

Multidimensional Poverty Index Among B40 in Kuala Krai, Kelantan

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Abstract: Poverty is a phenomenon faced by an individual or a family without their own will. The poor can be identified through poverty measurement as a first step. The objective of this study is to identify the indicators that define the multidimensional poverty of the B40 group in Kuala Krai and examine the needs of the population in helping them to eradicate poverty. Poverty measurement is divided into two types: unidimensional poverty measurement, which shows individual poverty in terms of income only, and multidimensional poverty measurement, which is related to poverty in the holistic aspect of humanity. Usually, multidimensional poverty is experienced by B40 households. B40 households are low-income households, and a total of 2.7 million households still belong to the B40 group. This study was conducted on 153 households in Kampung Lubuk Simpul, Kuala Krai, by using questionnaires, indirect interviews, and observations. Quantitative methods such as factor analysis, the crosstab method, and frequency. The results of the study found that, in addition to economic factors, social and spatial factors are also the cause of B40 poverty. Therefore, in a situation where Malaysia is developing in line with other countries, the B40 household should not be marginalized to enjoy the opportunities resulting from the country's prosperity. To eradicate poverty, all parties need to look at poverty from a multi-dimensional perspective to identify the poor B40 group. Therefore, this study uses multidimensional poverty are not only to identify indicators that define multidimensional poverty among the population but also to study the needs of the population to eradicate multidimensional poverty. Therefore, this study can help the authorities improve the existing implementation methods to achieve the goals of work and the SDG to achieve zero poverty.

Keywords: Poverty, B40, Multidimensional Poverty, Sustainable Development Goal

1.0 Introduction

Poverty is a universal social phenomenon that occurs in almost every country, whether developed or not. In Malaysia, since independence, efforts have been united by the government to tackle poverty. Multidimensional poverty refers to the concept of poverty that goes beyond a lack of income or property and encompasses a variety of other dimensions, such as poor health, a lack of education, inadequate housing, and limited access to basic services such as water, sanitation, and electricity. Multidimensional poverty recognizes that poverty is a complex and multifaceted phenomenon that cannot be reduced to one measure, such as income. Instead, it takes into account the various factors that contribute to poverty and the relationship between them. The concept of multidimensional poverty is often measured using the Multi-dimensional Poverty Index (MPI), developed by the United Nations Development Programme (UNDP) (2004). MPI measures poverty across three dimensions: health, education, and living standards, using ten indicators such as nutrition, child mortality, school years, and access to electricity. By measuring poverty in this way, policymakers and researchers can gain a more comprehensive understanding of the nature of poverty and the factors contributing to it. This, next, could help to inform policies and interventions that are more effective in reducing poverty and promoting human development.

According to Drabble (2000, Jomo (2014), and Hui (2014), the New Economic Policy (DEB) played a major role in Malaysia's economic development, unlike the laissez-faire policies of the previous post-independence period. However, the economy remains relatively open. DEB is used as a basic strategy to eradicate poverty. Its objective is to promote the development of the country by eradicating poverty and economic restructuring by eliminating the link between ethnicity and economic assets. Under the DEB, the government has invested a total of RM32.9 billion, or 19.1% of the total development budget, in poverty eradication programmes for the outlying population. Poverty fell to 15.1%, compared to 16.7% of DEB at the end of the 20-year programme, and the Gini scale fell to 0.466 in 1990 from 0.513 in 1970. Besides, in the outlying areas, the poverty rate is worse than in the city. The Malay people are synonymous with the poor, and the Malay people in general are the poor because most of the households overseas are Malay people.

In addition, the incidence of poverty in general has decreased from 8.5% in 1999 to 5.7% in 2004. Nevertheless, the state of Kelantan is still poor. There have been previous studies, but the overall profile of the poor in the country is still not systematic. Details have been executed by related poverty profiles. Y.B.M. Prince of Kelantan Dato' Tengku Mohamad Rizam said that the poverty rate in Kelantan in 2002 was 17.8% and decreased to 10.6% in 2004 and 2.7% in 2012. In 2012, some 58,000 people in Kelantan were classified as poor, and their income was between RM 1,800 and RM 2,500. They're poor (household income is less than half the poverty line). He said that when he spoke to the Congress of the National Council of Professors.

The Eastern Coast section was focused on the Strategic Transformation of Poverty Eradication at the MSE on March 29, 2014. He also stressed that poverty in Kelantan is closely linked to the level of education. In developing a global research agenda, it is important to study the efforts of the Malaysian government to address the phenomenon of poverty after independence from the British in 1957. Poverty eradication has been a fundamental objective of the development of the Malaysian government since independence. Poverty displacement in Malaysia is closely linked to ethnic settlement patterns and industrial structures. Historically, the three main ethnic groups in Malaysia, the Bumiputera (Malay and Peribumi), China, and India, were separated geographically and by the British colonial government. The government of Malaysia implemented a wide range of policies to combat poverty and redistribute income among people with a view to national unity. The fight against urban poverty in Malaysia has intensified since the early 1970s through the implementation of the New Economic Policy. (DEB). This is demonstrated by the huge expenditure of about RM32.9 billion to address the issue of poverty. Therefore, various strategies, such as land and territory development, land unification and rehabilitation, and integrated offshore development programmes, may be implemented by the Malaysian government has also emphasised currency industry programmes, assistance services such as credit, marketing, and subsidies, social development, infrastructure development, and social facilities.

In Malaysia, poverty has been a major problem for decades, as it is difficult to deal with. Nevertheless, the country's poverty rate in 2019 was 5.6%, compared to 49.3% in 1970, which shows a very significant decrease in the next five years. Thus, the consequences of the spread of the COVID-19 epidemic have led to an increase in the poverty rate to 8.4% by 2020, affecting household incomes. According to



Fakhrurrazi Rashid (2020), the B40 group had borne a high cost of living during the COVID-19 pandemic. These B40s tend to face problems like losing a source of income. The problem of multidimensional poverty is often experienced by B40s who earn between RM2537 and RM3860. A household would be categorized as poor if the household's total income was below the poverty line income (PGK) of RM1,169.

Besides, most of the inhabitants of this village are rubber lovers. According to Ahmad Tarmizi Sulaiman (2022), based on the current economic developments, rubber prices showing a drop of up to RM2.30 per kilogramme have given them concerns about covering the difficulties of living as a trader. Nevertheless, there are some peasants in this village who only take wages to pee in someone else's rubber garden. Then the proceeds must be shared equally with the owners of the rubber garden, and only that amount is their income to sustain. The income earned has put living pressure on rubber sellers due to unstable economic factors as well as ongoing rising commodity prices. Most of the villagers are binding their stomachs to shopping and buying daily supplies, medicines, and schools because of so little money. In the season, the seventh block will affect the activity of the merchant to the extent that it affects revenue.

Moreover, most of these efforts to eradicate poverty focus solely on unidimensional poverty, that is, on income-only earnings to determine the GDP, and this is also inconsistent with the SDG's agenda for the eradication of multidimensional poverty, such as the Che Mat study (2010), which examines the impact of non-agricultural income on poverty. Thus, the study will identify indicators of income, education, health, and standard of living to define multidimensional poverty amongst the population and then study the level of knowledge of multivariance among the B40s in Kuala Krai.

2.0 Study Area

The study was conducted in the suburban area of Kuala Krai District but focused on only one village, Kampung Lubuk Simpul, which is located in the mouth of Batu Mengkebang. The justification for choosing the location of this study is that it has a poor population of 350 B40 households. The poverty experienced by the people here is due to several dimensions.

The study selected the Kuala Krai district as the study area. (Refer to Figure 1). Kuala Krai was chosen because it is the secondlargest district in the state of Kelantan besides Gua Musang. The district of Kuala Krai was the earliest settlement and governmental area in Kelantan to be recorded in the navigation records of Ibnu Batuta (a famous former traveller) when he arrived at a place known as Khailun Qari, namely Kuala Krai. This is one of the oldest colonies established by the British government in 1909. Kuala Krai covers an area of 2,287.10 square kilometres, bordering the Machang in the north and the Gua Musang in the south, while in the east it borders the State of Terengganu, and in the west, it is the Jeli Colony.

In addition, the district of Kuala Krai was originally the Ulu Kelantan colony, including the Gua Musang and Kuala Balah, and the and the Jeli colony officially began on September 1, 1977. The city of Kuala Krai has developed and has a variety of facilities. The inhabitants initially used this area to conduct economic activities. Kuala Krai grew rapidly after the opening of the Kuala Krai-Gua Musang highway in August 1983, which was the main route to Kuala Lumpur from Kota Bharu. Kuala Krai connects the main river, the Galas River, and the Lebir River, which flows into the Kelantan River on the edge of the city of Kuala Krai. There is also a railway station that connects Tumpat to Gua Musang. Kuala Krai has a multi-ethnic population. This is because there are 149,018 Malay people, followed by 9862 Chinese, compared to an Indian population of 4545 people and 525 people each (UPEN Kelantan). The locations of respondents were taken from several areas in Kuala Krai: Kampung Pahi, Kampung Rahmat, and Kampung Lubuk Simpul. Selection of these three areas because of the area: this is an area where most of the people in this village have a middle income, or B40.

There are many advanced facilities in Kuala Krai to facilitate residents in the study area. As proof, Kuala Krai has a variety of shopping facilities, such as Econjaya Market and Pantai Timur Market, as well as the Public Tan Market, which supplies fresh foods such as fish, chicken, vegetables, and others for the daily needs of the inhabitants. Health facilities such as the Kuala Krai City Hospital and Health Clinic make it easier for residents in the area to access health services. In 2018, the newly built Sultan Ismail Petra Hospital on a 40-hectare site in Pahi involved construction costs worth RM300 million. The Sultan Ismail Petra Hospital is equipped with an international-class facility that has eight rooms. Surgery and a few specialised clinics. There are 2,700 new patients in the hospital, and it is expected to be a boost to the development of the Kuala Krai district. In addition, the Mini Zoo Kuala Krai Sports and Recreation Facility was rebuilt on July 28, 2022, and fully completed to be a recreation and recreation centre with 50 species of animals. Next to the zoo, there's a roadside around the lake. In this mini-zoo area, there are business areas like restaurants and grocery stores that can help the B40 generate income by working on the premises of the business. Employment opportunities from these facilities can help fill the poor home or B40 out of poverty so that they earn income to live their day-to-day lives and families. There's also a police station and a bombing station in the area to ensure the safety of the population. Educational facilities, such as primary and secondary schools, are also available in Kuala Krai. This facility gives the children in Kuala Krai a chance to get an education.



Figure 1: Study Area



3.0 Materials and Methodology

3.1 Study Design

In this study, a quantitative method was used to collect data from respondents in Lubuk Simpul Village, Kuala Krai. The researcher uses the collected data to study the relationship between the independent variable and the dependent variable. The survey question has been used using the survey tool on paper for this study, and the survey item is mainly the Likert scale. Thus, survey questions are used as an effective tool for collecting data in this study, and the hypothesis that supports quantitative research is developed. The goal of the researchers in conducting quantitative research is to gather primary data aimed at identifying the multidimensional poverty of the B40s in Kuala Krai. The qualitative method is used in half-session interviews with the population to determine their needs to help eradicate poverty.

According to Krejcie & Morgan (1970), quantitative is a study that involves statistics of a large number of respondents that are at least more than 10 samples in measuring variables in a study. The data obtained is compulsorily measured to prove reliability and used to test theory, build facts, and state the existence of relationships between variables. Thus, researchers have obtained a large number of survey respondents because the quantitative method has the advantage of collecting large sample sizes and being able to produce estimates that are sufficiently accurate to identify small differences.

3.2 Study Process

Multidimensional poverty is a framework that aims to measure poverty not only in terms of income or consumption but also by considering various other dimensions necessary for human growth. The methodology for measuring multidimensional poverty involves five main steps:

3.2.1 First grade – Study Introduction

In the first stage, this will describe the basic parts of understanding, such as the issue being studied, the main objectives of the study, and the importance of the research. There are two main problems highlighted in this study: multidimensional poverty and the indicators that define multivariate poverty in the B40 group. The government has taken serious measures to continue to address poverty. Various measures were taken by the government. Nevertheless, multidimensional poverty is still rarely used to define household poverty.

3.2.2 Second Level – Literature Review

Next, in the second phase, the part makes a literary review of urban poverty and the contents of B40 houses based on the opinions of the researchers. Definitions of multidimensional poverty, urban definitions, poverty measurement categories, B40 houses, and poverty eradication strategies. This information is collected from articles and reports by past researchers.

3.2.3 Level Three - Data Collection

The third stage is the process of collecting data from secondary and primary sources. Secondary data is needed more than statistical data collection. These data were obtained from various related departments. While primary data is obtained through surveys, interviews, and observations, Survey questionnaires are used to obtain respondent information and the situation of the study area for descriptive analysis. At the same time, interviews obtain additional information to confirm and add information on the study issues. Through observation, the researcher can see for himself the problems faced, the activities and the lives of the local population. In addition, the background and information related to the area of study is explained. The area of study is the available location, major land use, population, demographics, and facilities.

3.2.4 Level Four – Analysis and Study Discussion

In addition, this stage is part of the process of analyzing data that has been collected using SPSS software. This data is processed using descriptive analysis. Descriptive analysis is used to obtain respondent information that covers demographic, economic, social, and spatial dimensions. All these dimensions are obtained from the questionnaire form distributed to the respondents. In addition, this stage will also analyse indicators that define multidimensional poverty in Kuala Krai through factor analysis. Then this stage will discuss the needs of the population to help them eradicate poverty in their lives.

3.2.5 Level Fifth - Conclusions and suggestions

Finally, the department concludes that poverty exists on the basis of the study carried out. It's more of a discovery of the power of discovery. Another aspect that will be explained is the weaknesses of the research that are a barrier to conducting this study. In addition, the aspects of the proposal will also be outlined with an emphasis on advanced research to accommodate the strengths and weaknesses of this research. The overall methodology of this study starts with phases 1, 2, 3, 4, and 5.

3.3 Data Collection Methods

There are two main methods of data collection used by researchers to achieve the established objectives of the study, namely quantitative and qualitative methods. It is a coincidence, as stated by Chua (2006), that research is usually categorised into two methods, namely quantitative and qualitative, or combining both methods. (mix-method). Hair et al. (2007), cited by Mohd Azmeer (2020), explained that quantitative methods have the advantage of accommodating large and capable sample sizes and producing an estimate sufficiently accurate to allow small differences to be identified. While the qualitative method is an approach used to analyse and investigate more accurately the informative experience in a study carried out to gain a deeper understanding of the study conducted, (Dwyer and Limb, 2001). Not only that, but these qualitative methods are also used to support quantitative data obtained, for example, through references to past studies.

3.3.1 Quantitative Methods

3.3.1.1 Survey Questions

This study uses survey questions as it is one of the most appropriate and easy survey methods to obtain the required information because the quantitative dimensions of the survey results can give an idea for the next search. It is intended to obtain the necessary information after the statistical analysis and verification process is carried out. According to Gilham (2001), one of the advantages of the survey method is that respondents are flexible in choosing the appropriate time and place to fill out the survey forms, while the researchers can obtain information and data from respondents in large quantities and in a short time. The survey is divided into four sections:



demographic, economic, social, geographical, and family information that lives with respondents. In addition, the survey question design of this study has two forms: closed questions and optional questions.

Besides, the study also uses a Likert scale to build a survey question. A Likert scale is a scale used to measure the attitudes, opinions, and views of respondents to a symptom or phenomenon. The Likert scale is divided into five categories: very much agree, agree, not sure, disagree, and very much disagree. (Djaali, 2008). According to Alreck & Settle (1995), the Likert scale is usually used for questions in the form of statements for easy and quick answers. Researchers have used a five-point Likert scale since Phillip & Robert (2015) showed that most researchers are more likely to use a five-point Likert. This is said so because respondents only must answer the question according to their choice of answers, whether very agree, agree, unsure, disagree, or very disagree, for each question statement. According to Chua (2004), data collected through the Likert scale is more reliable. The study uses a Likert scale on parts B, C, and D, and there are five options of answers that are organised as they start with very disagreeable, disagreable, uncertain, agreeable, and very agreeable. The questionnaire in this study is divided into four parts:

Section A

This section provides information about the background of the respondents, also known as the demographics of respondents, covering gender, age, race, marital status, educational level, and the number of households living together. The demographics of these respondents are important in obtaining their information to meet the needs of the study in terms of their personal background.

Section B

This section covers the economic profiles of respondents, such as employment, side jobs, monthly income, monthly expenditure, aid received, ownership of transportation, type of residence, property rights, and comforts of the residence. Additionally, this section also contains questions in the form of a Likert scale that the respondent should mark on the answers provided.

Section C

This section covers the social profiles of the respondents. This section is also divided into two aspects: the social individual, the respondent, and the social environment. Individual social space includes respondent health and respondent nutrition patterns. The social space of the environment also includes the crime that occurred in the area of study.

Section D

This section contains questions about spaces or places in the study area. The questions in this section cover facility distances and occurrences of natural disasters. On the Likert scale, there are questions about the environmental conditions in the study area.

3.3.2 Qualitative Methods

3.3.2.1 Non-Live Interview

According to Chadwick et al. (1984), an indirect interview in a study is intended to investigate the topics of the study together with the informant without directly asking the questions in a structured and sequential manner. This means that the question is open. This method is intended to encourage informants to provide diverse and more meaningful insights and information according to the perspectives and knowledge they possess. According to Azmeer (2020), the rationality of this study is to obtain data that cannot be measured through surveys and can be used as evidence to support the findings of the study. Yin (2009, cited from Mokmin Basri 2012) explained that the study using the case study design and the interview method is a good technique for collecting data. This term will be used by the researcher in the interview method to reduce discrepancies with the survey method that uses the term respondent. The relevant responses of the informant to the open question asked will be recorded in a concise form to be used as an important input in the qualitative method. The survey was also conducted with eight respondents, consisting of residents or village heads who are responsible for the welfare of the population in the study area and the head of the family and household B40 in the village. The results of interviews collected through qualitative methods can strengthen and further multiply information about the B40 home content. Furthermore, according to Suriati Ghazali (2005), the interview method can give respondents an opportunity to present their views or opinions while they are engaged in the interview.

3.3.2.2 Library Methods

Library methods are also among the important methods used by researchers to collect the necessary information and data. According to Ahmad Mahdzan (2005), a library study using documentation methods based on document sources or written records will enable researchers to obtain various forms of descriptions and information from secondary sources. Where the data obtained by the researcher from various sources and reading angles will be recorded as additional information to support the primary findings obtained from a survey. This coincides with Ghazali Darulsalam and Sufean Hussin (2016) explaining that it is supporting or supplementary data to enable researchers to support or add evidence as well as validate information obtained from the questionnaire.

3.4 Factor Analysis

Factor analysis is a multivariate statistical technique used to reduce the factor that affects a variable to a smaller set of variables. So, in order to determine the factor that is appropriate to influence something, a variable value eigen must be calculated, and this is supported by Fauzi Hussin et al. (2014), where the value eigen needs to be identified to select the appropriate factor. These factors are derived from the questionnaire form distributed to the respondents. Each factor analysed will be named as a component in the Total Variance Explained table because in SPSS analysis using principal component analysis, Then the factor or component extracted or taken is calculated for variable variance. The results of the own value analysis must be greater than zero but must not exceed the sum of the variances. If the factor or dimension has a proper value greater than 1, then it is more appropriate and correctly selected as a poverty factor.

3.5 Study Sampling

Sampling refers to a way to obtain information to solve a problem without using the entire population (Mohd Majid, 1990). It is the same as Sheffie (1991) that sampling is a process when a small number of the entire population is selected and studied, which allows a researcher to generalise related to the population in question. Schutt (2009) explained that the sampling framework was important in the design of the study. In this study, the survey involved a sample size of as many as 153 respondents, according to the size of the B40 house in Simpul Village. Based on population statistics in Kelantan and the B40 households census in Kelantan, the estimated number of B40 houses was 66.4%. The determination of the number of respondents was also seen using significant statistics, which in this study used sample size through the Roasoft application. The determination of the number of respondents was also seen using significant statistics, which in this study



used sample size through the Roasoft application. Study design requires a sample framework (Schutt, 2009). In this study, four important concepts related to the sampling framework have been used by the researchers, namely:

a. Population

According to Ilyas (2022), a population is the sum of all the population or a large group that inhabits a place, district, state, or country that is the main focus of the study. Referring to the concept, the population in this study is all the inhabitants of Lubuk Simpul Village, Kuala Krai.

b. Sampling

According to Ilyas (2022), sampling is a systematic process of selecting samples involved in a study. In this study, the inhabitants of Simpul Lubuk Village, Kuala Krai, are samples.

c. Element

According to the Dictionary of the Council of the Fourth Edition (2015), an element is something that is part of a whole element. Referring to the concept, the part to be studied is the multidimensional poverty of the B40s in Kuala Krai, indicators that define multidisciplinary poverty, and the needs of the population to help them eradicate poverty.

d. Sample Population

The total element is contained in the population. The sampling framework will identify the fragmentation of respondents for the population of the states of Kedah and Penang. Sampling aims to obtain a sample that has the common characteristics of a population.

3.6 Reliability Analysis

Reliability analysis is a statistical technique used to assess the internal stability or reliability of a scale or measuring instrument. It is commonly used in the social sciences, psychology, and other fields where researchers want to make sure that their measuring instruments produce results that are consistent and reliable. SPSS (Statistical Package for the Social Sciences) is a software program widely used for data analysis in a variety of research fields, including reliability analysis. SPSS provides several tools and procedures for performing reliability analysis. One of the most commonly used methods is the alpha Cronbach, which calculates the internal consistency reliability factor for a set of items. In addition, the output will provide information about item statistics, such as minimums, default fractions, and correlations between items. By performing a reliability analysis in SPSS, the examiner can assess the stability and reliability of your measuring instrument, providing insights into the quality and authenticity of the data (Table 1).

Table 1: Reliability Analysis Test

Cronbach's Alpha	N of Items
.701	16

4.0 Results

4.1 Respondent Demographic Profile

This poverty study was conducted on 153 respondents, involving 83 male respondents (54.2%) and 70 (45.8%) female respondents, as shown in Table 2. Next, the age variable of the respondents recorded most respondents being between 31 and 40 years of age, which is 47, or 30.7%. Then the second highest number was in the 50s and above neighbourhoods, with 41 people (26.8%). While 41–50 years were 35 (22.9%), 21–30 years were 20 (13.1%), and the lowest age range was 20 years and below that was 10 people (6.5%) (Table 3). The selected respondents were eligible to answer the questionnaire because most of the respondents who were selected were indigenous people and lived in the village of Simpul Lubuk until now.

According to the national survey, most respondents were Malay (138 people, 90.2%), followed by 6 Chinese (3.9%) as listed in Table 4. While the rest are Indian, there are nine (5.9%). This is because the peasantry is often associated with the problem of poverty, as supported by Hassan (1985), who has explained the Za'ba definition of poverty, which is related to poverty synonymous with the Malay community.

Next, the marriage status variable of the respondents noted that most respondents were married (Table 5), which was 80 people, or 52.3%. Then followed the widows and the single respondents, who each recorded 40 (26.1%) and 33 (21.6%). The next demographic variable is the level of education of the respondents, who recorded most of the population in this village not attending school, which is 69 people (45.1%). Then followed the level of high school education of 39 people, or 25.5%. It was followed by the level of elementary school education of 32 (20.9%), and the remainder had a diploma, degree, or certificate level of 13 people at the same time (8.5%) (Table 6).

Gender	Frequency	Percentage (%)	
Men	83	54.2	
Women	70	45.8	
Total	153	100	



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Table 3:	Respondent	Age
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Age (Years Old)	Frequency	Percentage (%)
Below 20	10	6.5
21 – 30	20	13.1
31 – 40	47	30.7
41 – 50	35	22.9
50 and above	41	26.8
Total	153	100

Table 4: Nation of Respondent

Nation	Frequency	Percentage (%)
Malay	138	90.2
Chinese	6	3.9
Others	9	5.9
Total	153	100

Table 5: Respondent status

Marriage Status	Frequency	Percentage (%)
Single	33	21.6
Married	80	52.3
Widower/widow	40	26.1
Total	153	100

Table 6: Respondent Education Level

Education Level	Frequency	Percentage (%)
Never went to school	69	45.1
Primary school	32	20.9
Secondary school	39	25.5
Diploma/degree/cert	13	8.5
Total	153	100

4.2 Indicator Analysis Defining Poverty

4.2.1 Spatial Factor

In addition to economic factors, social and spatial factors are also the cause of poverty among the B40s in Kuala Krai, Kelantan. The space factor refers to natural disasters focused in this village, including floods, landslides, storms, and others that have caused property destruction, loss of life, and affected the daily activities of respondents. This statement was supported by Syed Hussain, T. P. R., Ismail, H., Md. Noh, M. K., and Yusof, R. (2015). These natural disasters have affected the socio-economic condition of the population in the wake of property destruction and loss of life. In 2014, the districts of Kuala Krai and Gua Musang were the worst affected by mud floods, causing various forms of property destruction, financial losses, and loss of life. Said, M. S., & Suhaimi, S. A. (2015) argued that the damage of the flood currents and the elevation of flood water levels along with the mud have resulted in damage to business goods and the destruction of some physical parts and structures of business buildings. Table 7 shows the common natural disasters in the study area.

Table 7: Type of Nature Disaster

Type of Nature	Frequency	Percentage (%)
Disaster		3 ()
Flood	141	92.2
Landslide	11	7.2
Others	1	0.7
Total	153	100



Most respondents agree that natural disasters are increasingly occurring in the study area. There were 145 people, or equal to 94.8 percent, compared with only eight (5.2 percent) who disagreed. According to Ismail, H., & Mariyappan, R. (2011) mankind's overly diligent creation of innovation through development and modernization in all angles and at the same time human has opened a high level of awareness to the risks of disasters such as in Lembang. The data shows that of the respondents (94.8%) who agreed to catastrophe occurrences (92.2%) agreed that flooding was the most frequent. Followed by landslides (7.2%). While other disasters like storms and thunderstorms are only one respondent





4.2.2 Humanities Factor

Poverty is measured not only in terms of lack of income but also involves holistic aspects of humanity such as one's health, which refers to measuring multidimensional poverty. Of the 153 respondents they met, the majority had jobs and earned income. Of those, only three (2%) have income below RM500. The income of RM500–RM999 recorded the second highest group of 45 people (29.4%). Then the income of RM1000–RM1499 showed the highest record, involving 75 respondents, equal to 49%.. A total of 20 people (13.1%) had an income of RM1500-RM1999. For the income of RM2000–RM2499, it involves only 7 respondents at the same time (4.6%). While the income of RM2500-RM2999, RM3000-RM3499, and RM4000 above showed the same number of respondents that each numbered only one at the same time (0.7%), Overall, many respondents in this village have less than RM2499 (Table 8)

Monthly Income (RM)	Frequency	Percentage (%)
Below 500	3	2.0
500 - 900	45	29.4
1000 – 1499	75	49.0
1500 – 1999	20	13.1
2000 - 2499	7	4.6
2500 - 2999	1	0.7
3000 - 3499	1	0.7
4000 and above	1	0.7
Total	153	100

Table 8: Total of Respondent Monthly Income

The link between health problems and multidimensional poverty is that health problems will disrupt the resources and income of the population, which leads them to remain among the poor. The results of the study showed that most respondents had a rather worrying level of health, as 102 respondents, or as many as 66.7%), needed periodic treatment, and only 51 respondents, compared with 33.3%), required periodic care. Respondents aged 51 and over were the highest group of patients in need of periodic treatment, which was 36 people. Most group respondents 51 years old and older with diabetes and hypertension found the same number of respondents being 12 people (12.8%). A total of four respondents aged 51 years and older suffered from fibroids, a type of asthma, and heart disease, recording the same number of respondents, three. Followed by knee pain involving two respondents. So, only five of the respondents are 51 years old and older without disease (Table 9).



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Type of Disease	Below 20 years old	21 – 30 years old	31 – 40 years old	41 – 50 years old	51 years old and above	Total
No disease	9	18	12	4	5	48
Heart attack	0	1	1	3	3	8
Diabetes	0	0	7	11	12	30
High blood pressure	0	0	10	5	12	27
Kidney failure	0	0	0	0	4	4
Asthma	0	1	7	2	3	13
Knee/joint pain	1	0	10	10	2	23
Total	10	20	47	35	41	153

Table 4.9: Table of Disease Types and Age of Respondents

5.0 Discussion

5.1 The Influence of Space Factors on Multidimensional Poverty

Flood disasters are a frequent occurrence in this village area because of the imbalance in the use of meadows in the natural ecosystems. According to Ismail, H., and Mariyappan, R. (2011), flood disasters will occur more seriously and may be life-threatening when there is a human role to alter the surface and sub-surface structure of the soil, causing the supply of rain and running water to be disrupted. Thus, the effects of surface structural alterations cause the flow of water to occur in large quantities, resulting in flooding and cliff distortion in this area.

Most respondents suffered economic disruption because of the natural disaster that happened. A total of 69 people (45.1%) voted very much in favour of the Likert scale. While 48 respondents (31.4 percent) still recorded their agreement with economic disruption because of natural disasters, the respondents who registered disagreed very strongly with each of the 17 people and only one. The rest of the respondents who worked as rubber harvesters and livestock farmers who were experiencing serious economic disruptions. This is because the flood disaster has affected the activities and plants of the rubber trees that have fallen. According to Sinar Daily Online (2023), the flooding in the Long Range has caused the reproduction and development of microorganisms, in particular the fungus, which causes disease in the roots, stems, and leaves. This thing has made people nervous about their fate because a lot of rubber trees are dying and falling. In addition, some respondents suffered economic disruption due to property damage and home damage during the disaster. So, they need a huge amount of capital to repair houses and damaged items. Additionally, the respondents informed us that some of the furniture inside the house had to be disposed of due to severe damage. The researchers observed during the interview that most of the respondents who suffered property damage were those who lived near the river basin because the area is vulnerable to flooding.

5.2 The Influence of Human (Social) Factors on Multidimensional Poverty

Referring to the findings of studies that show human aspects such as health cause poverty, It's said so because health problems are caused by age factors and the way nutrition is taken. The Malaysian Ministry of Health (2018) has established three main mealtimes: breakfast, lunch, and dinner. The best time for breakfast is before 8.30 a.m. because the body's metabolic rate is highest at that time. That's it. Next, lunchtime between noon and 2 p.m. Dinner is 3–4 hours before bedtime. A healthy snack between the main meals is encouraged, if necessary. It's also in line with the second SDG goal of achieving zero hunger for the entire world.

However, the daily dietary patterns of respondents showed that most of them ate only twice a day, which was 98 people (64.1%) compared to the frequency of three times a day (25.5%) of 39 respondents. Then some respondents ate once a day and four times a day, respectively (9.8% and 0.7%). During the interview, most respondents only ate lunch or at night. They say there's a time limit for breakfast, and combining breakfast with lunch is called brunch. It's not a good idea to skip breakfast because the respondents need enough energy to work. Respondents who don't eat breakfast anymore can experience excessive hunger and are likely to eat too much at some point in time, especially at midnight and noon. Excessive intake of food at a time will cause digestive and health problems.

6.0 Conclusions

Malaysia is not only suffering from urban poverty but also from out-of-city poverty that still cannot be fully addressed. This is likely due to unbalanced urban development, which has led to people still living in poverty. This problem of poverty is not only faced by the poor; the B40s are also faced with the same problem. Therefore, the issue of urban poverty in B40 needs to be addressed by all parties to ensure a comfortable life.

The findings of the population's level of knowledge of multidimensional poverty can provide wider exposure to the poverty experienced. Next, we can make sure the B40s on the outskirts are out of poverty. This is because the eradication of poverty in the outlying areas is driving the country's economy up. Thus, overall, the results of the study show indicators that define multidimensional poverty in the B40 group, the level of population awareness of multidisciplinary poverty, as well as improvements in strategies to eradicate the poverty of B40 in the outlying areas. Indicators that can define multi-dimensional poverty in B40 groups need to be identified to eliminate poverty and achieve the goal of the SDG, which is to completely eradicate poverty by 2030. The poor and the B40 can move to the M40 or T20 in the future.



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