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## LIVELIHOOD ASSETS INDEX: A CASE STUDY IN RURAL AREA, KEDAH, MALAYSIA

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#### **Abstract**

Livelihood assets refer to the resource base of the community and the different categories of households. There are five different types of assets available to locals: human, natural, financial, physical, and social. Livelihood assets are considered to improve the standard of living and quality of life of an individual or household, which largely influences the status of well-being. The objective of this study is to construct a Livelihood Assets Index for low-income households in Kedah, Malaysia. To achieve this objective, a total of 200 respondents were selected from the low-income household groups in Baling, Alor Setar, Padang Terap, and Sik, Kedah. The study shows that social and physical assets indexes have a medium higher. Financial assets, on the other hand, are in the middle range index. Overall, the study shows that the index of livelihood assets in this group is in the middle range. Policymakers directly involved in rural development would benefit from this study. The study also suggests solutions to improve the long-term livelihoods of low-income households in rural areas

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#### 1. Introduction

Poverty is a multidimensional concept and phenomenon. The economic dimension is the main dimension, but dimensions from the social, political, medical, nutritional, educational, etc. fields are no less important. Therefore, it is not surprising that there are numerous studies dealing with poverty from different aspects and in different disciplines (Lim & Mansur, 2015). For most people, poverty is the lack of money to meet the basic needs that every household must have in order to continue living. Basic needs are different for each person and change over time. However, the fact is that poverty is a concept that is difficult to translate and explain in inappropriate words. This is because this concept varies and depends on the researcher. In Malaysia to determine a poverty group based on Poverty Line Income as Table 1.

Table 1. Malaysian Poverty Line Income

Decile Group	Income	Income	Mean Household	Income
		Share (percent)	Income (RM)	Threshold (RM)
T20				
(T20 Group is the household that earns	T2	19,781	24,293	More than 15,039
the highest 20 percent of the total	T1	12,586	12,720	10,960 - 15,039
income of Malaysians.)				
M40	M4	9,695	9,730	8,700 - 10,959
(M40 group is the households that earn 41 percent to 80 percent of the total income of Malaysians)	M3	7,828	7,841	7,110 - 8,699
	M2	6,471	6,477	5,880 - 7,099
	M1	5,336	5,346	4,850 - 5,879
B40	B4	4,387	4,395	3,970 - 4,849
(B40 Group is the lowest 40 percent income household)	B3	3,556	3,556	3,170 - 3,969
	B2	2,786	2,803	2,500 - 3,169
	B1	1,929	1,849	Less than 2,499

Source: Department of Statistics Malaysia (2017, 2020)

Poverty is the inability of a household to meet the basic needs of the household members because it is unable to acquire the necessary resources to sustain its livelihood. The most important trigger for poverty unrest is the level of income earned. This is because the level of household income or savings has a major impact on the level of education and health of the household, including housing, etc. Morally, this group also experiences poverty in terms of spirituality and physicality, level of education, health, and so on.

Poverty can significantly affect livelihoods in various ways (Su et al., 2021). Livelihood refers to the means and assets that people use to make a living. When individuals and communities experience poverty, their ability to secure a sustainable and decent livelihood is compromised (Ding et al., 2020) Poverty can become intergenerational, where the conditions of poverty are passed from one generation to the next (McCarthy, 2020). Lack of resources for education, healthcare, and skill development can perpetuate the cycle of poverty, making it difficult for individuals to escape it (Jezeer et al., 2019).

In rural areas especially, low-income people or poor people lack access to health, limited educational opportunities, and reduced productivity, making it difficult to secure a decent livelihood (Deng et al., 2020). Meanwhile, individuals may not have stable jobs or earn income that is sufficient to

meet their basic needs (Liu et al., 2021), which will cause inadequate nutrition and healthcare to cause malnutrition and poor health (Yazdanpanah et al., 2021). In some cases, people living in poverty are forced to engage in environmentally harmful activities to make a living (Kuang et al., 2020; Li et al., 2020)

Poverty is still seen as a social disease and is the main enemy of the country's development plan. Rural communities, especially low-income households, are among the vulnerable groups. This group is considered vulnerable because of their poverty and lack of food. In addition, this group is also easily exposed to threatening factors (diseases, drought, floods, epidemics, and insect infestations) (Ibrahim et al., 2017). These unpredictable factors threaten the position of farmers either in the short or long term. Tora et al. (2022) emphasize poverty has a significant impact on the sustainability of livelihoods, and the relationship between poverty and sustainability is complex. Addressing the interplay between poverty and livelihood sustainability requires a multifaceted approach that recognizes the unique challenges faced by impoverished populations and aims to empower them to build more resilient and sustainable livelihoods (da Silva Cavalcante et al., 2022).

The strategy to deal with this threat depends on whether the farmer has the livelihood assets to ward off the threat. The importance of these livelihood assets is that it provide protection when faced with unexpected situations (Serrat, 2017). Livelihood assets in a community refer to the various resources and capabilities that individuals and households rely on to sustain their livelihoods and achieve economic well-being (Soma et al., 2022)

These livelihood assets include human assets (including knowledge and skills to find sources of livelihood), social assets (direct social relationships or not, including levels of trust, reliability, and accessibility), material assets (the ability to produce goods and infrastructure), financial assets (financial resources owned) and natural assets (including natural resources, including resource consumption flows and services rendered) Moser and Dani (2008) as a Table 2. Ownership of these assets is important for creating sustainable livelihoods. If households fail to acquire sufficient asset ownership, this group will become a vulnerable group (Lasse, 2001). The level of livelihood assets within a community significantly affects its ability to develop and implement effective adaptation strategies (Tufa & Megento, 2022).

The impact of lack of asset ownership also affects low-income households in obtaining nutritious food. Indirectly, this will contribute to the problem of malnutrition. This incident is due to the inability to meet basic needs in the household (Ibrahim et al., 2017, 2018). The effect has been that this group is not able to feed themselves adequately with the income generated. A person's strength depends on their assets and power. At the same time, the question is how people use their assets to achieve a better quality of life (Krantz, 2001). There are various definitions of assets that refer to different areas and disciplines, be it economics, finance, or accounting. In finance and accounting, assets usually refer to financial assets, especially those assets used to start and maintain a business.

Livelihood assets play a critical role in determining the level of livelihood security for individuals and communities. A holistic approach to livelihood security involves recognizing the importance of various asset types and addressing inequalities in asset distribution (Islam & Walkerden, 2022). Thus, this paper aims to analyze the level of livelihood asset possession among low-income households in

Kedah, Malaysia. This study also calculates the sustainability livelihood index to further explain the analysis of these assets.

**Table 2.** Definition of the Livelihood Assets

Measurements	Definition of the Most Important Capital Assets		
Human assets	Individual investments in education, health, and nutrition are all included. Labor is a valuable asset connected to human capital investments; people's capacity to work is determined by their health, and the returns on their labor are determined by their skill and education.		
Social assets	Intangible assets are described as the rules, norms, duties, reciprocity, and trust contained in social connections, social structures, and societies' institutional arrangements that allow people to fulfill their personal and collective goals. Social capital is a term that refers to the rules and regulations that govern formalized institutions in the marketplace, political system, and civil society. It is embedded in social institutions at the macro institutional level—communities and households—as well as the rules and regulations that govern formalized institutions in the marketplace, political system, and civil society.		
Financial assets	People have access to financial resources such as savings and credit lines.		
Natural assets	Stocks of environmental assets such as soil, atmosphere, forests, minerals, water, and wetlands are included. The land is a crucial productive asset for the impoverished in rural communities, and land for shelter is also a vital productive asset in urban regions.		
Physical assets	Produced capital (also known as human-made capital) refers to the stock of plants, equipment, infrastructure, and other productive resources owned by people, businesses, or governments.		

Source: Moser and Dani (2008)

### 2. Methodology

This study focuses on four rural villages in the Baling, Alor Setar, Pendang, and Padang Terap Districts of Kedah, Malaysia (Figure 1) using a case study research approach. The studies collected a total of 200 low-income households as respondents. The livelihood sustainability index proposed by Hahn et al. (2009) and modified by Rai et al. (2008) (Figure 2) is a user to evaluate livelihood assets and uses the indicators in Table 3.



Figure 1. Study Location

1. Index 
$$_{sd} = \frac{S_d - S_{min}}{S_{max} - S_{min}}$$

#### Where:

 $S_d$  was the original sub-component for community d,

 $S_{min}$  and  $S_{max}$  were the minimum and maximum values, respectively, for each sub-component

2. The household percentiles were determined



3. To determine livelihood assets status of low-income households (modified from Rai et al., 2008).

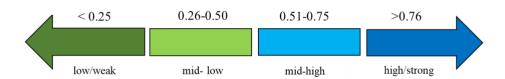


Figure 2. Evaluation Livelihood Asset

Table 3. List of indicators for measurement

Human Assets	Financial Assets	Natural Asset	Social Assets	Physical assets
Highest level of education Head of Household	Household income	Ownership of land	Position in society or organization	Water sources
Working experience	Income from non- economic activities	Ownership livestock	Involvement in community activity	Housing characteristic
Knowledge level	Subsidies recipient	Food resources from the environment	Involvement in a political party	Distance to town
Training attend	Saving amount		Involvement in an agricultural society	Vehicle ownership

#### 3. Results

#### 3.1. Demographic characteristics

The majority of people in these districts still live in villages and engage in a variety of economic activities including fishing, farming, and paddy field. Heads of households were chosen as respondents because they controlled management in the household and received zakat aid. With a total return of 193 usable surveys, all 200 questionnaires were effectively distributed among poor households in Kedah state citizens. This figure reflects a 96.5 percent response rate. Socio-demographics and household characteristics are listed in Table 2. Males accounted for 42 percent of respondents, while females accounted for 58 percent. The age group between 61 and 80 years old had the highest number of responders (48 percent). The majority of those who responded are in their eighties or nineties. The second-largest group of responders, 37 percent was between the ages of 41 and 60.

#### 3.2. Livelihood assets status

The study finds that human capital has a medium-low value (0.38). Social assets and physical assets had medium-high values (0.66 and 0.53 respectively) and natural assets (0.4). Ownership of financial assets has relatively low values (0.33) as a Table 4. This shows how human capital such as education, experience, skills and knowledge influences production and lifestyle to improve the livelihood of the low-income group in a rural area in Kedah, Malaysia. The lack of financial assets would prevent this group from expanding their production and developing infrastructure, making livelihood diversification difficult.

There is no doubt that dependence on the main source of income and lack of savings are the main factors causing low financial assets among rural residents. In addition, lack of side jobs due to low education levels and lack of training and skills also lead to low financial assert scores. Close ties to the community and frequent participation in community activities are reflected in high social wealth values. Involvement in the association also contributes to this value. Community involvement and association activities become one of the platforms for this group to access information, especially related to the field of work and current issues.

Government-provided infrastructure facilities such as link roads, health facilities, markets, and as support for the attainment of medium-level physical assets. The ability to provide clean and treated water

is also a key factor for perfect ownership of physical assets. Owning one's own means of transport such as motorbikes and cars enables one to reach all facilities quickly and safely. At the same time, owning a perfect home also contributes to and supports the well-being of this group through physical assets. Government interventions should be context-specific and address the particular needs and challenges of the community or population in question. Effective governance, transparency and equitable distribution of resources are critical to the success of these interventions in securing livelihoods and improving the well-being of populations (Sargani et al., 2023).

Table 4. Livelihood Assets Status

Index	Low	Mid- Low	Mid-high	High
	(< 0.25)	(0.26-0.5)	(0.51-0.75)	(>0.76)
Social Asset	0.66			
Physical Asset	0.53			
Human Asset	0.38			
Natural Asset	0.40			
Financial Asset	0.31			

#### 4. Conclusion

Based on the findings of this study, it is clear that promoting healthier lifestyles among this population requires access to quality education and skills training for the next generation. Social welfare programs for low-income households should be expanded such as cash transfers and health care should continue to be provided on a need basis. Productive welfare programs, including entrepreneurship and microfinance, must be intensified to provide economic opportunities for this group. In addition, the education and training of low-income households will be strengthened to improve employability and the ability to take up income-generating activities. Basic financial education will be improved to increase the financial literacy of low-income households. At the same time, improving access to basic services is key to poverty reduction. In this context, priority will be given to improving access to quality education and training and improving health care. These initiatives will increase the well-being of the poor and improve their standard of living.

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