

THE MULTIDIMENSIONAL POVERTY CHARACTERISTICS OF THE POOR AND DESTITUTE ASNAF IN KUALA LUMPUR

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ABSTRACT

From an adapted method originally developed as the Multidimensional Poverty Index by Alkire and Foster, this paper examined the multidimensional poverty characteristics of the poor and destitute asnaf in Kuala Lumpur with a sample of 380 poor and destitute asnaf households. The survey was conducted from March 2022 until January 2023, still very much affected by the COVID-19 pandemic. The findings of the study reveal significant dimensions of deprivation experienced by the poor and destitute asnaf in Kuala Lumpur, which were not sufficiently captured by previous assessments. In addition to the headcount and intensity of the poverty experienced, the study captures the dimensions and indicators that contribute to the poverty scenario of the poor and destitute asnaf in Kuala Lumpur. Consequently, zakat institutions are recommended to integrate non-monetary poverty indicators into their assessments to obtain a rigorous framework to address poverty-related issues and the factors that affect the well-being of the poor and destitute asnaf households in Malaysia. The results bring wide ramifications for casting the poverty net more exhaustively than before but also for identifying the indicators that the poor and destitute are most vulnerable to. In light of the findings, it is critical that future programmes that are designed address the non-pecuniary dimensions of poverty so that zakat resources are allocated effectively.

Keywords: Multidimensional poverty; Zakat, Poor and destitute, Maqasid al-Shariah, Kuala Lumpur

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1. INTRODUCTION

Assessments of poverty and inequality until the 1990s (especially at the national and provincial levels) have relied too much on poverty incidence and the Gini coefficient of income inequality. The efficacy of these measures has been questioned, especially since the 1990s, when Desai (1991), Sen (1992, 1993), and others began to critically review the two concepts. In Islamic countries, the old instrument of Zakat has played a similar role, but its application has been uneven among these countries. Governments have long promoted Islamic instruments to address the problems faced by the poor and the destitute, well before the introduction of capability, human development, and multidimensional approaches. The latter three approaches have been more holistic in casting the deprivation net to cover a wider range of human needs. For instance, multidimensional poverty, which has a component related to education, rose to prominence due to measures implemented to curb the pandemic. The lockdowns affect students access to education (especially over the period 2020–2021) and threaten to disrupt learning with long-term consequences for school-, university-, and education-going students. Consequently, it is not just the loss of learning; more importantly, several people became mentally affected (World Bank, 2022).

The COVID-19 pandemic presented significant obstacles as the education systems of several nations were not ready to offer adequate online learning platforms. Since poor and destitute households struggled with access to basic needs, their economic resources were largely devoted to meeting essential goods and services, such as food supplies. Besides, a growing number of the poor and destitute who were not in government employment faced serious health problems that prevented them from working (Halina, 2019). Additionally, there has been a rise in the number of applications submitted to the zakat centre to cover their increasing medical costs (Danila et al., 2020).

The most commonly used measurement instrument for poverty in the world remains the Poverty Line Income (PLI), which is based on household incomes falling below a threshold defined as being below income levels sufficient to meet the household' basic needs. This is a materialist approach that takes on a pecuniary measure, which several argue to miss the non-material needs. Consequently, other measures have been expounded to conceptualize a more suitable estimate. The capability, human development, and Had Kafayah (HAK) are some of them. Among Muslims, zakat institutions play a crucial role as Islamic social finance institutions in the development and welfare of the ummah. The primary objective of the HAK is to improve the well-being of the ummah, particularly the most vulnerable individuals, by identifying the extreme poor and delivering zakat resources according to their needs. Individuals will be classified as destitute (asnaf) if their income falls below the HAK threshold (Zailani et al., 2023). Although HAK takes into account several dimensions and requirements, the measurement is still constructed within a monetary framework, which does not account for several important dimensions of deprivation that Muslims and others face, including but not limited to health, living conditions, religious considerations, and educational opportunities.

This study aims to examine the multidimensional poverty characteristics of the poor and destitute (asnaf) in Kuala Lumpur by incorporating various dimensions and indicators to capture the areas of deprivation that households experience, largely from Maqasid al-Shariah and Sen's (1993) theory of capability. In doing so, the study seeks to expand the literature by establishing the

indicators that are relevant to the assessment of well-being based on the Islamic concept of development and well-being (*maslahah*). A profound probe into the living conditions of the destitute will inevitably require a search for conditions that are expected to go beyond what already exists. The subsequent sections of this article are organised as follows: First, the theoretical underpinnings that form the conceptual framework of the study and past empirical studies are discussed in the literature review section. Next, the research methodology section covers the sampling and data analysis techniques, followed by the discussion and conclusions of the study.

2. LITERATURE REVIEW

Mainstream assessments of poverty have primarily focused on material measurements. In current times, there has been a redefinition of the economic concept of poverty, which has been accompanied by the emergence of other approaches to understanding poverty. These include the capability approach (Sen, 1992, 1993), the human development approach (Desai, 1991), and the multidimensional poverty approach (Handley et al., 2009). Poverty encompasses constraints related to limited access to education, healthcare services, food insecurity, social rights, and social engagement. The evolution of the notion of poverty has been associated with the development of related concepts, such as the capability approach, which places emphasis on individuals' capabilities and functioning in order to lead a more harmonious life. Significant progress has been made in the global efforts to eradicate extreme poverty (World Bank, 2018). Based on data provided by the World Bank, there was a decline in the number of individuals residing below the International Poverty Line (IPL) from 1.9 billion in 1990 to 741 million in 2015. According to the Poverty and Shared Prosperity reports, despite this positive trajectory, there were a high number of households living in extreme poverty, who faced a deceleration in the poverty rate since 2015 (World Bank, 2020).

According to Wagle (2005), the monetary approach to poverty measurement is characterised as unidimensional in nature as it concentrates on income and consumption factors, thereby failing to consider other forms of deprivation encountered by individuals. On the global front, the Multidimensional Poverty Index (MPI), (which was developed by Alkire and Santos (2010)), has been consistently published by the United Nations Development Programme's Human Development Report. The global MPI deploys the poverty measurement framework developed by Alkire and Foster (2007) and integrates data associated with deprivations in health, education, and living standards to capture different aspects of deprivation. The global MPI addresses multidimensional poverty by incorporating three dimensions, including health, education, and living standards, along with eleven indicators. The axiomatic counting methodology established by Alkire and Foster (2011) is characterized by several notable qualities, such as the ability to break down dimensions and the adherence to the axioms of population subgroup decomposability (Chen et al., 2019). The MPI has also been deployed extensively in national contexts (Alkire & Shen, 2017; Battiston et al., 2013; Bronfman, 2014; Chen et al., 2019), as well as at subnational levels, such as groups or district levels (Deka, 2018; Henao-Cespedes et al., 2021; Sydunnaher et al., 2019; Wang & Wang, 2016).

Poverty levels have also risen sharply during crises, especially following the global outbreak of the COVID-19 pandemic in March 2020, which has ravaged the entire world economy, leading to a

worldwide recession and a growing number of impoverished individuals. The infectious flu forced governments to introduce lockdowns to prevent it from spreading (Rasiah, 2022). Severe disruptions in supply chains created severe demand-supply gaps, especially in essential goods, which drove inflation up in several European economies (Rasiah, 2022). As Eichenbaum et al. (2020) have argued, the implementation of stringent government-imposed lockdowns has mitigated the adverse effects of the COVID-19 pandemic on public health, but at the cost of suppressing economic expansion. The consequences, especially in 2020, were dire, as unemployment levels contracted sharply despite oil prices falling sharply. The pandemic has resulted in significant negative consequences, as demonstrated by the widespread fall in incomes and jobs globally (Hill & Narayan, 2020).

Deploying a multidimensional set of lenses, Lusk (2020) examined food insecurity in Canada in the aftermath of the COVID-19 pandemic, with the evidence demonstrating that concerns drove people to stockpile food buffers. Meanwhile, Dev (2020) predicted that the COVID-19 pandemic would cause a family food crisis in India owing to its vast population, heavy reliance on informal employment, closures, and severely disruptive social distancing policies. Liu et al. (2021) examining multiple dimensions of deprivation during the pandemic found vulnerability to health was the most significant impact, followed by industrial development, employment, and income. In addition, Alkire et al.'s (2021) findings over the potential consequences of the pandemic on global multidimensional poverty show that the potential setback to multidimensional poverty reduction is between 3.6 and 9.9 years under different scenarios after aggregating the findings from 70 countries that contributed to 89% of the worldwide poor based on the 2020 global MPI.

Assessments of poverty need the inclusion of intangible items to achieve *al-falah* as poverty in Islam is viewed as a multidimensional concept that covers the need to fulfil both material and non-material (including spiritual) needs. Indeed, the contemporary conventional approach to the concept of multidimensional poverty very much approximates the Maqasid al-Shariah as the elements of multidimensional poverty such as health, education, and living standards contribute to the preservation of the five components of the Maqasid al-Shariah (Abdul Rahman et al., 2022).

In Malaysia, zakat organisations have started to apply the HAK mechanism as a means of distributing zakat resources to eligible asnaf recipients. The concept of HAK can be seen as a sustainable level of necessity that is Sharia compliant, which includes the dimensions of housing, nutrition, education, transportation, and medical provisions. Since zakat management in Malaysia has been delegated to states, each zakat organization establishes the HAK threshold amount accordingly. The Department of Waqf, Zakat, and Hajj (JAWHAR) has specified the parameters to determine the HAK threshold level, including the principles of Maqasid al-Shariah, which cover the preservation of faith (*din*), intellect (*aql*), posterity (*nasl*), self (*nafs*), and wealth (*mal*). Consequently, HAK includes basic necessities, such as clothes, food, transportation, protection, and education (JAWHAR, 2007). In general, households whose income falls below the HAK requirement are usually categorised as poor or destitute (*asnaf*). HAK functions to determine the income level required to cover basic daily demands and is determined using variables such as age, household size, and other pertinent factors.

The selection of multidimensional poverty indicators is based on the Maqasid al-Shariah, which serves as a fundamental tool for assessing the extent of deprivation in households in accordance

with the principles and goals of Shariah. Maqasid al-Shariah encompasses five pillars that hold significant importance in the human experience, viz., the safeguarding of faith, the human self, intellect, posterity, and wealth. Islam has placed emphasis on various aspects of human well-being, encompassing the human self, faith, intellect, posterity, and money, together with their consequences, rather than solely focusing on wealth. Therefore, the concept of Maqasid al-Shariah can be seen as the Islamic paradigm for socioeconomic progress in elucidating the underlying causes of poverty (Chapra, 2008). In addition, the theory of capability developed by Sen (1993) has been embraced as a foundational principle for the advancement of multidimensional poverty assessment in this study. The capability theory directs its attention on individuals' capability for functioning as humans, rather than solely capturing it through minimum household incomes and consumption. According to Sen (1993), the capability approach places primary importance on the experiences of individuals in relation to their ability or disability to engage in various activities.

The MPI used in this study adopted dimensions and indicators contained in the 11th Malaysia Plan (11MP) and adapted according to the context of this research, which includes the 5 dimensions of religion, health, education, living conditions, and income, and 18 indicators (see Table 1). Since this is a longitudinal country study, it excluded some dimensions suggested by Alkire and Santos (2010), which are more suitable for country comparisons.

Table 1: Dimensions, indicators and cut-off points used in the study

Dimensions	Indicators	Deprivation cut-off
Religion	<ul style="list-style-type: none"> • Basic Islamic education • Exchange/Investment/Savings: Involved <i>riba</i> transaction/ non-shariah funds • Access to zakat collection • Involvement in prohibited activities by Islam 	<ul style="list-style-type: none"> • Head of household do not have basic Islamic education • Household's money is borrowed/lent/invest/save on <i>riba</i> (interest) /non-shariah funds in at least one transaction • Household face restrictions in applying or receiving zakat collection. • Household members currently involve in prohibited activity by Islam
Health	<ul style="list-style-type: none"> • Access to health facility • Access to clean and pure (<i>mutlaq</i>) water supply • Nutrition intake • Islamic health insurance coverage 	<ul style="list-style-type: none"> • Health facility in more than 5km from home and no mobile health facility nearby • Other than treated pipe water inside house and public water pipe/standpipe • Household do not obtain halal food intake at least 3 times a day • Any household do not have Islamic health insurance coverage
Education	<ul style="list-style-type: none"> • Years of schooling • School attendance • Access to online learning 	<ul style="list-style-type: none"> • All household members aged 17-60 have less than eleven years of education • Children aged between 6-16 years old who have not attended school • Household member do not have access to internet connectivity and/or do not have sufficient devices

Living Standard	<ul style="list-style-type: none"> • Conditions of living home • Sharing of bedrooms • Access to basic communication • Transportation • Waste collection • Toilet facility 	<ul style="list-style-type: none"> • Deteriorating • Sharing bedroom among same gender (aged above 10 years old) except for spouse • There is no internet or fixed mobile subscription • All members in the household do not use private or public transportation • No waste collection facility • Unimproved or no sanitation facility or improved but shared with other households
Income	<ul style="list-style-type: none"> • Had Kifayah threshold 	<ul style="list-style-type: none"> • Monthly household income less than HAK threshold

3. METHODOLOGY (10PT, TIMES NEW ROMAN, BOLD, CENTRED)

3.1 *Sample and Sampling Technique*

The research population consists of household heads of the poor and destitute, which is categorised by the Majlis Agama Islam Wilayah Persekutuan (MAIWP). The size of the sample is an essential factor in attaining accurate and pertinent estimations, as well as in the elucidation of the findings (Hair et al., 2006). Based on deliberations with representatives from Baitulmal MAIWP, the total number of poor and destitute stood at 22,269 as of February 2022. Zakat officials also provided a breakdown of the poor and destitute by parliament zones. It is also acknowledged that ensuring the representativeness and generalizability of the chosen population sample is of utmost importance to obtain the correct data for using the sample to infer for the entire population (Pallant, 2020). Cooper and Schindler (2014) suggest that for the multivariate analysis to be accurate, they recommend a sample size in the range of 300 to 500, which was further supported by Sekaran (2011), who posited that a sample size ranging from larger than 30 to less than 500 is suitable for such research.

3.2 *Analytic Technique*

In analysing the poverty scenario of the poor and destitute from a multidimensional set of lenses, this study utilised the MPI method advanced by Alkire and Foster (2007), which is a product of two variables, i.e., headcount ratio (H) and intensity of poverty (A). The headcount ratio (H), also known as the incidence of poverty, refers to the proportion of individuals who are poor in more than one dimension, while the intensity of poverty (A) captures the average deprivation score among the poor individuals.

$$H = \frac{q}{n}$$

where q refers to the number of multidimensionally poor people and n , the population size.

$$A = \frac{c(k)}{qd}$$

where, $c(k)$ refers to the share of deprivations encountered by all poor individuals and qd refers to the maximum number of deprivation dimensions (d) possible.

A weighted methodology was deployed to measure poverty based on deprivation counts to obtain a simple average. According to Alkire and Foster (2007), the determination of relative weights for the dimensions involves normative value judgements that may be subject to public deliberation and assessments following which three commonly utilised weighting measures were deployed, specifically frequency-based, expert opinion, and equal weights. It is noteworthy that each of these approaches has its own distinct advantages and disadvantages (Deyshappriya and Feeny, 2021). However, most research undertaken to examine multidimensional poverty utilises a methodology that deploys equal weights to all dimensions and indicators within each dimension (Alkire et al., 2017). This study assigns equal weights to each of the dimensions and indicators incorporated. The calculation to determine the weights for the 5 dimensions of religion, education, health, living standards, and income, as well as the 18 indicators are presented in Table 2.

4. RESULTS AND DISCUSSION

The findings of the study are presented in this section. The usual descriptive statistics to discuss the diagnostic parameters are examined in the first subsection followed by the multidimensional characteristics of the poor and destitute in Kuala Lumpur. The final subsection presents the discussion against previous findings.

4.1 Descriptive Statistics

Table 4 presents the demographic profile from the data collected, encompassing the respondent's gender, ethnicity, age, education level, occupation, and monthly income. In relation to gender, 73.2% of the respondents are male, while 26.8% are female. This observation is indicative of the prevailing trend wherein the majority of households were led by men. As for ethnicity, a higher level of involvement among the Malays was evidenced since the majority of Malays are Muslims. It was recorded that 99.2% of the respondents were Malays, while only 1% were Chinese, Indians, and others. It was noted that most of the respondents, or 14.21% of the total respondents, were from the age groups 45–49 and 50–54 years' old, respectively. Meanwhile, only 3.4% of the respondents hold a diploma, followed by STPM/Matriculation holders at 3.2%. There were 1.1% of the total respondents who do not have any formal education, and only 0.5% of the total respondents hold a bachelor's degree certificate. In terms of employment status, 30.5% of the total respondents have permanent employment status, while 22.4% are self-employed and are involved in running their own businesses. Most households in the study are engaged in commercial operations within a small-scale setting, focused primarily on the supply of food and beverages. Those who earned less than RM500 per month constitute 20.3% of the total respondents studied, which mainly consisted of the poor and destitute asnaf who are no longer able to work full time since they have retired.

Table 4: Profile of respondents and households

Items	Description	Frequency (n=380)	Percentage (%)
Gender	Male	278	73.2
	Female	102	26.8
Ethnicity	Malay	377	99.21
	Chinese	1	0.26
	Indian	1	0.26
	Others	1	0.26
Age	25-29	7	1.84
	30-34	24	6.32
	34-39	32	8.42
	40-44	41	10.79
	45-49	54	14.21
	50-54	54	14.21
	55-59	51	13.42
	60-64	53	13.95
	65-69	50	13.16
	70-74	8	2.11
Educational level	75-79	6	1.58
	No education	4	1.1
	Primary school	29	7.6
	PMR/SRP	84	22.1
	SPM/SPV	236	62.1
	STPM/Matriculation	12	3.2
	Certificate/ Diploma	13	3.4
	Bachelor's degree	2	0.5
Employment status	Permanent employment	116	30.53
	Self employed	85	22.37
	Part-time/Contract	77	20.26
	Retirees	64	16.84
Monthly income (Before zakat)	Unemployed	38	10
	500 and below	77	20.26%
	501-1000	103	27.11%
	1001-1500	98	25.79%
	1501-2000	93	24.47%
	2001-2500	8	2.11%
	2501-3000	1	0.26%
Household size	< 4	111	29.21%
	5-8	117	30.79%
	>9	5	1.32%

Source: Computed by the authors

4.2 Multidimensional Poverty Characteristics of the Poor and Destitute Asnaf in Kuala Lumpur

Prior to analysing the multidimensional poverty results, it is important to ensure that there is a no strong correlation between the indicators deployed when using multidimensional poverty index to

avoid multi-collinearity problems. Specifically, it is imperative to ensure that none of the 18 indicators proposed under the MPI used in the study exhibit a significant correlation. Table 5 presents the results of the Spearman correlation between the indicators of the MPI used in this study. The Spearman's Rho measure has a range between -1 and +1, where -1 shows the strongest negative correlation, +1 depicts the strongest positive correlation, and a value of 0 reflects no correlation between the indicators. The results reveal that most of the correlation coefficients between the different pairs of indicators proposed were low, not exceeding 0.305. The highest correlation recorded was found between the indicator of health insurance and income ($r_s = 0.305$). The indicator of basic Islamic education showed a weak negative correlation with financial exchange ($r_s = -0.004$), prohibited activities ($r_s = 0.073$), waste collection ($r_s = -0.090$), school attendance ($r_s = -0.004$), sharing of bedroom ($r_s = -0.099$), access to communication ($r_s = -0.072$), transportation ($r_s = -0.038$) and income ($r_s = -0.016$). Meanwhile, there is a weak positive correlation between basic Islamic education and access to zakat collection ($r_s = 0.114$), access to health facilities ($r_s = 0.071$), nutrition intake ($r_s = 0.022$), health insurance ($r_s = 0.072$), years of schooling ($r_s = 0.011$), access to online learning ($r_s = 0.047$), conditions of living home ($r_s = 0.021$), waste collection ($r_s = 0.040$) and toilet facility ($r_s = 0.060$). The findings of the Spearman rank correlation analysis indicate that there is no substantial correlation between the indicators used in the study, which implies that any deprivation in one indicator is not significantly explained by a deprivation in any other indicator. Since the correlation between any two variables used was found to be reasonably low, the indicators proposed are indeed fit for the multidimensional poverty analysis.

Table 5: Spearman’s rank correlation of indicators used in the study

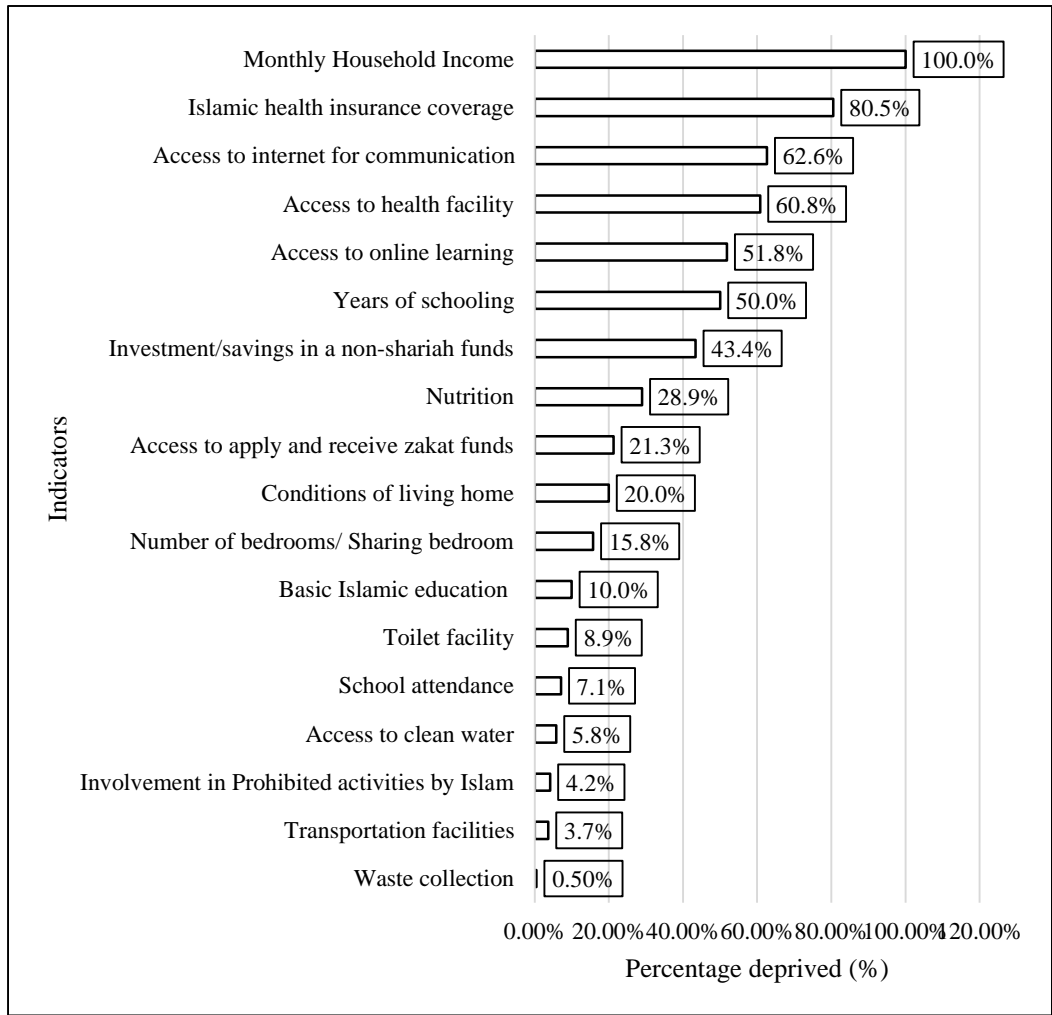
	BIE	FEX	AZC	PRO	AHF	WAT	NUT	HI	YOS	SCH	AOL	COLH	SBED	ACOM	TRAN	WAS	TOI	INC
BIE	1	-0.004	0.114	-0.073	0.071	-0.090	0.022	0.072	0.011	-0.004	0.047	0.021	-0.099	-0.072	-0.038	0.040	0.060	-0.016
FEX	-0.004	1	-0.029	0.142	0.039	-0.081	0.078	0.083	-0.069	0.063	-0.005	-0.019	-0.025	0.199	0.224	0.090	0.017	0.004
AZC	0.114	-0.029	1	-0.111	0.007	0.072	0.103	0.020	0.094	-0.047	0.034	0.010	-0.024	0.110	-0.048	0.032	0.142	-0.162
PRO	-0.073	0.142	-0.111	1	0.053	0.054	-0.060	-0.087	-0.037	0.146	0.090	0.085	0.140	-0.070	0.097	-0.015	0.067	0.021
AHF	0.071	0.039	0.007	0.053	1	0.016	0.000	-0.070	-0.090	0.015	0.008	0.097	0.006	-0.063	-0.021	0.025	0.020	0.046
WAT	-0.090	-0.081	0.072	0.054	0.016	1	0.081	-0.047	0.104	-0.012	0.060	-0.127	0.013	-0.061	-0.018	0.019	-0.011	0.038
NUT	0.022	0.078	0.103	-0.060	0.000	0.081	1	0.116	-0.030	-0.097	0.062	-0.036	-0.033	0.083	-0.039	0.049	0.018	-0.255
HI	0.072	0.083	0.020	-0.087	-0.070	-0.047	0.116	1	-0.016	-0.115	0.110	-0.055	0.147	0.177	-0.113	-0.030	-0.082	-0.305
YOS	0.011	-0.069	0.094	-0.037	-0.090	0.104	-0.030	0.016	1	0.016	0.422	0.039	0.222	0.098	-0.144	-0.023	0.029	-0.277
SCH	-0.004	0.063	-0.047	0.146	0.015	-0.012	-0.097	-0.115	0.016	1	-0.024	0.014	0.093	-0.078	-0.043	-0.020	-0.116	0.140
AOL	0.047	-0.005	0.034	0.090	0.008	0.060	0.062	0.110	0.422	-0.024	1	0.029	0.103	0.109	-0.292	0.004	0.000	-0.426
COLH	0.021	-0.019	0.010	0.085	0.097	-0.127	-0.036	-0.055	0.039	0.014	0.029	1	0.097	-0.110	-0.116	0.119	-0.002	-0.018
SBED	-0.099	-0.025	-0.024	0.140	0.006	0.013	-0.033	0.147	0.222	0.093	0.103	0.097	1	0.038	0.113	-0.030	-0.074	-0.154
ACOM	-0.072	0.199	0.110	-0.070	-0.063	-0.061	0.083	0.177	0.098	-0.078	0.109	-0.110	0.038	1	0.139	0.118	0.031	-0.279
TRAN	-0.038	0.224	-0.048	0.097	-0.021	-0.018	-0.039	-0.113	-0.144	-0.043	-0.292	-0.116	0.113	0.139	1	-0.078	0.137	0.301
WAS	0.040	0.090	0.032	-0.015	0.025	0.019	0.049	-0.030	-0.023	-0.020	0.004	0.119	-0.030	0.118	-0.078	1	0.023	0.017
TOI	0.060	0.017	0.142	0.067	0.020	-0.011	0.018	-0.082	0.029	-0.116	0.000	-0.002	-0.074	0.031	0.137	0.023	1	-0.001
INC	-0.016	0.004	-0.162	0.021	0.046	0.038	-0.255	-0.305	-0.277	0.140	-0.426	-0.018	-0.154	0.279	0.301	0.017	-0.001	1

Source: Computed by the authors

Overall, the findings show that more than 50% of households in the sample face deprivation among the 18 indicators and 5 dimensions. Since all respondents were selected from the category of poor and destitute, they fell below the HAK income threshold. A percentage share of 80.5% of the households are deprived of Islamic health insurance coverage as they could not afford the Islamic (takaful) insurance or other health insurance to enjoy healthcare coverage. While there is widespread recognition of the Internet as a fundamental medium of communication, the results show that 62.2% of households lack access to Internet connectivity. Meanwhile, 60.8% of households lack access to healthcare as they live over 5 kilometres from the nearest hospital and clinic. In addition, 51.5% of the households lacked access to online learning. Given the danger posed by the COVID-19 pandemic, this group of households faced serious vulnerability.

The results show that less than 10% of the households were deprived in several dimensions, e.g., basic Islamic education, toilet facilities, school attendance, access to clean water, involvement in activities prohibited in Islam, transportation facilities, and waste collection (Figure 1). The low percentage is mainly due to the provision and availability of public facilities provided by the government, including public transportation and water supply in Kuala Lumpur. Furthermore, the evidence reveals that a significant majority of household heads do not encounter difficulties obtaining basic Islamic education. Additionally, it has been observed that the participation of members of asnaf households in activities prohibited by Islam is minimal. With regards to the waste collection indicator, the results indicate that there are no significant concerns regarding waste collection among the asnaf households, which is primarily attributed to the fact that a significant proportion of the asnaf population reside in residential areas that are equipped with waste collection facilities provided by the local government.

Figure 1: Indicators deprived



Source: Computed by the authors

To rank the dimensions in a deprivation ladder, the average aggregate for the five dimensions shown in Table 6 was calculated. All households (100%) reported being deprived in the income dimension, as all poor and destitute asnaf earned less than the HAK threshold. The income dimension used in the study categorized a person as being deprived in the income dimension if the household income earned is less than the HAK threshold. Next, the health dimension contributed to the second highest average aggregate percentage among the deprived, which stood at 36.8%. Under this dimension, the indicator of health insurance contributed the most with 80.5% of the household members not having coverage of Islamic or takaful insurance, which was followed by the indicators of access to health facilities (60.8%), nutrition intake (28.9%), and access to clean water (5.8%).

The education dimension came in third among the average aggregate of the deprived (36.3%). Meanwhile, the access to online learning indicator recorded the highest percentage of deprivation at 51.8% within the education dimension, followed by years of schooling at 50% and school attendance at 7.1%. The results indicate that many household members who are involved in online learning faced difficulties accessing proper education due to a lack of devices, such as laptops and smartphones. The religion dimension recorded an average aggregate of 19.7%, with the financial exchange in non-shariah funds indicator accounting for the highest percentage of deprivation at 43.4%, followed by access to zakat funds at 21.3% and basic Islamic education at 10%. The Syariah indicator showed the lowest incidence within the religion dimension, which is the indicator for involvement in Syariah prohibited activities, at 4.2%. The living standard dimension recorded the lowest average aggregate percentage of the deprived indicators, with a total of 18.6%. The indicator of access to internet communication contributed the most, at 62.6%. The conditions of living at home indicator recorded the next highest at 20%, followed by the sharing bedroom indicator at 15.8%. Meanwhile, other indicators, including toilet facilities, transportation, and waste collection, showed a small contribution to the aggregate percentage of the deprived dimensions.

Table 6: Deprivation by dimensions

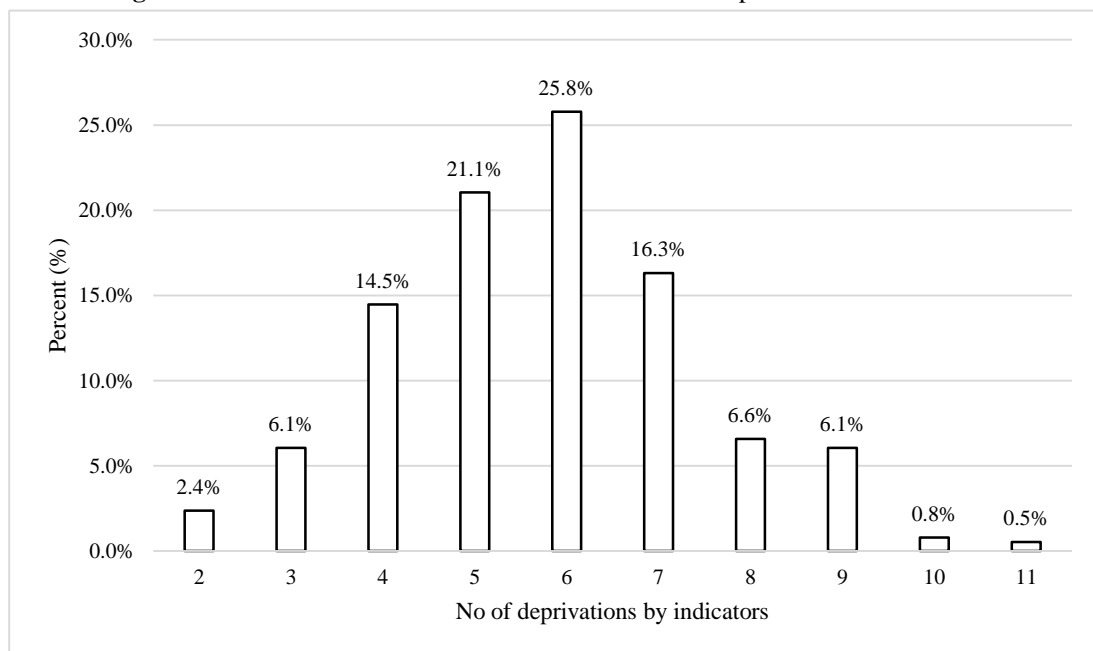
Dimension	Indicator	Percentage deprived (%)	Average aggregate (%)
Education			
I.	Years of schooling	50	36.3
II.	School attendance	7.1	
III.	Access to online learning	51.8	
Total		108.9	
Health			
I.	Access to health facility	60.8	36.8
II.	Access to clean water	5.8	
III.	Health insurance	80.5	
IV.	Nutrition intake	28.9	
Total		147.1	
Living standards			
I.	Conditions of living home	20	18.6
II.	Sharing of bedrooms	15.8	
III.	Access to internet for communication	62.6	
IV.	Transportation	3.7	
V.	Waste collection	0.5	
VI.	Toilet facility	8.9	
Total		111.6	
Religion			
I.	Basic Islamic education	10	19.7
II.	Financial exchange in non-shariah funds	43.4	
III.	Access to zakat collection	21.3	
IV.	Involvement in prohibited activities by Shariah	4.2	
Total		78.9	
Income			
I.	Household monthly income	100	100.0
Total		100	

Note: *Total percentage deprived in education dimension = 300%; **Total percentage deprived in health dimension= 400%; ***Total percentage deprived in living standards= 600%; ****Total percentage deprived in religion dimension= 400%;

Source: Computed by the authors

Next, the percentage of households and the number of indicators that the households are deprived of are analysed. The results show that the aggregate of poor and destitute households encountered a maximum of 11 indicators of deprivation out of the 18 indicators, with all households suffering deprivation in more than two. indicators. It is recorded that 25.8% of the households were deprived in six (6) indicators, followed by 20.8% in five (5) indicators, 16.3% in seven (7) indicators, and 14.5% in four (4) indicators. Meanwhile, less than 10% of the total households were deprived in two (2), three (3), eight (8), nine (9), ten (10), and eleven (11) indicators.

Figure 2: Poor and Destitute households and number of deprivation indicators



Source: Computed by the authors

To identify the multidimensional poverty status of households, it is necessary to determine an aggregate poverty threshold. An aggregate cut-off refers to the total minimum number of indicators a household is deprived of, which can be classified as multidimensionally poor. The cut-off used is defined as the poverty line, which determines the poverty status of households. Based on the literature, two extreme poverty cut-off points were introduced, including the intersection method, where a household is considered multidimensionally poor if they are deprived of all indicators, and the union method, which categorises a household as multidimensionally poor if they are deprived of at least one indicator. In addition to this, the AF dual cut-off method offers an intermediate choice between the intersection and union methods. This implies an intermediary poverty cut-off for global MPI (Alkire and Kanagaratnam, 2021). The intermediate approach classifies a household as multidimensionally poor if it is deprived of at least 0.33 of the sum of the deprivation score.

As indicated in Figure 2, if the union approach is used, which classifies a person as poor if he or she is deprived in at least one indicator, it implies that all the poor and destitute in Kuala Lumpur are classified as multidimensionally poor. Conversely, the intersection approach delineates an individual as poor if he or she experiences deprivation across all indicators. If the intersection approach is applied, none of the poor and destitute asnaf in Kuala Lumpur can be identified as multidimensionally poor. This study has deployed an intermediate approach by adopting a poverty cut-off that lies between the approaches of union and intersection. To determine the number of households that are multidimensionally poor, the study set a cut-off at $k = 6$, which represents one-third of the total indicators used, i.e., 18 indicators or 0.33 of the sum of the deprivation score.

Based on the cut-off point established at $k = 6$, M_0 is recorded at 0.217, while A stands at 0.386, which shows that, on average, the households were deprived by up to 38.6% based on the total indicators used in this study.

Table 7: Aggregate multidimensional poverty estimates

Cut-off (k)	Headcount of poverty (H)	Average Poverty Gap (A) ($A=M_0/H$)	Adjusted Headcount (M_0) ($H \times A$)
$k=2$	1	0.320	0.320
$k=3$	0.976	0.325	0.317
$k=4$	0.916	0.335	0.307
$k=5$	0.771	0.357	0.275
$k=6$	0.561	0.386	0.217
$k=7$	0.303	0.431	0.131
$k=8$	0.139	0.481	0.131
$k=9$	0.074	0.514	0.067
$k=10$	0.013	0.578	0.008
$k=11$	0.005	0.611	0.003

Source: Computed by the authors

In the approach used, researchers possess the ability to assign relative weights for each dimension deployed to assess the poverty level based on the significance of the study. The MPI in the study incorporated 18 indicators, with each dimension being assigned a weight of 1/5. This value was subsequently divided by the number of indicators identified. For instance, the education dimension can be evaluated using three indicators, namely, years of schooling, school attendance, and access to online learning. In this scenario, the value of 1/5 was further divided into three, and thus, each indicator under the education dimension was assigned a weighted value of 1/15. Table 8 shows the weighted value of each indicator under the MPI used in the study.

Table 8: Weighted value of each indicator

No	Indicators	Weightage
1	Years of schooling	0.067
2	School attendance	0.067

Cut-off (k)	Headcount of poverty (H)	Average Poverty Gap (A) ($A=M_0/H$)	Adjusted Headcount (M_0) ($H \times A$)
$k=2$	1	0.437	0.437
$k=3$	1	0.437	0.437
$k=4$	1	0.437	0.437
$k=5$	0.976	0.442	0.431
$k=6$	0.900	0.454	0.408
$k=7$	0.708	0.479	0.339
$k=8$	0.513	0.504	0.259
$k=9$	0.250	0.546	0.137
$k=10$	0.087	0.597	0.052
$k=11$	0.026	0.638	0.017
$k=12$	0.008	0.667	0.005
3	Access to online learning		0.067
4	Access to health facility		0.05
5	Access to clean water supply		0.05
6	Health insurance		0.05
7	Nutrition intake		0.05
8	Conditions of living home		0.03
9	Sharing bedroom		0.03
10	Access to basic and internet communication		0.03
11	Transportation		0.03
12	Waste collection		0.03
13	Toilet facility		0.03
14	Basic Islamic education		0.05
15	Financial exchange in non-shariah funds		0.05
16	Access to zakat collection		0.05
17	Involvement in activities prohibited by Shariah		0.05
18	Income level		0.2
	Total weightage		1.00

Source: Computed by the authors

Table 9: Weighted multidimensional poverty measures

Source: Computed by the authors

Upon assigning the weights for each indicator, at the cut-off point $k=6$, 90% of the poor and destitute in Kuala Lumpur were found to be multidimensionally poor. The average poverty gap recorded a score of 0.454, which means that on average, households are deprived of as much as 45.5% of the 18 indicators applied in this study. At $k=6$, the adjusted headcount recorded a score of 0.408.

Taken together, the MPI approach adopted in this study reveals the importance of a number of dimensions and indicators that are non-monetary in nature and are experienced by the poor and destitute. In addition to the income dimension, the data demonstrates that a substantial number of poor and destitute households experience deprivation across non-monetary dimensions, including health and education. Under the health dimension, most of the poor and destitute households in Kuala Lumpur were deprived of health insurance. While a significant share of households lack Islamic or takaful health insurance coverage, the same can be said with access to essential financial services, such as takaful and credit, primarily due to the exorbitant costs associated with these services (Rom & Rahman, 2012). The lack of access to health can result in members of the poor and destitute households being stuck in the vicious cycle of poverty, thereby creating a culture akin to anomie (Durkheim, 1960; Lewis, 1966; Banerjee & Duflo, 2011). Because deprived people lack the freedom to realise their creative selves, Freire (1972) referred to it as alienation.

Education is widely considered a basic human right due to its close links to other dimensions of well-being. Ensuring equitable access to education, whether through virtual or physical means, is of utmost importance. The analysis also found that a significant number of households are facing a form of deprivation known as digital poverty, specifically access to internet connectivity. The lack of access to internet connectivity could hamper the educational progress of poor and destitute family members. Hence, the poor and destitute asnaf community in Kuala Lumpur faces serious challenges in accessing internet connectivity for communication purposes, primarily due to the lack of personal ownership or subscription to internet packages among its members. This has hampered poor and destitute households progress towards online learning, whereby more than 50% of the poor and destitute asnaf in Kuala Lumpur were found deprived of access to online learning facilities. The results of the study have substantiated the claim that the level of access to online educational resources within the asnaf community is limited, which is primarily attributed to the absence of adequate technological equipment, including tablets, laptops, and smartphones, as well as the inadequate availability of internet connectivity. This finding is consistent with the results of Ai Bing and Jamaludin (2021), where internet access remains an important challenge faced by students accessing online education. The analysis of the multidimensional poverty measurement reveals that the indicators proposed in the study effectively capture different forms of deprivation experienced by the poor and destitute asnaf population.

5. CONCLUSION

This study deployed the MPI method as suggested by Alkire and Foster (2007) to examine the multidimensional poverty characteristics of the poor and destitute asnaf in Kuala Lumpur with a sample of 380 poor and destitute asnaf households represented by the household heads. The survey was conducted from March 2022 until January 2023. The findings of the study revealed significant areas of deprivation experienced by the poor and destitute asnaf in Kuala Lumpur, which were not

sufficiently captured by alternative assessments in the past. In addition to the headcount and intensity of the poverty experienced, the study highlights dimensions and indicators that contribute to the poverty scenario of the poor and destitute asnaf in Kuala Lumpur. Hence, it is imperative for zakat institutions to integrate non-monetary poverty indicators into their assessments to obtain a robust scenario of poverty-related issues and the factors that impact the well-being of poor and destitute asnaf households in Malaysia. Consequently, a targeted policy and program should be designed by the zakat institutions to better channel their zakat resources.

The findings of the study provide implications for policy on the dimensions and indicators of deprivation experienced by the poor and destitute asnaf. The need for asnaf to maintain an adequate standard of living extends beyond mere financial considerations. The integration of the MPI in the study and HAK can mitigate some limitations observed in the individual measurements. The sequential utilisation of MPI and HAK entails employing MPI to identify individuals experiencing the most pronounced deprivation across multiple indicators, followed by the application of HAK as a first screening mechanism to determine if an individual qualifies to be a zakat recipient. The COVID-19 pandemic has resulted in various types of deprivation, encompassing digital access (such as network availability, usage, and device availability), housing, healthcare, employment, and other forms of deprivation that may not be adequately captured by the current poverty measurement methods.

The establishment of an all-encompassing social protection system that covers medical expenditures is of paramount significance in view of the growing healthcare expenses globally, which is also reflected in the limited access the poor and destitute enjoy in Kuala Lumpur. This phenomenon is further substantiated by the increasing population of individuals classified as poor and destitute asnaf, attributed primarily to health-related concerns, particularly within the context of the ongoing pandemic. Despite the implementation of the Asnaf Takaful plan by the MAIWP, there is a lack of sufficient information about the targeted Asnaf community regarding the details and benefits of the scheme. Hence, it is imperative to raise awareness within the Asnaf community about the importance of health insurance. Zakat institutions have the potential to engage in partnerships with insurance providers in order to explore strategies for enhancing the accessibility of insurance coverage at more affordable rates.

The research also reveals that a majority of poor and destitute households lack sufficient technological resources to facilitate a seamless learning environment. The limited availability of online learning resources may impede the advancement of children's educational development. The results of this study indicate that children belonging to economically disadvantaged households (specifically those categorised as poor and destitute asnaf) face digital poverty, thereby exacerbating the digital divide with deleterious consequences for educational inequality. Alkire et al. (2023) noted that the internet has the capability to grant individuals access to public and market information while also offering mechanisms to safeguard fundamental freedoms. Furthermore, the COVID-19 pandemic has brought renewed emphasis to the significance of internet connectivity in all aspects of daily life, including remote working and virtual education. Hence, it is suggested that zakat institutions, such as MAIWP, contemplate the provision of suitable educational instruments to the poor and destitute asnaf households within the framework of the education support program. In addition, the persistent increase in medical expenses is a significant challenge for the poor,

emphasising the crucial role of health insurance in providing coverage, especially for vulnerable groups, including the poor and destitute.

REFERENCES

- Abdul Rahman, M. Z., Mohamad, M. T., & Abdul Azzis, M. S. (2022). Indeks Kemiskinan Multidimensi Global: Analisis Menurut Perspektif Maqasid Syariah (Global Multidimensional Poverty Index: An Analysis According to Maqasid Syariah Perspectives). *UMRAN - International Journal of Islamic and Civilizational Studies*, 9(1), 1–22. <https://doi.org/10.11113/umran2022.9n1.544>.
- Alkire, S. & Foster, J. (2007). Counting and multidimensional poverty measurement. *OPHI Working Paper 7*, University of Oxford.
- Alkire, S. (2007). *Choosing Dimensions: The Capability Approach and Multidimensional Poverty*. Working Paper No. 88, Oxford University, Oxford
- Alkire, S., & Santos, M. E. (2010). Acute multidimensional poverty: a new index for developing countries. *Working Paper 38. Oxford Poverty and Human Development Initiative*.
- Alkire, S., & Shen, Y. (2017). Exploring multidimensional poverty in China: 2010 to 2014. In *Research on Economic Inequality: Poverty, Inequality and Welfare* (pp. 161-228). Emerald Publishing Limited.
- Alkire, S., & Kanagaratnam, U. (2021). Revisions of the global multidimensional poverty index: indicator options and their empirical assessment. *Oxford Development Studies*, 49(2), 169-183.
- Alkire, S., Kövesdi, F., Scheja, E., & Vollmer, F. (2023). Moderate Multidimensional Poverty Index: Paving the way out of poverty. *Social Indicators Research*, 1-37
- Alkire, S., Nogales, R., Quinn, N. N., & Suppa, N. (2021). Global multidimensional poverty and COVID-19: A decade of progress at risk? *Social Science & Medicine*, 291, 114457.
- Battiston, D., Cruces, G., Lopez-Calva, L. F., Lugo, M. A., & Santos, M. E. (2013). Income and beyond: Multidimensional poverty in six Latin American countries. *Social indicators research*, 112, 291-314.
- Bing, W. A., & Jamaludin, K. A. (2021). Pembelajaran dalam talian (e-pembelajaran) semasa pandemik covid-19. *Jurnal Dunia Pendidikan*, 3(3), 408-414.
- Bronfman, J. (2014). Beyond Income: A study of Multidimensional Poverty in Chile, *MPRA Working Paper*, 63256, 1-53.
- Chapra, M. U. (2008), "The Islamic vision of development in the light of maqasid al-Shariah", *The International Institute of Islamic Thought*, Vol. 57 September
- Chen, K. M., Leu, C. H., & Wang, T. M. (2019). Measurement and Determinants of Multidimensional Poverty: Evidence from Taiwan. *Social Indicators Research*, 145(2), 459–478. <https://doi.org/10.1007/s11205-019-02118-8>.
- Cooper, D. R., & Schindler, P. (2014). *Business research methods*. Mcgraw-hill.
- Danila, R., Saat, R. M., Khairuddin, N., Rosli, K., Al, R., & Saad, J. (2020, December). Developing a New Health Aid Dashboard System for Marginalized Muslim Community: Behaviour of the Recipient of Health Aid among the Marginalized Muslim Community in Sabak

- Bernam, Selangor. In *Proceedings of the 4th UUM International Qualitative Research Conference (QRC 2020)* (Vol. 1, p. 3).
- Deka, N. (2018). Multidimensional poverty index for the poor in Guwahati city (Assam, India). *Journal of Social and Economic Development*, 20(1), 43-74.
- Desai, M. (1991). Human development: Concepts and measurement, *European Economic Review*, 35(2-3): 350-357.
- Deyshappriya, N. R., & Feeny, S. (2021). Weighting the dimensions of the multidimensional poverty index: findings from Sri Lanka. *Social Indicators Research*, 156, 1-19.
- Dev, S. M. (2020). Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India. *IFPRI book chapters*, 7(7), 33–35.
- Duflo, E., & Banerjee, A. (2011). *Poor economics* (Vol. 619). New York, NY, USA: PublicAffairs.
- Durkheim, E. (1960). *The Division of Labour*, Fourth translated printing (First published in 1868), London: Macmillan
- Eichenbaum, M., Rebelo, S. T., & Trabandt, M. (2020). *Epidemics in the Neoclassical and New-Keynesian Models*. CEPR Working Paper 14903.
- Freire, P. (1972). *Pedagogy of the Oppressed*, Harmondsworth: Penguin.
- Hair, J., Bush, R., & Ortinau, D. (2006). *Marketing Research within a changing environment*. Revised international edition. McGraw-Hill, New York, USA, 589, 566.
- Halina Mohd Noor (2019), *65,000 keluarga asnaf, miskin dibantu*. Retrieved September 1, 2023, from <https://www.bharian.com.my/wanita/keluarga/2019/11/631816/65000-keluarga-asnaf-miskin-dibantu>
- Handley, G., Higgins, K., Sharma, B., & Cammack, D. (2009). Poverty and Poverty Reduction in Sub-Saharan Africa: An Overview of the Issues. *ODI Working Paper*.
- Henao-Cespedes, V., Garcés-Gómez, Y. A., Ruggeri, S., & Henao-Cespedes, T. M. (2021). Relationship analysis between the spread of COVID-19 and the multidimensional poverty index in the city of Manizales, Colombia. *Egyptian Journal of Remote Sensing and Space Science*. <https://doi.org/10.1016/j.ejrs.2021.04.002>.
- Hill, R., & Narayan, A. (2020). Covid-19 and inequality: a review of the evidence on likely impact and policy options. *Centre for Disaster Protection Working Paper*, 3.
- JAWHAR. (2007). *Manual Pengurusan Agihan Zakat*. Putrajaya: Jabatan Wakaf, Zakat dan Haji.
- Lewis, O. (1966). The Culture of Poverty, *Scientific American*, 215(4):19-25.
- Liu, Y. L., Zhu, K., Chen, Q. Y., Li, J., Cai, J., He, T., & Liao, H. P. (2021). Impact of the COVID-19 pandemic on farm households' vulnerability to multidimensional poverty in rural China. *Sustainability*, 13(4), 1842.
- Lusk, J. (2020). *Impacts of Coronavirus on Food Markets*. <http://jaysonlusk.com/blog/2020/3/16/impacts-of-coronavirus-on-food-markets>.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. McGraw-hill education (UK).
- Rasiah, R. (2022). Poverty and Inequality, Rasiah, Salih, and Cheong (eds), *Malaysia's Leap into the Future: The Building Blocks for Balanced Development*, Singapore: Springer.
- Rasiah, R. (2024). Beyond the COVID-19 Pandemic: Renewing Innovation Frontiers to Strengthen Sustainability, Singh, L. & Joseph, K.J (eds), *Reimagining Innovation Systems in the COVID and Post-COVID World*, Abingdon: Routledge.
- Rom, N. A. M., & Rahman, Z. A. (2012). Financial protection for the poor in Malaysia: Role of zakah and micro-takaful. *Journal of King Abdulaziz University, Islamic Economic*, 25, 1.
- Sekaran, U. (2011). *Research methods: A skill building approach*. John Wiley & Sons.

- Sen, A. K. (1992). *Inequality reexamined*, New York: Oxford University Press.
- Sen, A. K. (1993). Capability and Well-Being, Nussbaum, M. Sen, A.K. (eds), *The Quality of Life*, Oxford: Clarendon Press.
- Sydunnaher, S., Islam, K. S., & Morshed, M. M. (2019). Spatiality of a multidimensional poverty index: a case study of Khulna City, Bangladesh. *GeoJournal*, 84, 1403-1416.
- Wagle, U. (2005). Multidimensional poverty measurement with economic well-being, capability, and social inclusion: a case from Kathmandu, Nepal. *Journal of Human Development*, 6(3), 301-328.
- Wang, Y., & Wang, B. (2016). Multidimensional poverty measure and analysis: a case study from Hechi City, China. *SpringerPlus*, 5, 1-25.
- World Bank (2018). *World Development Report 2018: Learning to Realize Education's Promise*. Washington, DC: World Bank.
- World Bank. (2020). *Poverty and shared prosperity 2020: Reversals of fortune*. The World Bank.
- Zailani, M. N., Satar, N. H. M., & Zakaria, R. H. (2023). Multidimensional Poverty Measurement from Islamic Perspectives: A Survey of the Literature. *International Journal of Economics, Management and Accounting*, 31(1), 77-98.