

Significance Of Qualitative Vis A Vis Quantitative Approach To Address Poyerty: A Malaysian Perspective

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Abstract

Traditionally, our understanding of poverty has been based on comparisons of standardized quantitative measures including income and welfare statistics. However, quantitative method alone does not reveal the most subjective elements of poor people's experiences of poverty. Besides, recent studies show a shift in paradigm towards qualitative methods. This paper attempts to demonstrate that both quantitative and qualitative methods are essential in providing a holistic understanding of poverty. Given the multi-dimensional nature of poverty, quantitative methods need to be complemented with qualitative measures. This paper is conceptual in nature. Based on the content analysis, an extensive review of secondary data was undertaken to examine and understand the rising phenomenon of current paper on poverty in Malaysia. Being a concept paper, the study concludes by providing implication of using both methods in understanding how poverty occurs, why it persists, and how it may be alleviated.

JEL Classifications: I13

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1.0 Introduction

Poverty is an intractable challenge for most countries of the world. It is not only spreading fast but also becoming severe in many countries. In Malaysia, poverty is largely perceived as a rural problem with strategies, programmes, and development expenditure reflecting strong rural bias. In fact since the colonial era, the discourse on the notion and perception of poverty in Malaysia was that of rural poverty (Sulochana, 2007). However with rapid urbanization, structural transformation, and rural-urban migration, urban poverty has become critical (Sulochana, 2007). Hence, existing policies and programmes with their inherent biases towards the rural are unlikely to have a serious impact on urban poverty. In response to this effect, both government and non-governmental organization(NGO) have currently renewed their interests and recommitted themselves to address urban poverty particularly issues related to poverty measurement. It must be noted here that this paper would address the nature of poverty measurement in general without exclusively emphasising either in the rural or urban area.

Poverty measurement technique has been a major issue in research related to poverty either both in the rural or urban area. The complexity of measurement mirrors the complexity of definition and the complexity increases where participatory methods are used and people define their own indicators of poverty. And ultimately the poverty alleviation programmes have so much bearing on the nature of poverty measurement. Furthermore, the measurement is very much related to the research method used by researchers. Hence, in Malaysia and most part of the world popular research method used is based on quantitative approach. On the contrary, since urban poverty vis-a-vis rural poverty is rapidly increasing, it becomes more complex and vulnerable because of insecure tenurial status, health threatening, environmental condition and changes in basic prices of commodities, its research method also becomes multidimensional and calls for a more comprehensive set of measures to address it (Mohd Yusof, 1994; Ragayah, 2004 and Denison, 2005;). In this regard, the type of research methods used not only ought to be comprehensive but should transcend narrow ethnic boundaries and be conceived as part of overall development efforts. Hence, this study is meant to complement the quantitative approach with the qualitative approach as the comprehensive research method to measure poverty. In addition, the study would also make an attempt to analyze to what extent the mixed-method approach can be utilized as an appropriate research method so as to formulate a better measurement to alleviate poverty.

2.0 Background: Changes in the Conceptualisation of Poverty Measurement

A number of different meanings have been given to 'poverty'. A major task of the social sciences is to establish a robust conceptualization which stands up to international usage. Little attempt has been made to consider how far poverty deserves to be treated as a scientific phenomenon with universal application. A striking fact is a difference between analyses of poverty in rich and poor societies. Thus, is poverty simply about the level of income obtained by households or individuals? Is it about the lack of access to social services? Or is it more correctly understood as the inability to participate in society, economically, socially, culturally or politically? The answer is that the term has been used in all these ways. Hence, the complexity of definition mirrors the complexity of measurement, and the complexity increases where participatory methods are used and people define their own indicators of poverty. The proliferation of concepts and indicators would matter less if the same individuals were being identified by all measures. However, there is often a limited correlation.

Poverty is not only blessed with a rich vocabulary but also in terms of measurement and indicators, in all cultures and throughout history. The conceptual complexity which leads to poverty measurement difficulty as well can be understood as a series of fault lines in the debate about poverty. There are nine of these factors which expounds the various aspects of poverty debate on measurement and illustrates

the difficulties in determining a unidimensional approach in measuring poverty (Maxwell, 1999): **First, individual or household measures.** Early measurement of poverty (e.g. by Rowntree) was at the household level, and much still is. Another analysis disaggregates to the individual level, so as to capture intra-household factors and different types and causes of deprivation affecting men, women, children, old people, etc. **Second, private consumption only or private consumption plus publicly provided goods.** Poverty can be defined in terms of private income or consumption (usually consumption rather than income, in order to allow for consumption smoothing over time, e.g. by managing savings), or to include the value of goods and services provided publicly, the social wage. **Third, monetary or monetary plus non-monetary components of poverty.** Money-metric measures are often used because they are either regarded as sufficient on their own or seen as an adequate proxy for measuring poverty. However, there is a clear fault line between definitions of poverty which are restricted to income (or consumption) and those which incorporate such factors as non-monetary (self-esteem, empowerment or access to opportunities). In Maslow's hierarchy of needs, these were seen as higher needs, which would become more important as basic needs for food, shelter, housing and safety were met. However, many current definitions deliberately blur the distinction between higher and lower needs. **Fourth, snapshot or timeline.** Many surveys and poverty assessments report the incidence of poverty at a point in time. However, there is a long history of thinking about poverty in terms of life cycle experience, seasonal stress, and shocks (illness, drought, war). In both North and South, there has been increasing attention to understanding movement in and out of poverty, what Jenkins calls 'bottom-end churning'. **Fifth, actual or potential poverty.** Some analysts include as poor those who are highly sensitive to shocks, or not resilient. Small-scale farmers exposed to the risk of drought are an acommon example: current income may be adequate, but vulnerability is high. Planning for these groups means understanding both short-term coping strategies, and also long-term adaptation to livelihood stress. **Sixth, stock or flow measures of poverty.** The definition of poverty as income focuses on the flow of material goods and services. An alternative is to examine the stock of resources a household controls. This may be measured in terms of physical or monetary assets (land, jewellery, cash), or in terms of social capital (social contacts, networks, reciprocal relationships, community membership). Sen analysed the commodity bundles to which an individual was 'entitled' and has emphasised, entitlements may derive not just from current income, but also from past investments, stores or social claims on others (including the State) (Devereux, 2001). **Seventh, input or output measures.** Sen has reminded us that poverty measured as a shortfall in income essentially captures an input to an individual's capability and functioning rather than a direct measure of well-being. Writing about poverty has often assumed, wrongly, an automatic link between income and participation, or functioning, in the life of a community. **Eight, absolute or relative poverty.** The World Bank currently uses a figure of \$US1 per day (in 1985 purchasing power dollars) for absolute poverty. The alternative has been to define poverty as relative deprivation, for example as half mean income, or as exclusion from participation in society. Thus the European Union has decided that 'the poor shall be taken to mean persons, families and groups of persons whose resources (material, cultural, social) are so limited as to exclude them from the minimum acceptable way of life in the member state in which they live'. **Ninth, objective or subjective perceptions of poverty.** The use of participatory methods has greatly encouraged an epistemology of poverty which relies on local understanding and perceptions. For example, exposure to domestic violence may be seen as important in one community, dependency on traditional structures in another.

According to Mohamed Saladin, Fauzi Mohd, Ariffin Mohd & Noraini Idris (2011) employment of correct measurement is essential in identifying certain target group, which would enable the researchers to suggest appropriate policies in addressing the issue of poverty. Each definition would describe the poor differently and would result in different estimation and extent of poverty (Benner 2001). Similarly, Laderchi (2003) stressed that choosing different definitions are as vital as they use different measurements in terms of variables. Thus, different definitions identify different dimensions of poverty and consequently identify different individuals or households as poor groups. In her study undertaken in Peru and India, Laderchi (2003) found that the usage of the different measurements has resulted in different households or individuals being defined as impoverished. The overlapping of poor individuals according to different definitions are significantly small. In other words, more than half of impoverished individuals or households in one definition would differ from the other groups and vice versa. The various approaches to poverty measurement are explained below.

Defining poverty would lead to proper measurement methods and governments and donors depend on poverty assessments to allocate aid, evaluate programs and track change over time. “If you can’t measure it, you can’t manage it,” according to Sylvia Whitman (2008), a worldwide consortium of number crunchers affiliated with the United Nations. She added, sizing up poverty is an inexact and controversial science. Incidentally in total, researchers commonly use tools to measure poverty, such as monetary approach, capability approach, social exclusion approach and poverty participation approach”.

For long the study on measurement of poverty draws heavily from economics, a mathematically inclined social science. Thus, poverty lines quantify deprivation. Experts set a baseline of income or expenditures from survey households and count who falls below the cutoff point known as poverty line income (PLI). As long as researchers design the model carefully and gather accurate information from a representative sample, this method provides precise, objective, and standard results, with figures that can be easily compared from year to year or group to group. Drawbacks, however, include the high cost of large-scale surveying and the need to avoid new variables. Critics also question the long-standing practice of gathering information from households and then extrapolating figures for individuals, which overlooks inequalities within the household, such as between men and women, or among adults, children, and the elderly. This approach to specifying the PLI is known as absolute approach and relative approach to measure poverty.

Absolute poverty measures the level of income just enough to maintain the basic minimum standard of living or basic needs that include both food and non-food items. Hence, this approach is more concerned with ensuring that nobody in the society should have a standard of living that is below this minimum standard of living known as poverty line income (PLI). In contrast, the relative poverty’s measurement is based on the income of an individual in comparison with another individual or others notwithstanding (even if) the income of the former exceeds a certain PLI. Besides, relative poverty is based on the cultural environment around them, not on a basic amount necessary for all humans to survive. Hence, as far as relative poverty measurement is a concern, a person may not be categorized as an absolute poor but he/she is still a poor relatively to another person or society who has higher income than him/her.

Mohamed Saladin, et al. (2011) argues relating poverty to the assessment of individual well-being and social arrangements, the focus capability approach as a second approach is different from the traditional method that involves income as the main element of poverty. Pioneered by Sen (1985), this approach includes non-income items such life expectancy, literacy and infant mortality in measuring poverty. As Sen (1999) explains it, ‘In this perspective, poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes, which is the standard criterion of identification with poverty’ (Sen, 1999).

According to Sen (1987, 1989 and 1999), this capability notion postulates that poverty results from a lack of capability to ‘function’ or to ‘achieve’ well-being, where well-being is defined as the “ends” and capability as the “means” to achieve it. Rejecting the welfarist and utilitarian theories, Sen concentrates on the quality of life and emphasises on the removing of obstacles so that people could have more freedom to function. He deliberates basic capability as the freedom to do basic activities necessary to avoid poverty. Sen (1997) explains functions as activities and actions individuals want to perform including working, resting, being healthy, being literate and being respected. Alkire (2002) concurs capability as a freedom to function in daily life. From a different perspective, Robeyns (2005) stressed that capability approach emphasised on what people are effectively able to do and to be. Contrasting with Sen’s ideas, Nassbaum (1992 & 2000) develops the capability approach by focusing on individual’s skills and personality traits. Specifically, she proposes a list of capabilities such as life, bodily, health, bodily integrity, emotions and others. Ayala, Jurado & Mayo (2009) who studied the relationship between income poverty and multidimensional deprivation in Spain, found that the determinants of both phenomena vary according to regions and both have a weak statistical relationship. Similarly, Notten (2009) concurs in his study that was carried out in the physical environment of children in the Republic of Congo that monetary poverty and deprivation are not strongly correlated

although they are positively related.

Social exclusion as the third approach of poverty measurement is defined as a process when individuals or groups are excluded whether fully or partially from the participation with the society they live in (Mathieson et al, 2008). This concept of poverty measurement was developed by industrialised countries to describe the phenomenon of deprivation and marginalisation. This concept was first developed by Townsend (1979) in his attempt to explain deprivation as those who are excluded from the ordinary living pattern, customs and activities. In a study in England, Burchardt (1999) defined those socially excluded as those excluded from normal activities such as consumption, savings, production, political and social activities. Other researchers such as Strobel (1996), Evans (1998) and Taylor (1999) supported the idea of social exclusion approach in explaining poverty using the economic, political and cultural dimensions.

Finally, poverty participation, as poverty measurement approach is a family of approaches and methods which enable communities to share, develop and analyse their own knowledge of life and conditions (Chambers, 1996). By empowering local people to conduct their own modes of investigation, communities can plan and act (Chambers, 1992) on their own outcomes, developing more community-based solutions (Sellers 1996). To achieve this community aim requires researchers to recognise the wealth and value of local knowledge and information. Hence, the methods explained above look at poverty from the perspective of parties involved in policy making or researchers, but poverty participation approach takes into account the views of poor people themselves. Instead of viewing poverty from outside which is regarded as incomplete, Chambers (1997), who pioneered this approach pointed out that the participation of the poor themselves in decisions and policies is vital in understanding the meaning and extent of poverty. The advantage of this approach is it involves the interpretation and understanding of poverty from various dimensions depending on the subject studied. On the other hand, the disadvantage of this approach is that the process of data gathering is lengthy. Due to this, sample sizes of participants are often small, making statistical data analysis difficult (Laderchi, 2003). Therefore, policy makers often do not take seriously the findings or the results reported employing this approach.

From the forerunning discussion of the different approaches in the measurement of poverty, it is evident that various conceptualisation of poverty leads to various measurement in poverty. Hence, poverty measurement is deemed multidimensional so as to formulate effective poverty alleviation program in a multi facet poverty phenomenon. Having described the salient features of the poverty measurement in chronology, the following section would expound on the advantages of mix method approach.

3.0 The Mixed Method Approach

In the past when poverty was confined to a rural area, a quantitative method was popularly used to collect data to determine the poverty measurement (Jasmine, 2007). Today, with the rise of urban poverty due to rapid urbanization, poverty is increasingly recognized as a multidimensional concept. Therefore, the methodology to collect poverty data can be elucidated not only based on quantitative approach but also qualitative approach.

Poverty analysts, particularly for urban poverty, have been highly active in the policy debates since the past decade in the qualitative and quantitative traditions. While quantitative approaches have been dominant in the past, especially in the policy-making circles, the use of qualitative approaches has been increasing recently. There is also a concern while quantitative measures provide important aggregate level information; these data are able to tell only a partial story. Poverty varies across and within

countries; its precise contours and dimensions are always contingent on time, place, and social groups involved (Deepa et al., 1999). A quantitative approach which is based on aggregate data by definition, does not reveal location specific variations. Neither do these data reveal the most subjective elements of poor people's experience of poverty or the ways in which individuals cope (Baulch 1996).

Table 1: Characteristics of the Quantitative and Qualitative Approaches

	Characteristics	Quantitative Approach	Qualitative Approach
1	Definition of Concept	Is an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers/numerals, analyzed with statistical procedures, in order to determine whether the predictive generalization of the theory hold true.	Is an inquiry process of understanding a social or human problem based on building a complex, holistic picture, formed with words (non-numerical), reporting detailed views from the informants (participants) perspective and conducted in a natural setting.
2	Definition of Poverty	People considered poor if their standard of living falls below the poverty line, i.e., the amount of income (or consumption) associated with the minimum acceptable level of nutrition and other necessities of everyday life	Poor people define what poverty means the broader definition of deprivation resulting from a range of factors (not simply lack income/consumption) adopted.
3	Philosophical underpinning	Positivist paradigm: the existence of one reality (Chung 1996).	Rejection of the positivist paradigm: there are multiple forms of reality and, therefore, it is senseless to try to identify only one (Chung 1996).
4	Determination of poverty	Determination by external surveyors.	Determination through an interactive internal-external process involving facilitator and participants.
5	Nature of variables for which data is collected	Quantifiable, e.g. household expenditures on food, unemployment rate.	Perception variables reflecting attitudes, preferences, and priorities(See Moser 1996,); the number of similar responses with respect to each variable themselves cannot be quantified.
6	Interview format	Structured, formal, pre-designed questionnaire	Open-ended, semi-structured, interactive.
7	Sampling	Probability sampling.	Purposive sampling.
8	Sampling error	Less sampling error but prone to more non-sampling sampling.	More sampling error but tends to reduce non-sampling error.
9	Sampling error	Less sampling error but prone to more non-sampling sampling.	More sampling error but tends to reduce non-sampling error.
10	Statistical Analysis	Statistical Analysis forms an important part of approach.	Statistical analysis makes little or no use of it. Triangulation is employed i.e., simultaneous use of several different sources and means of gathering and interpreting information. The expectation is that bits and pieces of information gathered from different sources will yield a pattern of responses. Systematic content analysis and gradual aggregation of data based on themes from the household, group, village, district, and national levels may also be used.

Source: Combining the Quantitative and Qualitative Approaches to Poverty Movement and
Analysis: Practice and Potential (Sonia Carvalho & Howard White, 1997)

Incidentally, there have also been increasing attempts at integrating the two approaches as mix method. However, why is there a need for a mixed-method approach to poverty measurement? According to Baker and Schuler (2004) defining and analyzing urban poverty can be complex as it is multidimensional. For this reason of complexity and by extension cost, most urban poverty studies will target only a particular aspect of urban poverty. When designing a study of urban poverty, it is useful to focus on certain aspects specific to the urban poor that are of particular concern and this will affect the design and approach of the study. For example, to generate a poverty map or spatial poverty profile, a mapping of slums, or access to services, quantitative data collected through a census or household survey would be required. For focusing on issues of urban crime and violence and its link to poverty, supplementing quantitative data with a qualitative approach may be more appropriate. Thus, several approaches may be combined to capture a more comprehensive analysis of urban poverty.

Table 2: Differences Between Qualitative and Quantitative Inquiry

	Qualitative	Examples from the tools tests	Quantitative	Examples from the tools test
1	Lower a number of respondents.	Honduras and Mali, approximately 12 clients per individual tool and 6 focus groups.	A Higher number of respondents.	In Honduras and Mali between 72 and 96 respondents were included in the Impact Survey.
2	Open-ended questions and probing yield detailed information that illuminates nuances and highlights diversity .	Loan Use Strategies Over Time tool demonstrates the diversity and complexity of how clients vary their loan activities over time.	Specific questions obtain predetermined responses to standardized questions.	Impact survey results reported the percent of clients who believed their enterprise income had increased in the last year and whether significantly more clients than non-clients reported increases.
3	Data collection techniques interviews vary.	Focus group discussions and in-depth individual.	Relies on surveys as the main method of data collection Impact.	Survey and Client Exit Survey.
4	More focused geographically (limited use of vehicles).	Specific locations identified for special characteristics; for example, urban vs. rural, vendors vs. Manufacturers.	More dispersed geographically (more use of vehicles).	In Mali, three categories of communities (towns, large villages, small villages) with three categories of clients (one-year, two-year, and incoming).
5	More varied techniques in data analysis Empowerment tools, With a focus on grouping similar responses.	The simple content analysis is applied with the Loan Use Strategies Over Time and Client.	Relies on standardized data analysis.	Use of Epi Info software to report descriptive statistics (prevalence and means) and to test for statistically significant differences between sample groups
6	More suitable when time and resources are limited.	Interviews took one to two hours to conduct, but fewer were done.	Relies on more extensive and big group of respondents.	Impact Survey takes 45-60 minutes with each client and done with a large number; Client Exit

				Survey takes 25 minutes.
7	Empowering and participatory.	Ask for participants' reflection on their experience	Not empowering	Areas of inquiry are predetermined
8	Sampling depends on what needs to be learned.	Clients selected by key variables; for example, gender, time in the program, type place they stay.	The sampling focus is on probability and "representativeness".	Considerable effort to randomly select clients within stratified samples to ensure "representativeness" of results and comparability of sample groups.
9	Provides information on the application of the program in a specific context to a specific population	In Honduras, the Loan Use Strategies Over Time tool highlighted differences between individual and village bank clients.	More likely provides information on the broad application of the program.	In Mali, stratified samples clarified differences between rural and urban areas, but responses also pooled for general comparison to nonclient group.
10	Explores causality	Generates hypotheses.	Suggests causality.	Tests hypotheses.

Source: Patton, 1990; Gosling and Edwards, 1995; Carvalho and White, 1997

In the case urban poverty in Penang, the past research done by Socio-Economic And Environmental Research Institute (SERI) in 1998, which was based on solely quantitative approach, did not tell the whole story about the poverty experienced by the actors (SERI, 1998). Incidentally, qualitative methods may be more appropriate in dealing with various issues related to poverty which cannot be answered easily through quantitative methods. For example, qualitative methods make a unique contribution to the understanding of processes shaped by the subjective perception of the social actors. It also may be able to explain the meaning and value people attached to various aspects of their life and how they themselves define poverty as individuals.

In view of the aforementioned contention, this paper highlights the key characteristics of the quantitative and qualitative approaches to poverty measurement and analysis, examines the strengths and weaknesses of each approach and analyzes the potential for combining the two approaches in analytical work on poverty.

A number of characteristics differentiate the quantitative approach from the qualitative approach to poverty measurement and analysis. The main differences between the two approaches are discussed and summarized in Table 1 and 2 below:

According to Carvalho and White (1997), there are a number of ways in which the quantitative and qualitative approaches may be combined in the measurement and analysis of poverty. Three major ways of doing so are:

- i. integrating the quantitative and qualitative methodologies;
- ii. examining, explaining, confirming, refuting, and/or enriching information from one approach with that from the other; and
- iii. merging the findings from the two approaches into one set of policy recommendations.

The key is to tap the breadth of the quantitative approach and the depth of the qualitative approach. The exact combination of qualitative and quantitative work will depend on the purpose of the study and the available time, skills, and resources. In general, integrating methodologies can result in better measurement; confirming, refuting, enriching and explaining can result in the better analysis; and merging the quantitative and qualitative findings into one set of policy recommendations can lead to better action.

Of the three ways of combining quantitative and qualitative approaches as mention above, the first has been less common in Poverty Assessments, but the second and third have been supported in almost every Poverty Assessment reviewed papers-albeit to varying degrees

Carvalho and White (1997).

4.0 Discussion

Having discussed the various changing dimensions of qualitative and quantitative measurements in the light of poverty study in general; can these changes be applied in the Malaysian poverty context?

In the Malaysian context, according to Norzita Jamil and Siti Hadijah(2014), poverty measurement since the poverty measurement inception, is explained through a quantitative approach, i.e., a financial perspective or income. Through this concept, poverty is divided into two, absolute poverty and relative poverty. However, poverty in Malaysia is often referred to as absolute poverty income households compared with Poverty Line Income (PLI). This type of measurement, using the income method in identifying an individual or household poor also as a measurement of unidimensional. Having said that, the study would further expound the various studies which had been conducted in Malaysia using various approaches to address poverty phenomenon (Mohamed Saladin et al., 2011).

Among the earliest studies undertaken was by Ungku Aziz (1964) who introduced three socio-economic measures of poverty in his study on poverty and rural development, namely nutrition, mortality rates and the *sarong*⁴ index. Firstly the relationship of poverty with low-level nutrition was highlighted. He pointed out that the level of poverty is negatively correlated with the level of animal protein as protein intake is positively correlated with income. Therefore, an increase in poverty will be associated with a decrease in the protein intake and vice versa. Secondly, emphasising the relationship between poverty and mortality, Ungku Aziz suggested that a reduction in poverty is shown by the increase in life expectancy and a decrease in infant mortality. Thirdly, the number of *sarong* divided by the number of households above the age of one known as *sarong index* was used to reflect the severity of poverty. The index was used primarily to measure whether there was an increase or decrease in poverty. However, due to its susceptibility to variations in fashion, the *sarong index* was deduced to be

⁴ It is a common attire in the form of cloth worn by most Malaysian then. The more sarongs one has indicates their wealth status.

unpractical and was consequently abandoned.

Other studies such as Anand (1977) and Shireen(1998) developed poverty profiles in their studies. Both studies found that the percentage distribution of poverty among the values of each demographic variable locate concentrations of poverty. Furthermore, groups with a high incidence of poverty indicate a high-risk group of poverty. Anand (1983), Ishak Saari (1997) and Jamilah Ariffin(1997) adopted head-count ratio and revealed that poverty in Malaysia is more prevalent in rural areas. In another study, Mohd Yusof (1994) highlighted that poverty incidence in urban areas is different from rural areas as urban poverty is associated with factors such as the cost of living. The argument is in tandem with Ragayah (2002; 2004) who mentioned that poor urban households are more vulnerable to economic shocks compared to rural poor households.

In his study applying distributive-sensitive poverty indices, Roslan (2004) concluded that all measurements used such as poverty-income gap index, Sen index, and FGT (Foster-Greer-Thorbecke) index, showed that there is evidence of poverty reduction, consistent with the government published figures. Employing Malaysian Family Life Survey (MFLS), Roslan used the cash and non-cash income to proxy income received by households. More recent studies by Mohd Taib (2002) and Mohd Fauzi (2009) used social exclusion approach to study various patterns and behaviour of the poor. While Mohd Taib (2002) concentrated on the urban poor, Mohd Fauzi focused his study on Malaysian natives (Orang Asli). He developed human poverty index from the context of Malaysian natives to study the effect of marginalisation or social exclusion on the quality of life amongst the natives in the state of Perak. He concluded that there is a positive correlation between poverty and marginalisation. The more natives are marginalised, the poorer are their conditions.

Poverty was also measured by the multidimensional natured index taking into account different dimensions such as education level, healthcare, quality of dwelling etc. Specific dimensions that contributed to the high poverty incidence of natives such as social and economic exclusion such as education facilities, healthcare, and infrastructure were highlighted. In other words, Mohd Fauzi (2009) acknowledged the importance of studying poverty using the multidimensional approach from the perspective of natives. In the same light, Mahmud et al. (2010) have also applied the multidimensional application by adopting Fuzzy Index Poverty approach at the rural area in Terrangganu. Subsequently, in another study, Siti Hadijah et al.(2012) applied the similar approach of multidimensional poverty index based on the Alkire and Foster method in the district of Daerah Baling, Kedah. Finally, Nadia et al.(2011) have also measured poverty based on multidimensional approach among the University Teknologi MARA (UiTM) students in Shah Alam. However, such studies are still scarce in Malaysia particularly to measure multidimensional poverty index at the national level. Therefore, a multidimensional approach which is based on quantitative as well as a qualitative research method is deemed necessary in understanding poverty in Malaysia.

From the forerunning discussion on the salient features of quantitative and qualitative approaches, it is evident that this paper suggests, a multidimensional triangulation approach in the methodical and theoretical application. For example, quantitative methods have been appropriately criticized for not taking into sufficient account information on context, or, similarly, being too shallow or narrow in the questions posed (sources). In part, these deficiencies are remediable at a reasonable cost, even in large-scale household surveys, through incorporating techniques and approaches used more frequently in qualitative methods.

Although, implementing a genuinely multidimensional approach will often make the welfare rankings of social states (including policies) more difficult, it may also have important policy implications in its own right, given that there can be some degree of correspondence between policy instruments and welfare objectives. It also has implications for the types of models that are used to understand the processes determining poverty and inequality in both rural and urban area. There will not only be more

independent variables to consider, but there will also be some potentially complex interrelationships amongst these variables. Low income, for example, is likely to be both a cause and effect of poor health and schooling i.e, quantitative paradigm. On the contrary, the prospects of escaping poverty may be highly dependent on the individual, household and community characteristics i.e, qualitative paradigm. These interrelationships will often be difficult to disentangle empirically though richer integrated (mix-method of quantitative and qualitative paradigm) and longitudinal data sets offer hope of doing so.

Such data open up a rich and relevant agenda of research into the dynamics of poverty and inequality along multiple dimensions (mix-method of quantitative and qualitative paradigm). A simultaneous attack on these issues from all three fronts-measurement, modeling and data offers hope of establishing a credible empirical foundation for public action in fighting poverty particularly for the poor Malaysian. And ultimately the poverty alleviation programmes have so much bearing on the nature of poverty measurement.

Malaysia's commendable success in reducing its poverty incidence from 49.3% in 1970 to 0.6 % in 2014 is attributed to various factors including rapid economic growth with macroeconomic stability and the inclusion of poverty reduction as an integral element of its development strategy. However, despite policy commitment to poverty eradication evidenced in terms of strategies, programmes, and projects as well as budgetary allocations, poverty continues to be a major development concern in Malaysia especially after poverty analysis took a new broader dimension when Amartya Sen introduced and developed the Capability Approach that viewed poverty as a multidimensional aspect and not just a result of deprivation of a single resource such as income (Sen, 1980, 1985a, 1985b, 1992 and 1999).

In the same light, Sulochana (2010) asserted that even the recently launched New Economic Model (NEM) which was strategized as an important poverty alleviation tool appears to have the required characteristics of a framework with its emphasis on inclusiveness (a multidimensional perspective) of the bottom 40 % of the population in the development process and the recognition that excessive focus on ethnicity-based distribution of resources contributes to growing separateness and dissension. The NEM also recognizes that not having the opportunities to benefit from economic progress breeds resentment within marginalized groups in the urban and rural areas, especially those in remote locations of Sabah and Sarawak. The NEM incorporates a new approach to development which it defines as *inclusive growth*, which is pro-poor and concerned not only with the level but also the effect of 47 persistent inequalities along ethnic lines class, occupation, age, regional location on economic growth and poverty alleviation.

Sulochana (2010) also argued that a key challenge of inclusive growth in Malaysia is the design of effective measures that strike a balance between the special position of *Bumiputera* (the native of the country-the Malay ethnic group) and legitimate interests of different ethnic groups (namely the Chinese and Indian ethnic groups). Under the NEM market-friendly affirmative action programmes are to be designed to a) target assistance to the bottom 40% of households, of which 77.2% are *Bumiputera the majority of whom are* located in Sabah and Sarawak, b) ensure equitable and fair opportunities through transparent processes, c) allow access to resources on the basis of needs and merit d) enable improvements in capacity, incomes and well-being, e) have sound institutional framework for better monitoring and effective implementation.

From the above explanation, hitherto, it is worthwhile to explore relative poverty and multidimensional poverty methods (using indicators suited to the Malaysian scenario) so as to enhance the poverty measurement method in its efforts to identify the correct poor group which would be able to facilitate effective poverty eradication efforts as exemplified by Figure 1 (below) for future research.

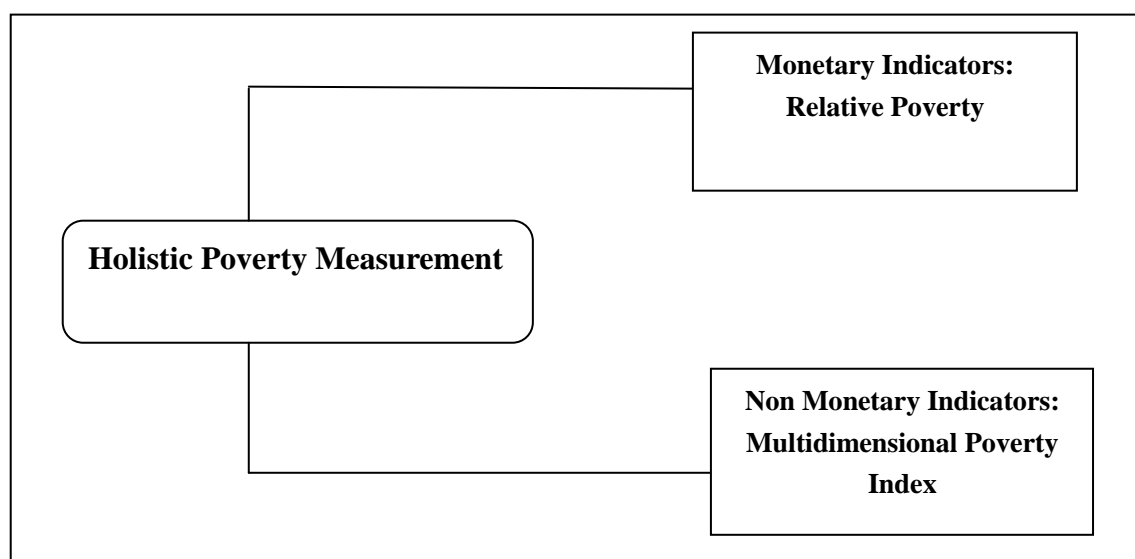


Figure1: Proposed Holistic Poverty Measurement for Malaysia

Source: Mohamed Saladin and Arifin Md Salleh. Universiti Teknologi MARA (UiTM), Melaka Branch.

Hence, this paper proposes (based on Figure 1) the current poverty measurement approach to be adopted by the state as an intrinsic features of the state policy as this paper identifies that the multifaceted approach was the measurement gap that existed for so long as far as the poverty measurement approach and poverty alleviation programme is concerned. Incidentally, the relative poverty and multidimensional poverty measurements are identified as a near future method of measurement in the Malaysian context, in line with the status of high middle income nation of the 10th and 11th Malaysian Development Plan. The relevant statistical data related to this method could be utilised to appropriately measure poverty. Consequently, poverty eradication efforts could be carried out more effectively. Furthermore, Malaysia is undergoing transformation efforts towards a developed nation. When Malaysia realises a fully developed nation status, it would have to move towards subjective well-being measurement, following the footsteps of developed nations. For instance, Japan has developed the Well Being Framework in December 2011 to provide overall well-being for its people, consisting of subjective well-being, socio-economic and sustainability indicators. It will be significant then for Malaysia to expound future research in relation to alternative dimension in measuring poverty. The introduction of the proposed index would give alternatives in identifying the poverty group to policy makers from a different perspective. Using index as a method to measure poverty, the MPI is envisaged to reflect the multi-dimensional phenomenon of poverty in a more holistic way. Thus, a study to develop this proposed index is deemed necessary and should be undertaken with immediate effect to address the issues highlighted in this paper with regards to poverty measurement.

5.0 Conclusion

The main conclusion of this paper is that sole reliance on either only the quantitative approach or only the qualitative approach in measuring and analyzing poverty is often likely to be less desirable than combining the two approaches. This is because there are limits to a purely quantitative approach as well

as a purely qualitative approach to poverty measurement and analysis especially in the light of the multidimensional nature of poverty phenomenon today. Hence, relying on one method alone does not suffice. Each approach has an appropriate time and place, but in most cases both approaches will generally be required to address different aspects of a problem and to answer questions which the other approach cannot answer *as well* or cannot answer *at all*. Nevertheless, the need to combine the two approaches in analytical work on poverty cannot be overemphasized or rigid.

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