equitable distribution of wealth throughout society. This truly reveals the very significance of zakat which means to grow, to purify and to establish peace (Nadzri et al., 2012).

The practice of zakat played an important role in the history of early Islam (Nadzri et al., 2012). It achieved notable success prior to the Crusades when Western feudal lords invaded Muslim territories (Mohsin et al., 2011). During the regime of the great Caliphs of Islam, particularly Omar Ibn Khattab and Omar Bin Abdul Aziz the collection and distribution of zakat emerged as a most productive solution of poverty and economic injustice (Nadzri et al., 2012). However, during the mediaeval era, zakat as an Islamic doctrine lost favour and the fervour to continue it. Zakat only really re-emerged as mechanism to help the destitute when Muslim nation-states were formed (Bakar et al., 2011).

Despite having a very effective God who ordained that poverty can be alleviated through a tool such as zakat, Muslim states are in general characterised by being economically underdeveloped. Mostly Asian and African countries with majority Muslim populations have great swathes of poverty and lack the necessary food and resources (Shaikh et al., 2017). Scholars believe that ineffective and insufficient zakat management is responsible for such an unexpected phenomenon. However, Azam et al. (2014) asserted that charity improves the wellbeing of Pakistani households to a great extent. In the same way, Bakar and Abdghani (2011) argue that effective distribution of zakat to the right people has a truly productive role in reducing poverty. They claim there is both a short-term and long-term trade-off between zakat and elimination of poverty. Suprayitno et al. (2013) conducted an empirical study in Malaysia and their results show that disbursement of zakat has a small yet favourable impact on increasing aggregate consumption level.

Before the British ruled Malaysia, the payment of zakat was perceived as a mere religious obligation by the Malay Muslims (Sarif et al., 2013). There was in fact no official arrangement to collect and distribute zakat in Malaysia (Ab Rahman et al., 2012). Payment of zakat was done informally through Islamic scholars prior to colonisation, and Islamic scholars disbursed the proceeds to those people who qualified to receive it (as prescribed by the Quran and Sunnah of the prophet Mohammed (Pbuh) as the recipients (Htay and Salman, 2014). However, upon the arrival of the British, the State Islamic Religious Councils (SIRCs) or Majlis Agama Islam Negeri (MAIN) were the only bodies to look after this matter as it related to both Islamic and traditional customs of Malay

Muslims (Ab Rahman et al., 2012). Those SIRCs eventually became the apex bodies responsible for zakat administration in Malaysia (Htay and Salman, 2014).

Extensive research has been conducted on zakat to measure the extent of poverty and destitution in the Malaysian Muslim community (Ab Rahman et al., 2012; Bakar et al., 2011; Hassan and Ashraf, 2010). Studies on zakat looked at it from the fiqh point of view like the definition of zakat, types of assets for which zakat is compulsory, utilisation of funds collected from it to develop or improve infrastructure. Some studies investigated different regulatory dimensions of zakat management (Tahliani, 2018; Owoyemi, 2020). In addition, Mahat and Warokka (2013) studied zakat as a tool for economic growth in the Muslim countries. However, not many studies have considered the effectiveness of zakat management from the sustainable development perspective. Thus, this study intends to empirically investigate the nature of sustainability with reference to zakat recipients in Malaysia's Kedah State, which is located in the north-western part of Peninsular Malaysia. This study will help policymakers and other stakeholders understand the dynamics of zakat management and its effectiveness in ensuring the sustainable development of Malaysian Muslims.

2 Literature review

2.1 Sustainable development theory

The theory of sustainable development is established through practice, and the analysis of sustainable development cannot be distinguished from the implementation of effective strategies (Steer and Wade-Gery, 1993; Stagl, 2007). Sustainable development has encountered the germination of thoughts, and afterward a progression of sustainable development rehearses, for example, the United Nations Sustainable Development (UN-SDG) Summit. There have been many developments and sustainable development has moved from solving ecological challenges only to addressing the world's key issues (Olawumi and Chan, 2018). In different ages, human society has distinctive development problems. The development rehearsals continue to evolve under the guidance of the theory of sustainable development, and sustainable development goals continue to be advanced and enhanced (Jabareen, 2004, 2008). The Sustainable Development Goals have progressed from the single-factor objective of encouraging the sustainable use of plant and animal resources to the poverty-focused MDGs, and now to the more comprehensive and wider SDGs.

The UN implemented SDGs in 2015 in consideration of the experience of MDGs (United Nations, 2015). 17 goals and 169 sub-objectives to guide sustainable development are included in the SDGs for all areas, including advanced and developing nations, over the next 15 years. Six main components are also protected by the SDGs which are: respect, citizens, the world, stability, equity, and association (Muff et al., 2017; Rudra and Kurian, 2018). Sustainable development goals can be separated into four categories: economy (objectives 8, 9, 10, and 12), society (objectives 1, 3, 4, 5, 11, and 16), environment (objectives 2, 6, 7, 13, 14, and 15), and administration (objective 17) (Lu et al., 2015). As per Misso et al. (2018) environmental, social and economic ideas of sustainable development goals are all interrelated with the economy reliant on environment and society though social presence, and mankind are similarly reliant to the environment. Thus, sustainable development truly represents for addressing the

requirements of present ages without imperilling the ability of people in the future to address their own issues, at the end of the day, the main aim of the concept is to have a better personal satisfaction of life for everybody, presently and for a long time into the future (Misso et al., 2018). Consequently, the central motivation behind SDGs is that during the process of accomplishing hunger easing and advancing financial turn of events, individuals ought not to exist at the expense of harming the ecological atmosphere, and should cling to and execute the idea of sustainable development to its fruition (Stafford-Smith et al., 2017).

Currently, while sustainable development theory has been widely advocated, many of the theories' conceptual and analytical problems have not been substantially addressed in practice. However, this study tends to utilise zakat as an instrument that fulfils three fundamental SDGs which are the economic, social and environmental goals. The study intends to provide some practicality in how to measure the achievement of SDGs status thus filling the gap in the literature of sustainable development in terms of SDGs status measurements.

2.2 Conventional and Islamic theories and views of sustainable development

According to conventional understanding, the sustainability issue encompassing the top three requirements of achieving economic emancipation, social progression and keeping in view the ecological balance (Hacking and Guthrie, 2008), is paramount in removing the woes of downtrodden people. There are many in this situation who urgently need sustainable support and development so that they can make ends meet, and have a future that they can aim for (Yumna and Clarke, 2011).

The need for sustainable development has become very important due to the unprecedented but uneven economic growth that has taken place in different territories. If, however, this development is not sustainable then the issue of real and long-term poverty will remain and especially in the ecological and societal contexts. Remedies will be urgently required (Gladwin et al., 1995). With this line of thinking, Elkington (1998) proposed a basic three-dimensional paradigm known as the 'triple bottom line' that takes sustainable development into account. This concept evolved as appreciating human, social and economic development where the natural environment has to be cared for because it is fragile.

Islam has always advocated for good faith, sound values, unwavering dignity, and the highest level of fairness within its appropriately defined way of life (Akoum and Haron, 2011). In line with Islamic teachings, humanity is entrusted to act as vicegerent on Earth and this means that people are duty bound to respect nature and treat it well (Ahmadi, 2016). The Islamic position of humans on Earth is that humans are mere beneficiaries and not the owners who can do whatever they want through free will, but they need to ensure harmony and peace with every individual, every environmental and economic interest (Ahmadi, 2016). People and the societies they live in must adapt to a more sustainable way of living, and the Islamic worldview of relationship with nature is even stricter than conventional thought (Matali, 2012). This is the logical outcome of the true Islamic position on man's place in the environment, to ensure survivability of all species given the currently very fragile state of nature (Ahmadi, 2016).

The issue of sustainability is at the core of the Islamic perspective which is embedded in the deeper Islamic framework (Matali, 2012). Islamic notions go beyond the conventional norm, according to Matali (2012). Aydin (2015) states that the Islamic

understanding and wisdom about the environment is more sustainable, very demanding of its adherents and profoundly important both theoretically and practically in comparison to conventional social business platforms. According to Ahmed et al. (2015) and Kamaluddin et al. (2018), the truly Islamic way of life improves social sustainability and makes possible a fully realised and comprehensive human and societal development. In Islam, infrastructure development must incorporate a sustainable agenda (Ahmed et al., 2015). Islam encourages an accommodative sustainable business model in which people can thrive and enjoy the fruits of economic development (Alam et al., 2013, 2015, 2017a, 2018). Gamieldien (2010) and Kamaluddin et al. (2018) mentions that in order to live a healthy and progressive life within an Islamic framework, human beings need to understand the very concept of sustainability. Further to the discussion above, Islam is actually far ahead in terms of the discussion highlighted decades ago by the Brundtland Report on United Nations sustainable development in 1987 (Aris et al., 2018). Islam ordains humans to be responsible as vicegerents on Earth (Akoum and Haron, 2011); in this capacity humans have to live and abide by strict moral standard and values indicating to sustainability at every step, with strict adherence to the Quran, Sunnah and the Islamic tenets of peace and sustainability (Matali, 2012).

As per Ansari et al. (2012), sustainable development is a *sine qua non* for conservation of humans, the environment and the very nature that we all live in. In line with the above authors, God-given measures need to be adhered to, in order to ensure maximum satisfaction. Aburounia et al. (2006) states that although Muslim societies embracing the notion of sustainable development is a new concept given the trajectory and circumstances of contemporary economic development, such an understanding has been present in the Quran and the Sunnah for the last fourteen hundred years. Another point to note in the current literature is that the word 'sustainability' is gradually replacing the term 'sustainable development', because humans and nature are becoming justly important as an integrated system and overtaking the more traditional concept of development (Ansari et al., 2012).

2.3 *Effectiveness of zakat as an Islamic development tool*

Over the past three decades, studies have analysed the impact of zakat from the economic point of view in some Muslim majority countries (Piliyanti, 2013; Kasri and Ahmed 2015). Bakar and Abdghani (2011) argue that a sustainable zakat distribution process can guarantee a better standard of living for zakat recipients. Earlier studies like that of Awang and Mokhtar (2011) state that funds collected through zakat are considered to constitute a form of capital subsidy provided to people in dire need of life's necessities as a gesture of support and solidarity. They further argue that zakat works as a social insurance scheme that guarantees a comfortable standard of living and dignity for Muslims. Ahmad et al. (2015) assert that a well-organised zakat administration system can play a critical role in solving socioeconomic issues like poverty, unemployment and self-development that Muslims throughout the world experience.

A study conducted by Shaikh (2016) attempted to estimate the prospective amounts of zakat to be collected in several OIC member countries. The study finds that the ratio of zakat to GDP outperformed the ratio of the Poverty Gap Index to GDP in three OIC countries where living on US\$1.25 per day is the poverty level. The study reveals that prospective amounts of zakat being collected in 17 OIC countries is enough to eradicate poverty in those countries. Another empirical study carried out in Sudan (Abdelmawla,

2014) finds that zakat education has helped to eradicate some poverty in that country. Hassan and Khan (2007) did research in Bangladesh and they found that zakat funds significantly reduced public expenditure from 21% of Annual Development Plan in 1983–1984 to 43% in 2004–2005. Meanwhile, in Malaysia, the study conducted by Sadeq (1996) contended that on an annual basis, around 73% of the projected collection of zakat was enough to improve the prospects of households from experiencing hard-core poverty to no poverty.

A further empirical study claims that the distribution of charity curtails the inequality of income in Malaysia (Bakar and Abdghani, 2011). The impact of zakat in Indonesia was examined by Firdaus et al. (2012) and they showed that zakat can improve the country's GDP by 3.4% and significantly remove destitution. Furthermore, Debnath et al. (2013) investigated whether zakat can be an effective replacement of micro-finance programs to overturn poverty in Bangladesh. Their study uses the Propensity Score Matching (PSM) technique and finds that zakat was better than microfinance programs. Nadzri et al. (2012) suggest the idea of integrating of many poverty reduction mechanisms on the grounds that institutions dealing with zakat will be more efficient and effective.

A number of studies have been conducted in the last decade on issues related to zakat in Malaysia in general and in the district of Kedah in particular (Ab Rahman et al., 2012; Mahamod, 2011). For example, Ab Rahman et al. (2012) studied problems besetting the Malaysian zakat institutions, while Adnan et al. (2013) examined the intellectual capital in religious organisations from the perspective of Malaysian zakat institutions. Ahmad et al. (2011) worked on tax-based modelling of zakat compliance in Malaysia. Ahmad (2012) looked at the contemporary policy and practice of zakat investment in Malaysia with reference to Shariah law. It was argued by Mahamod (2011) that in spite of showing a positive outcome in Kedah, poverty was still a serious problem and undermining the state's economic development.

2.4 Hypotheses development: zakat for sustainable development

Zakat is widely seen as a meaningful counter-measure in terms of ensuring the well-being of poor Muslims around the globe. In line with that notion, Sadeq (1996) clarifies that zakat is a basic instrument for making possible sustainable human development at grassroots level within the Islamic framework. It also gives the asnaf (zakat recipient according to the Quran and Hadith) a sense of self-reliance and taking oneself out of poverty, if one truly wants to. This is also in line with the economic or financial pursuit of sustainable development (Yumna and Clarke, 2011). In its tenets, Islam promotes a balanced sustainable way of life that can overcome any economic or social woes (Matali, 2012).

Ibrahim (2015) elaborates that zakat is a God-given system bestowed to mankind for establishing a truly sustainable mode of development. It is like a 'collective social security scheme for mutual help' as well as attracting sympathy for fellow humans in an Islamic framework. Ariyani (2016) elucidates that zakat is an effective strategy in the Islamic framework to alleviate poverty and it is actually a practical sustainable mechanism to overcome serious socioeconomic gaps in a Muslim society. Similarly, Nurzaman (2011) testifies that zakat can ensure strong sustainable poverty alleviation programs are put in place, and as a better human development instrument to ascertain socio economic development.

The link between sustainable development and zakat has yet to be explored by academia in more detail. Shaikh (2017) argues that in at least 7 of the 17 broad SDGs set by the UN, the role of zakat is very integral in Muslim countries. He suggests that due to the loftiness of the goals set and the time constraints to achieve them, all organisations need to work together for the best outcomes. Scholars further claim that over the last decade or so, financial turmoil in the Eurozone and MENA regions has resulted in a call for Official Development Assistance. New sources of funding from unconventional channels like faith-based organisations (FBOs) are now making noteworthy contributions to poverty reduction programs. They have proved to be extraordinarily effective in religiously predominant societies (Mahmood and Ashmawey, 2015). It has been further observed that zakat contributes positively to both profitability and value of a business, and it plays a major role in establishing socioeconomic sustainability through better business performance (Javaid et al., 2018). However, no study has yet been published on the degree of sustainable development among zakat recipients in Malaysia and especially in Kedah.

In its declaration of sustainable development, the World Bank emphasises inclusiveness and environmentally friendly economic growth which will decrease poverty and establish mutual prosperity for all people, and meet future generations' needs (World Bank, 2016). Sustainable development goals (SDGs) devised by the UN set forth a comprehensive blueprint for international development with the focus on three major pillars of sustainable development. These are economic, social and environmental in character and should conform to the conditions set by the World Bank. Moșteanu et al. (2014) state that sustainable development fosters economic growth and ensures equitable distribution of profits and benefits. It also restores the environment and supports people who are marginalised.

2.4.1 Zakat and economic development

A sustainability inspired economy requires effective management and redistribution of wealth, as poverty will deter sustainable environment (Kates, 2005; Ansari et al., 2012). So, this link between environment and economy gives importance to the Islam notion that peace and social justice can only be achieved through the 'brotherhood' concept (Ukhuwah), khilafah (viceregency), amanah (trust), mandatory alms-giving (zakat), charity (Sadaqah) and waqf. All of these combined wills have a positive impact on eliminating poverty and hardship in society. Furthermore, the Quran repeatedly demands that vicegerents not to be wasteful (Surah Isra: 27) and conserve the God-given natural environment. According to Ariyani (2016), zakat is for the welfare improvement of asnaf as well as for ensuring a sustainable way to minimise the socioeconomic problems.

The Islamic notion of sustainable development believes that zakat is an economically sustainable measure for welfare of humankind and their peaceful existence (Ibrahim, 2015). This precept ensures social balance, which is a key part of social sustainability. The structure of zakat improves people's sharing and caring attitude so that financial stability is available to all throughout the wider society. This creates collective social security and long-term benefits of peaceful existence between all societies. This in turn will augment the socioeconomic environment so that social security and sustainable development measures are on par with the expectations of contemporary western society, which can further ensure social justice (Sarif et al., 2013; Ibrahim et al., 2015). The God commands in the Quran, "The believing men and believing women are allies of one

another. They enjoin what is right and forbid what is wrong and establish prayer and give zakat and obey Allah and His Messenger. Allah will have mercy upon them. Indeed, Allah is Exalted in Might and Wise" (Surah Taubah:71). In this way practising Muslims are humbly submissive to God and perform their prayers with sincerity as well as pay their zakat.

In their ground-breaking SLA empirical analysis, Samsudin and Kamarudin (2013), while discussing the need for empowering the hard-core poor with effective interventions so that they make the most of their livelihood assets, emphasise the importance of natural and human assets to improve one's place in society, rather than simply relying on financial assistance. According to Samsudin and Kamarudin (2013), SLA is a multidimensional, rational and integrated approach, and it is important to understand the livelihood aspects of poverty-stricken households. According to the findings of Samsudin and Kamarudin (2013) study, financial assistance is a short-term stop gap measure. Understanding the potential of livelihood assets and how such assets should be distributed, will benefit recipients in the long run. The importance of acquiring education was greatly emphasised in their findings. As Allah cautioned his believers with the following words, "That (happened so) because God never changes a favour that He has bestowed upon a people unless they change what is in themselves (their belief, lifestyle, world-view, and devotion to God's laws embodied in the Religion, and in life, and in the creation and operation of the universe). And God is indeed All-Hearing, All-Knowing" (Al Quran 8.53). Therefore, this study hypothesis the following:

H1: Zakat has statistically significant contribution on the improvement of economic status of the zakat recipients.

2.4.2 Zakat and social development

To date, zakat's performance has been measured based on a tool of poverty alleviation, but now it is essential to think about zakat as a sustainable social development tool for people at the bottom level of society, not just those who are the targets of poverty alleviation. Fundamentally, this approach is appropriate because ensuring a good quality of life is a foremost aim of zakat distribution and researchers agree that its allocation should ensure a certain level of comfortable living for beneficiaries. Shaikh and Ismail (2017) emphasise that zakat must be allocated in such amounts to retain a consistent quality of life and sustainable social standard of living. Here sustainable living standard refers to the fulfilment of one's primary and comfortable necessities of life. Habshi (1990, 1998, 2006) suggests that the amount received in the form of zakat should visibly impact in improving the life standard of its recipient and that improvement will be gained if people manage to fulfil their basic and comfort needs. On this theme, researchers argue that if the lives of beneficiaries of zakat have no material change even after receiving it, this means there are problems in zakat administration, its allocation and maintenance in Muslim societies. Ahmad et al. (2015) state that due to this shortcoming the basic objective of zakat is not being realised in the truest sense. The authors therefore argue that recipients of zakat need the motivation and proper guidelines to become independent and self-reliant in order for the zakat concept to genuinely work.

The economic and social status of the poor people are the most significant sustainable development goals to achieve a sustainable decrease in poverty and in guaranteeing upward socioeconomic mobility. Metwally (1983) contends that zakat has a more

extensive base and it is applicable on both the wealth and incomes. He emphasises that the zakat framework has an inbuilt instrument to arrive at the appropriate focus groups in terms of zakat assortment and payment. This guarantee expanding the propensity to utilise more determinedly and rapidly. Moreover, the collected wealth can be significantly more than the single time frame salary, particularly in the high total assets people of the general public. That is the reason, without expansive based wealth taxes and provisos in taxing off-shore wealth, the dynamic personal taxes alone have been not able to decrease salary disparity and wealth redistribution. Consequently, zakat from endowment surplus family units (those having higher wealth than Nisab) to the enrichment lacking families can help in giving income backing and affordability for skills development programs. Zakat could likewise be utilised to give subsidising to health establishments and education institutions, in this manner adding to human capital advancement which can give good work to many poor people. Then again, the organisation of zakat would guarantee circulation of wealth in the beneficial businesses, accordingly guiding cash-flow to go in the genuine segment of the economy as opposed to sitting inert in the possession of the rich people. Since this redistribution depends on wealth instead of salary, it can accomplish the redistribution goals all the more adequately and reliably since wealth varies substantially less than pay over the business cycles.

In addition to that, Ariyani (2016) showed that zakat has a domino impact on the improvement in social welfare assistance through two principle viewpoints specifically the making of jobs and the lessening of social gap. The expansion of total demand by the beneficiary of good cause will support the demand for items and in this manner increment production and investment, which thus will affect expanding the demand for labour (joblessness diminishes). Simultaneously, the exchange of wealth from the rich to the helpless will prevent the accumulation of wealth with the end goal that it diminishes the financial gap. Ali et al. (2010) declared, with regards to zakat, that large scale noble cause can manage capital aggregation through improved capital proportion of work and upgraded financial power and social advancement of the beneficiaries of charity. For these endeavours to change good cause from the obligations and restricted estimations of religion to turn into an instrument of financial development, the idea of zakat must be adjusted to so as to accomplish prosperity for the entire society. Therefore, this study hypothesis the following:

H2: Zakat has statistically significant contribution on the improvement of social status of the zakat recipients.

2.4.3 Zakat and environmental development

According to Kamali (2016), in the 14th century Ibn Khuldun propagated the need for sustainable civilisational development to ensure a harmonious society. The Prophet (PBUH) used to forbid cutting down trees or killing animals or destroying agricultural products even during the war, and ruler (caliph) Omar encourage Muslims to pursue zuhd (austerity) to avoid indulging in excessive profiteering and to perform the concept of kifayah (sufficiency) in Islam (Kamali, 2016).

As Islam considers the public interest at the core, the sustainable development framework in an Islamic society is also based on moral standards (Kamali, 2016).

The Islamic Declaration on Sustainable Development (IDSD) 2012 maintains that these salient features are seen in an Islamic social order in order to preserve the fragile environment. To ensure such interest, the economy will be directed by a set of rules, which safeguards a balance in every aspect of economic and social dealings in regard to environmental safety. Economy will ensure less wastage, fair profit and fair competition to guarantee maximum participation of many players rather than a monopoly. As per understanding of Islamic paradigm, natural resource is a gift from God that must be protected, therefore, ecological degradation is not endured in such a well administered atmosphere (Kamali, 2016).

Furthermore, in Islamic legal maxim, it is enlightened that not to harm anyone, and not to destroy the environment, so as not to receive it in return. Besides, in accordance to this maxim, a greater harm is avoided by tolerating a much lesser one and harm to an individual may be tolerated in order to further avoid harm to many. Likewise, harm should be evaded in whatever extent it's possible and a miraculous way out need to be intended when intolerable or hardship occurrences may take place (Kamali, 2016). So, protecting the environment, including the economic and social sphere is equally important in an Islamic ally inspired economy.

From environmental point of view, according to Shepherd et al. (2013) without substantial efforts there potentially be approximately 325 million extremely poor individuals living in 49 nations, and generally powerless against natural hazards and adverse climate impact by the year 2030. Poor or oppressed individuals or any particular community are more vulnerable to natural disaster events since they live in more dangerous areas (Alam et al., 2017b). For example, impoverished people live in poorly constructed houses which generally have no chance to withstand floods, earthquakes or storms. Twenty years ago, the World Health Report (2000) published figures on the infections leading to more ailments that are caused by serious water, sanitation, and hygiene problems; almost 1000 children die per day, as a result of preventable water and sanitation related diarrheal sicknesses. Having good and dependable sanitation and healthcare services does not merit much attention compared to the business involving mobile phones and other such services which are extravagances in comparison.

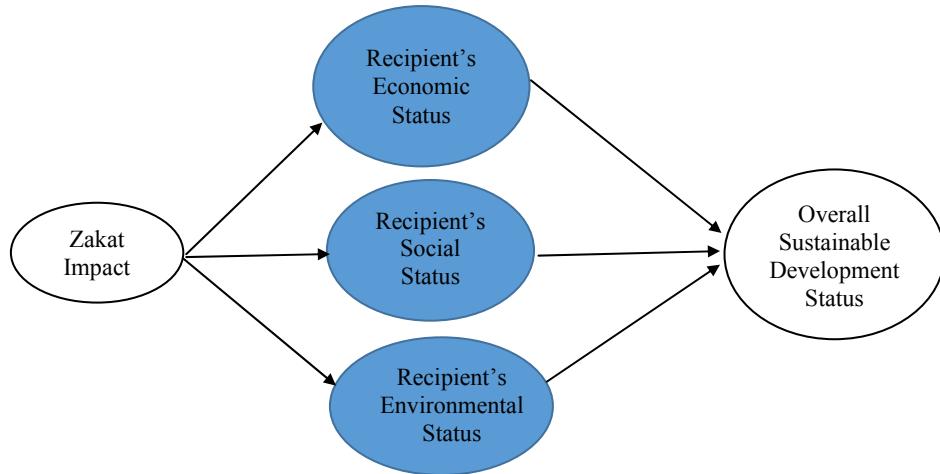
Therefore, zakat assets could be used not just for providing income assistance to needy individuals who do not have access to regular food supplies, but also lack the livelihoods and earnings that could change how they live in their environment. For this reason, appropriate sustenance, medications and inoculations are important to avoid ill-health, stunted growth, nutrient deficiency and a general loss of ability to live an independent productive life well into adulthood. Some life-sparing prescriptions actually cost less than one dollar, yet they are under or not provided because of business reasons. If successful redistribution methods like zakat do not occur, then the purchasing power of poor people can never be improved. It is essential that they are provided with the means to manage the costs of even the basic necessities of life, for example, food, water, sanitation and medicines. Therefore, this study hypothesis the following:

H3: Zakat has statistically significant contribution on the improvement of environmental status of the zakat recipients.

2.5 Research framework

The framework of this study is given in Figure 1. It shows the relationship how zakat has impacts on sustainable development status of zakat recipients through all three dimensions of sustainable developments – economic, social and environmental.

Figure 1 Framework of the study (see online version for colours)



3 Methodology

The primary data collection for this study was accomplished through a structured questionnaire survey. This study's sample consisted of 440 zakat recipients who were chosen through a cluster random sampling technique from eleven zones of Kedah, Malaysia. The study employed a few trained enumerators to collect the necessary samples. The data collection continued over a three-month period from June to August 2019 and 440 questionnaires were distributed to the targeted samples. Out of 440 recipients, a total of 427 responded to the survey, meaning that the response/targeted sample rate was nearly 97%. The questionnaire was finalised after a thorough revision and pre-testing study. It was designed to collect data for empirically testable parameters. A five-point Likert scale was used where 5 indicated the highest and 1 indicated the lowest. The data were analysed using descriptive statistics, Chi-square test, and structural equation modelling (SEM) based on SmartPLS software. A number of diagnostic tests, such as internal consistency reliability, indicator reliability, convergent validity, and discriminant validity, etc., were conducted to test the validity and reliability of data and models.

4 Analysis and findings

4.1 Profile of the respondents

The sampling profile documented in Table 1 shows that among the zakat recipients, 52% are female and 47% are male. It is worth noting that nearly 68% of recipients are of

working age, which indicates that getting these people into meaningful employment should be one of the major priorities of policy-makers. Meanwhile, nearly 75% of recipients receive only RM 500 or less. At the same time, 77.5% of the cases have less than one family member earning a wage. Moreover, over 80% of the recipients earn a household monthly income of less than RM 1000 per month even after receiving zakat, and most of these people rely greatly on zakat as their only source of income.

4.2 Sustainable development status according to demographic profile

The respondents' economic, social, and environmental situations change significantly before and after receiving zakat based on different sub-categories of their profile (Table 1). Importantly, the mean values for the majority of the cases are higher after receiving zakat than before. Moreover, for some sub-groups of respondents, there is no significant difference in a respondent's social, economic, and environmental conditions between before and after receiving zakat. Literally, zakat does not exert a sufficient impact on recipients' sustainable development status according to different sub-categories of the respondents. Therefore, it is imperative to investigate the findings based on advanced statistical analysis for the total sample case.

Table 1 Demographic profile and sustainable development status of zakat recipients

Variable	Groups	% of Respondents	Economic		Social		Environmental	
			After Zakat	Before Zakat	After Zakat	Before Zakat	After Zakat	Before Zakat
Gender	Male	47.5	3.6002*	2.6814*	4.0608*	3.252*	4.1429*	3.3818*
	Female	52.5	3.3698*	2.7195*	3.9792*	3.3504*	4.1324*	3.4933*
Age	20–39 years	11.2	3.5451*	2.7743*	4.1493*	3.5174*	4.3264*	3.6840*
	40–60 years	57.1	3.5096*	2.7384*	3.9918*	3.3005*	4.0786*	3.4010*
	Above 60 years	31.6	3.4012*	2.6086*	4.0185*	3.2333*	4.1765*	3.4247*
Marital Status	Married	60.9	3.6013*	2.6923*	4.0769*	3.2814*	4.1692*	3.4442*
	Widow/Divorced	34.2	3.3276*	2.7728*	3.9395*	3.3619*	4.1199*	3.4623*
	Single	4.9	3.0238**	2.3175**	3.8333**	3.1746**	3.8651*	3.2381*
Education	No education	11	3.2730*	2.8298*	3.9043*	3.5000*	4.0355*	3.4716*
	Primary	45.4	3.4510*	2.6710*	3.9991*	3.2294*	4.1512*	3.3960*
	Secondary	41	3.5648*	2.7248*	4.0733*	3.3476*	4.1610*	3.4867*
	Certificate	1.6	3.6905***	2.5714**	4.0000**	3.0714**	4.2143*	3.2143*
	Diploma	0.5	3.25	2.1667	3.9167	2.5	3.5	4.1667
	Degree	0.5	3.25	2.1667	3.9167	2.5	3.5	4.1667

Table 1 Demographic profile and sustainable development status of zakat recipients (continued)

Variable	Groups	% of Respondents	Economic		Social		Environmental	
			After Zakat	Before Zakat	After Zakat	Before Zakat	After Zakat	Before Zakat
Earning Members	1 or less person	77.5	3.4878*	2.6728*	4.0097*	3.2467*	4.1442*	3.3807*
	2 persons	15.9	3.4093*	2.8064*	3.9657*	3.4975*	4.0711*	3.6299*
	3 persons	4.9	3.7619*	2.7619*	4.2937**	3.6270**	4.2698*	3.7698*
	4 persons	1.2	3.7619*	2.7619*	4.2937**	3.6270**	4.2698*	3.7698*
	5 and above	0.5	4.0833*	1.8333*	4.3333*	2.4167*	4.6667*	2.2500*
Household Monthly Income in RM	0–500	43.3	3.2613*	2.7405*	3.9324*	3.3694*	4.0514*	3.5279*
	501–1000	37.2	3.7275*	2.7002*	4.1174*	3.2296*	4.2285*	3.2799*
	1001–1500	15.9	3.4902*	2.5564*	4.0196*	3.2426*	4.1618*	3.5245*
	1501–2000	2.3	3.4667**	2.6333**	3.9333	3.4667	4.0833*	3.5500*
	More than 2000	1.2	3.5333	3.4	4.1667***	3.7333**	4.2	3.9333
					*			
Household Monthly Income from Zakat in RM	0–500	74.7	3.4159*	2.7085*	4.0131*	3.3433*	4.1442*	3.4880*
	501–1000	19.7	3.5774*	2.7024*	3.9702*	3.1865*	4.1091*	3.3214*
	1001–1500	5.2	3.9545*	2.5833*	4.2576*	3.1212*	4.1212*	3.1288*
	1501–2000	0.2	NA	NA	NA	NA	NA	NA
	More than 2000	0.2	NA	NA	NA	NA	NA	NA
All Sample		100	3.4793*	2.7014*	4.0180*	3.3037*	4.1374*	3.4403*

* $P < 0.01$, ** $P < 0.05$, *** $P < 0.10$. NA = not available due to smaller percentage of participants.

4.3 Structural model assessment of the sustainable development status

The sustainable dimension of zakat recipients is analysed under three different factors, namely: economic factors, social factors and environmental factors. A summary of the sustainability constructs for the pre- and post-zakat scenario is shown in Table 2, Figures 2 and 3. After receiving zakat, the economic factor dominates the respondents' overall sustainable development, followed by social and environmental factors. However, before receiving zakat, the social factor dominates sustainable development status, followed by environmental and economic factors. Moreover, it is observed that for overall sustainable status, the economic factor increased weight following receipt of zakat, yet both social and environmental factors declined in the same scenario. This

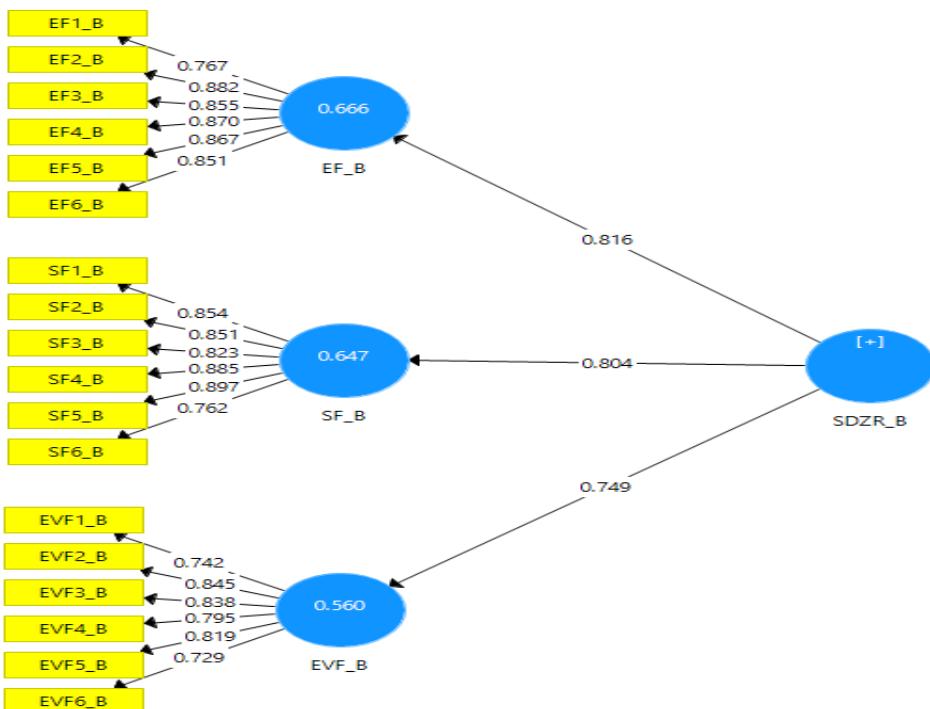
suggests that zakat does enhance the economic lives more than the social and environmental circumstances do.

Table 2 Path coefficient of sustainability dimensions

Sustainability constructs	After zakat	Before zakat
Economic factors	0.816*	0.743*
Social factors	0.804*	0.872*
Environmental factors	0.749*	0.855*

*indicates significance at the 1% level.

Figure 2 Sustainable development status after receiving zakat (see online version for colours)

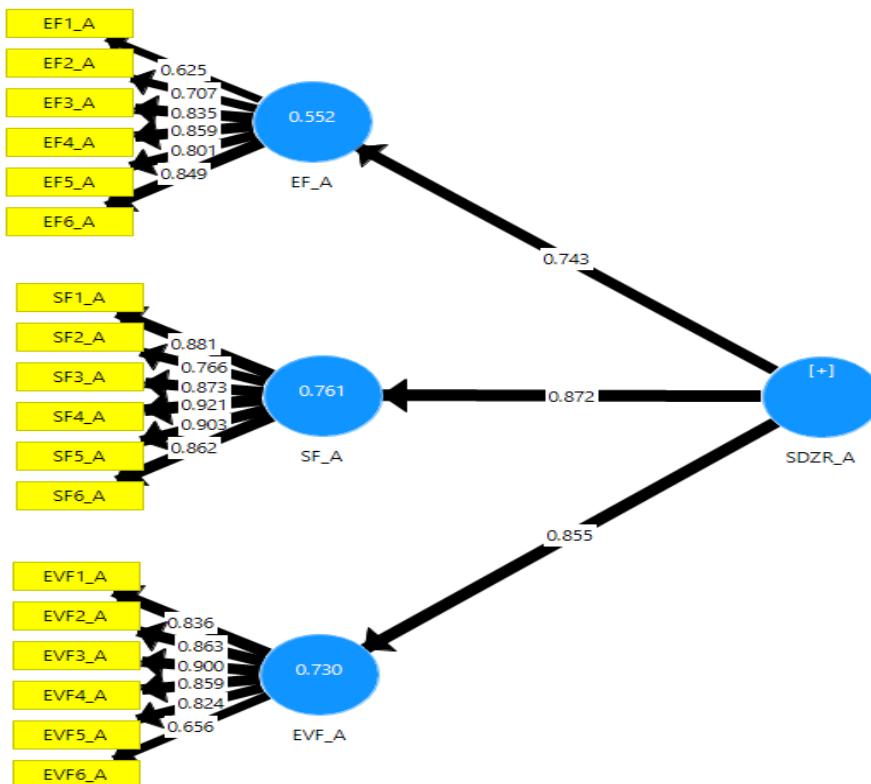


4.4 Descriptive assessments of changes in sustainable development status

To get more detailed changes about all three constructs of sustainable development, the individual item level data are summarised in Tables 3 and 4. Overall, the average score of all three constructs of sustainable development improves, wherein the economic factor improves from 2.7 to 3.48, social factor improves from 3.3 to 4.02 and environmental factor improves from 3.44 to 4.13.

Table 3 Sustainable development assessment scores after receiving zakat

Items	Descriptions	% of respondents as per scale					Average score
		1	2	3	4	5	
EF1	My (family) is able to fulfil its basic needs	1.2%	6.1%	28.3%	45.4%	19.0%	3.75
EF2	My (family) is living at the poverty level	1.2%	11.7%	31.6%	40.0%	15.5%	3.57
EF3	My (family) is able to participate in income generating activities	2.3%	13.3%	26.5%	41.5%	16.4%	3.56
EF4	My (family) can manage funds in cases of necessity	3.3%	11.0%	26.9%	42.4%	16.4%	3.58
EF5	My (family) level of savings	12.4%	19.0%	21.8%	33.3%	13.3%	3.16
EF6	My (family) level of productive investment for more income	11.2%	15.5%	22.7%	36.8%	13.6%	3.26
SF1	My (family) lives in harmony with the community	0.5%	3.7%	12.6%	51.1%	32.1%	4.11
SF2	My (family) has social status	0.5%	4.7%	18.5%	53.2%	23.2%	3.94
SF3	My (family) interacts with relatives	0.2%	3.5%	10.5%	47.8%	37.9%	4.20
SF4	My (family) participates in the community	0.5%	3.7%	13.8%	53.6%	28.3%	4.06
SF5	My (family) joins social organisations	0.9%	3.5%	18.0%	50.6%	26.9%	3.99
SF6	My (family) contributes to social work (Monetarily or otherwise)	0.9%	8.0%	23.2%	43.8%	23.9%	3.82
EVF1	My (family) has access to clean water	0.0%	1.2%	9.4%	50.1%	39.3%	4.28
EVF2	Sanitation conditions for my family	0.0%	1.4%	10.3%	49.4%	38.9%	4.26
EVF3	Cleanliness of my home environment	0.2%	1.9%	11.2%	51.1%	35.6%	4.20
EVF4	My (family) overall living environment	1.2%	2.3%	13.3%	49.4%	33.3%	4.10
EVF5	My (family) depends on natural resources	0.5%	3.5%	14.5%	46.8%	34.7%	4.12
EVF6	My (family) adapts to natural disasters	0.5%	4.9%	26.0%	45.7%	23.0%	3.86
EF	Economic Factors (all average)	5.3%	12.8%	26.3%	39.9%	15.7%	3.48
SF	Social Factors (all average)	0.6%	4.5%	16.1%	50.0%	28.7%	4.02
EVF	Environmental Factors (all average)	0.4%	2.5%	14.1%	48.8%	34.1%	4.13

Figure 3 Sustainable development status before receiving zakat (see online version for colours)

As per the item level, economic factor-related items reveal that the fulfilment of basic needs and poverty reduction are far better than all other individual items (Tables 3 and 4). Overall, the average score of all three items of sustainable development improves, wherein economic factor improves from 2.7, 2.58, 2.86, 2.79, 2.72, 2.69 to 3.75, 3.57, 3.56, 3.58, 3.16, and 3.26, respectively. Social factor improves from 3.29, 3.11, 3.47, 3.40, 3.33, 3.23 to 4.11, 3.94, 4.20, 4.06, 3.99, and 3.82, while environmental factor improves from 3.60, 3.48, 3.53, 3.50, 3.51, 3.01 to 4.28, 4.26, 4.20, 4.10, 4.12, and 3.86, respectively.

4.5 Model diagnostic test

To ensure internal reliability which denotes the ability to measure the construct, the loading of items should be above 0.70, but sometimes 0.60 is acceptable (Hair et al., 2017; Sekaran and Bougie, 2013). Here the loading for all of the items for assessment is above 0.6 (Table 5), which is good enough to run the SEM based on these items.

Table 4 Sustainable development assessment scores before receiving zakat

Items	Descriptions	% of respondents as per scale					Average score
		1	2	3	4	5	
EF1	My (family) is able to fulfil its basic needs	12.4%	32.8%	41.9%	11.0%	1.9%	2.57
EF2	My (family) is living at the poverty level	11.0%	33.3%	43.3%	11.5%	0.9%	2.58
EF3	My (family) is able to participate in income generating activities	9.1%	25.5%	40.3%	20.6%	4.4%	2.86
EF4	My (family) can manage funds in cases of necessity	8.2%	25.3%	48.7%	15.0%	2.8%	2.79
EF5	My (family) level of savings	15.0%	28.3%	33.7%	15.7%	7.3%	2.72
EF6	My (family) level of productive investment for more income	13.6%	30.0%	34.7%	17.3%	4.4%	2.69
SF1	My (family) lives in harmony with the community	5.4%	15.5%	32.8%	37.9%	8.4%	3.29
SF2	My (family) social status	4.9%	22.2%	36.5%	29.3%	7.0%	3.11
SF3	My (family) interacts with relatives	4.4%	12.9%	27.2%	42.6%	12.9%	3.47
SF4	My (family) participates in the community	4.2%	13.8%	32.3%	37.5%	12.2%	3.40
SF5	My (family) joins social organisations	4.4%	17.1%	30.7%	37.0%	10.8%	3.33
SF6	My (family) contributes to social work (monetarily or otherwise)	4.4%	20.1%	32.8%	32.3%	10.1%	3.23
EVF1	My (family) has access to clean water	2.6%	9.4%	29.3%	42.6%	16.2%	3.60
EVF2	Sanitation conditions for my family	2.3%	10.5%	35.8%	38.9%	12.4%	3.48
EVF3	Cleanliness of my home environment	1.9%	12.6%	29.0%	43.8%	12.6%	3.53
EVF4	My (family) overall living environment	2.3%	13.3%	30.0%	40.3%	14.1%	3.50
EVF5	My (family) depends on natural resources	2.6%	11.2%	31.6%	41.7%	12.9%	3.51
EVF6	My (family) adapts to natural disasters	5.4%	23.0%	40.5%	27.4%	3.7%	3.01
EF	Economic Factors (all average)	11.6%	29.2%	40.4%	15.2%	3.6%	2.70
SF	Social Factors (all average)	4.6%	16.9%	32.0%	36.1%	10.2%	3.30
EVF	Environmental Factors (all average)	2.8%	13.3%	32.7%	39.1%	12.0%	3.44

Table 5 Factor loadings

Items	Descriptions	Factor Loadings	
		After	Before
EF1	My (family) is able to fulfil its basic needs	0.767	0.625
EF2	My (family) is living at the poverty level	0.882	0.707
EF3	My (family) is able to participate in income generating activities	0.855	0.835
EF4	My (family) can manage funds in cases of necessity	0.870	0.859
EF5	My (family) level of savings	0.867	0.801
EF6	My (family) level of productive investment for more income	0.851	0.849
EVF1	My (family) access to clean water	0.742	0.836
EVF2	Sanitation conditions for my family	0.845	0.863
EVF3	Cleanliness of my home environment	0.838	0.900
EVF4	My (family) overall living environment	0.795	0.859
EVF5	My (family) depends on natural resources	0.819	0.824
EVF6	My (family) adapts to natural disasters	0.729	0.656
SF1	My (family) lives in harmony with the community	0.854	0.881
SF2	My (family) social status	0.851	0.766
SF3	My (family) interacts with relatives	0.823	0.873
SF4	My (family) participates in the community	0.885	0.921
SF5	My (family) joins social organisations	0.897	0.903
SF6	My (family) contributes to social work (monetarily or otherwise)	0.762	0.862

Where EF, SF & EVF is economic, social & environmental factor, respectively.

Similarly, other measurements of internal reliability such as Cronbach's alpha, composite reliability, and validity of the construct measured for pre-and post-zakat environments are shown in Table 6. The average variance extracted (AVE) is a measure of convergent validity (Campbell et al., 1959). In general, the composite reliability (CR) and Cronbach's alpha (CA) need to be higher than 0.7 (Hair et al., 2014) and the AVE should be above 0.5. The constructs below have achieved internal consistency (reliability) and convergent validity. Since the CR and AVE maintain the minimum threshold, it is not necessary to remove any of the items from the model.

Table 6 Construct reliability and validity

Constructs	Cronbach's Alpha		Composite reliability		Average variance extracted (AVE)	
	After	Before	After	Before	After	Before
Economic factors	0.922	0.871	0.94	0.904	0.722	0.615
Social factors	0.92	0.934	0.938	0.949	0.717	0.756
Environmental factors	0.884	0.905	0.912	0.928	0.634	0.684

The discriminant validity (Table 7) or divergent validity (Table 8) serve to find the extent of the non-relationship of the measurements (Campbell et al., 1959). Measuring the

cross-loadings through the Fornell and Larcker (F&L) criterion is a widely used method for estimating discriminant validity according to Henseler et al. (2015). Fornell and Larcker (1981) argue that the discriminant validity is attained for constructs when the variance extracted for each construct is bigger than its squared correlations with other constructs. The results below indicate that F&L criterion is fulfilled. Apart from this, the HTMT ratio is a more up-to-date method (Henseler et al., 2015) and as the threshold in HTMT is <0.85 , the criterion is also fulfilled and discriminant validity is obtained in the present model.

Table 7 Discriminant validity via the Fornell-Larcker criterion

		<i>Economic factors</i>	<i>Environmental factors</i>	<i>Social factors</i>
After Receiving Zakat	Economic factors	0.85		
	Environmental factors	0.451	0.796	
	Social factors	0.577	0.602	0.847
Before Receiving Zakat	Economic factors	0.784		
	Environmental factors	0.456	0.827	
	Social factors	0.616	0.736	0.869

Table 8 Heterotrait-Monotrait ratio (HTMT)

		<i>Economic factors</i>	<i>Social factors</i>	<i>Environmental factors</i>
After Receiving Zakat	Economic factors			
	Social factors	0.627		
	Environmental factors	0.493	0.602	
Before Receiving Zakat	Economic factors			
	Social factors	0.679		
	Environmental factors	0.516	0.8	

5 Discussions and conclusion

During the last few decades, exploring the role of zakat in resolving Muslim societies' financial and social problems, especially those linked to poverty, has attracted much significant interest in academia. Most scholars agree that the best outcome of giving zakat, is for policymakers to create a robust zakat administration and management framework that delivers the money to where it is truly needed. This study has investigated the pre- and post-zakat scenarios of zakat recipients in Kedah State of Malaysia in terms of sustainable development. The results find that the individual items for all three sustainability dimensions improved after the receipt of zakat indicating that it fulfills the hypotheses of this study.

Moreover, the study reveals that the very objective of zakat from the sustainable development perspective has yet to be achieved for its beneficiaries, because among the

three dimensions of sustainable development, the economic factor had priority over the environmental and social factors. The overall weight of sustainable development status shows both social and environmental factors are not much improved among zakat recipients, which is not in line with the goals of achieving sustainable development as advocated by the United Nations. This situation calls for a more systematic and goal-oriented zakat distribution strategy that is in line with the United Nations' SDGs.

Muslim nations on average need to do considerably more in accomplishing the development goals when contrasted with more developed economies. Since the objectives are aspiring and the time period set for these objectives is short, it is significant that widely inclusive endeavours are embraced including a wide range of organisations. Based on the findings of this study, it is clear how zakat has impacted positively on the sustainability of economic parameters more than social and environmental factors affecting zakat beneficiaries. This is in line with Salleh and Ngah (1980) and Ibrahim (2006) who found that the distribution of zakat reduced the poverty rate and also the income distribution gap among many Muslim communities in various states of Malaysia. That is to say, that the more zakat is gathered, the more powerful zakat instrument plays a significant function in financial advancement to substitute the role of the state through the administration spending plan. Accordingly, the expansion of zakat assortment in short run will upsurge zakat distribution and increase income of zakat beneficiaries. There is no dispute that zakat distribution mainly helps in alleviating poverty in Malaysia. Nevertheless, there are still some matters that need to be talked about and ultimately enhanced to fully improve the social and environmental factors that will lead to better sustainable development of zakat beneficiaries in Kedah and throughout Malaysia.

In spite of the significance of zakat in accomplishing sustainable development objectives, the possibilities of reducing poverty are compromised by the way in which zakat is being gathered, administered and distributed (Farouk et al., 2017; Sheikh and Ismail, 2017; Mahmud et al., 2014). The real issue of poverty reduction is that it is failing and the zakat drive has remained low and the degree of distribution to the poor is very insignificant. Ahmed et al. (2017) and Ayuniyyah et al. (2017) found that the sum of zakat collected is little, and can only help a few individuals and is not effectively invested, thus yielding no productive outcome. Therefore, most zakat payments are not received by the most underprivileged sections of society. Along these lines, to guarantee successful use of zakat support given to the various needy individuals and groups in a stated locale, communication platforms like social media must be considered as long as these are relevant, help the process and are effective.

The results of this study have important implications for determining a proper poverty alleviation instrument that is line with the United Nations' SDGs. Zakat institutions need to focus on and provide poverty alleviation programs designed to help beneficiaries to escape the poverty trap once and for all. This study shows that the economic relief given to zakat beneficiaries must be enough for them to find jobs and roles in society which will eventually lead them to improve their social status, change their living conditions and achieve meaningful sustainable development objectives. If such efforts are not made the cycle of poverty simply remains the same. Therefore, a comprehensive and inclusive zakat mechanism that deals with sustainable development of zakat recipients will

definitely help many zakat organisations to achieve SDGs for targeted recipients. The zakat authorities need to focus on the details of how poverty relief schemes will actually work for people who most need it.

Finally, as this is a pioneer study, it has limitations in terms of number of sample and coverage of location as well as selection of variables. In future, more studies should be conducted on the issue to check the validity of the findings as well as to explore the possibilities of financing SDGs through zakat funds in Muslim majority states or charity-based funds. At the same time, this research will open the doors for more work being done on groups of people who depend on and run charity, philanthropy and zakat-based development models throughout the world.

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Appendix: Survey Questionnaire

Part A: Respondents Background

Please tick only one in the space provided and answer all questions.

1. Gender: Male Female
2. Profession: _____
3. Age: _____ years
4. Marital status : Married Divorced Widow Single
5. Education: no education primary secondary diploma
degree certificate
6. Number of household members: _____ adults, _____ children
7. Number of earning family members _____
8. Household monthly income (RM):
 0-500 501-1000 1001-1500
 1501-2000 2001-2500 2500-3000 3000+
9. Household monthly income from zakat:
 0-500 501-1000 1001-1500
 1501-2000 2001-2500 2500-3000 3000+
10. How many members of your family are receiving zakat _____
11. How many years you or your family members are receiving zakat _____ years
12. For what purposes are you using zakat?
 Maintain livelihood (food) Business Medical
 Child Education Housing Others (specify) _____
13. What is your plan about becoming self-sufficient and not receive zakat:

Part B: Sustainable dimensions of zakat recipients

Please state only one score (5-Very High, 4-High, 3-Neutral, 2-Low, 1-Very Low) in the space provided and answer all questions.

	<i>Current score (1-5)</i>	<i>Before zakat score (1-5)</i>
<i>B1: Economic dimensions</i>		
1 My (family) ability to fulfil the basic need of family		
2 My (family) status in the poverty level		
3 My (family) capacity of doing income generating activities		
4 My (family) ability to manage funds in case of necessity		
5 My (family) level of savings		
6 My (family) level of productive investment for more income		
<i>B2: Social Dimensions</i>	—	—
1 My (family) living with harmony in the community		
2 My (family) social status		
3 My (family) interaction with relatives		
4 My (family) engagement in community participation		
5 My (family) scope of joining in social organisations		
6 My (family) contribution to social work (Monetarily or otherwise)		
<i>B3: Environmental dimensions</i>	—	—
1 My (family) accessibility to clean water		
2 Sanitation condition of my family		
3 Cleanliness in my home environment		
4 My (family) overall working environment		
5 My (family) dependency on natural resources		
6 My (family) adaptation to natural calamities		