# A STUDY ON DEVELOPING A MONITORING SYSTEM FOR THE BIMP-EAGA REGION

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#### **ABSTRACT**

BIMP-EAGA, which stands for Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA), is Asia's largest regional grouping. One of the main purposes of setting up BIMP-EAGA is to address the socio-economic development of the less developed and marginalized areas of the four member countries. Thus, it is important to develop a poverty monitoring system for the region and thereafter, determine the progress in poverty eradication programmes. However, prior to the development of a poverty monitoring system, the definition of poverty for this region has to be identified and standardized for the four countries. This exploratory study will be based on qualitative research methodology given that there has not been any prior study on poverty monitoring for the BIMP-EAGA region. From a total of 11 focus areas, 7 focus areas have been selected for this study. Areas selected are Brunei Darussalam, Sulawesi and Kalimantan (Indonesia), Sabah and Sarawak (Malaysia), and Mindanao and Palawan (Philippines). The results for incidence of poverty for the selected areas in Malaysia (between 5.3% and 19.7% in 2009) and Indonesia (between 10.1% and 17.9% in 2007) show significant improvement since 2004. The results for Philippine range between 37.6% and 40.8% in 2006. All available data on Brunei Darussalam show none of its citizens are living in poverty.

Keywords: BIMP-EAGA, Poverty, Monitoring, Development

## 1.0 INTRODUCTION

BIMP-EAGA stands for Brunei Darussalam-Indonesia-Malaysia-Philippines East Asean Growth Area, which was established in 1994 to promote development in the sub-regions. The sub-regions or focus areas comprise of the entire sultanate of Brunei Darussalam; the provinces of Kalimantan, Sulawesi, Maluku, West Papua and Papua in Indonesia; the states of Sabah and Sarawak and the federal territory of Labuan in Malaysia; and the island of Mindanao and the province of Palawan in the Philippines. The area covers a land area of 1.6 million square kilometers and has a combined population of more than 57 million.

Although the focus areas are rich in natural resources they are the least developed areas in their respective countries. The key objective of setting up BIMP-EAGA is to accelerate development in these areas, with the ultimate goal of eradicating poverty through the cooperation of the governments of the four countries with private sector.

With any poverty eradication programmes, measurements of poverty must be established before the determination of the degree of success. Unfortunately, the meaning of poverty varies from one country to another thus, making comparison and measurement difficult.

The purpose of this research is to set up a common measurement of poverty so that ultimately, a monitoring system can be established. After the establishment of a poverty monitoring system, only then the degree of success can be measured and comparison can be made.

#### 2.0 METHODOLOGY

# Issues in measuring poverty in BIMP-EAGA

## Assessing poverty

In general, there are three commonly used methods in assessing poverty. First method is the construction of a poverty line and computation of various poverty indicators that take into consideration of the way actual household expenditures falls below the line.

Second method involves the ranking of household by wealth. This is whereby the community members assess and rank each household based on the wealth of the household.

The last method is where a poverty index is constructed using a range of quantitative and qualitative indicators to reflect that standard of living involves both quantitative and qualitative factors.

## Definition of poverty

However, a more persistent issue in measuring poverty is the definition of poverty. Throughout the world, the definition of poverty varies from one country to another and this is true even within the BIMP-EAGA region.

The standard definition of poverty in many developing countries is the inability to access basic resources such as clean water, electricity, and nutritious food to enable the enjoyment of minimal or acceptable standard of living to maintain health and ability to work. However, the measurement to maintain the minimum "acceptable" standard of living also varies from country to country. For example, minimum acceptable standard of living can range from maintaining minimum consumption of calories for well-being in some least developed countries to having shelter and clothing in most developed countries. Therefore, it is difficult to compare poverty across the BIMP-EAGA region.

# Poverty measures

There are various measurement used for poverty assessments. The first natural measure of poverty is the proportion of poor people in the population or the head-count ratio (HCR). The HCR is defined below:

where q is the number of individual below the poverty line and N is the total number of population. However most analysts rarely rely on this method as it fails to capture and differentiate various "states" of poorness.

The second method is based on the income approach. This measures the income gap for the poor in the country. The gap represents the income needed or required to raise income towards the poverty line with respect to the total income. This method is known as poverty gap ratio (PGR). The PGR is defined as below:

$$PGR = \frac{g_i > p}{nm}$$

where p is the poverty line, g is the income of the individual, n is the total population and m is the mean income for the population thus nm become the total income of the society.

The PGR was formulated as the ratio of total income transfer necessary to bring everyone out of poverty incidence. However, by applying this method the existing data on household survey is crucially needed for each country.

The third method is known as the income gap ratio (IGR). The IGR is closely related to PGR but the only difference lies on the denominator. The denominator for PGR is measured based on the total income of the population in a country; whereas, the IGR is based upon the total income of the poor. The formula is exhibit as below:

$$IGR = \frac{\sum_{\gamma_i > p} (p - \gamma)}{p * q}$$

where q is the total number of people in poverty. The IGR is the measurement of total income needed to remove poverty relative to the total income if all the poor people were raised to the point where they escaped poverty. The IGR figure will be much larger compared to PGR since the denominator of IGR is smaller.

## **Research Methodology**

This research will be using qualitative approach, where a naturalistic approach would be employed that seeks to understand the phenomena in context specific settings where the researcher does not attempt to manipulate the phenomenon of interest. Apart from qualitative, the study will also employ quantitative method to measure poverty and the development in overcoming it.

This is an exploratory study since there has never been any previous study on poverty monitoring system for the BIMP-EAGA region. This study tries to establish a common measure of poverty among the BIMP-EAGA countries. To achieve this objective, secondary data or published data will be used whenever possible. Secondary data mainly consisted of annual statistics and census published by each of the country. If such data is not available alternative sources will be used.

Out of a total of 11 focus areas, 7 focus areas have been selected for this study. Areas selected are Brunei Darussalam, Sulawesi and Kalimantan (Indonesia), Sabah and Sarawak (Malaysia), and Mindanao and Palawan (Philippines).

## 3.0 RESULTS

#### Brunei Darussalam

The sultanate total population was 388,190 in the year 2009. The Gross Domestic Product (GDP) per capita for Brunei was \$50,100 (2009), which was the highest among the members of BIMP-EAGA. The country's economy was strong and stable and it had no external debt.

The research found that there were no previous studies or any published information on poverty. Secondary data on poverty in Brunei was not available as it was considered that poverty did not exist in the country. The government social programmes mainly focused on issues such as unemployment, orphanage, single mothers rather than poverty.

Therefore, in terms of poverty, all available information had so far showed no indication of any Brunei citizens living below the poverty line.

#### Indonesia

### Kalimantan

Kalimantan is divided into four provinces, East, South, West and Central Kalimantan. Based on Badan Pusat Statistik (Statistics Indonesia) total population was 13,065,800 (2009), with West Kalimantan took the lead at 4,319,100. The Gross Regional Product (GRP) is the counterpart of the national GDP. In 2008, the GRP per capita for East Kalimantan was \$11,257, South Kalimantan was \$1,459, West Kalimantan \$1,259 and Central Kalimantan was \$1,737. The country GDP income per capita was \$2,395.

Table 1.1 shows the percentage of population living below the poverty line from 2005 to 2007. West Kalimantan is the poorest among the four provinces. The table is also showing that, in general, poverty trends have improved slightly over the years.

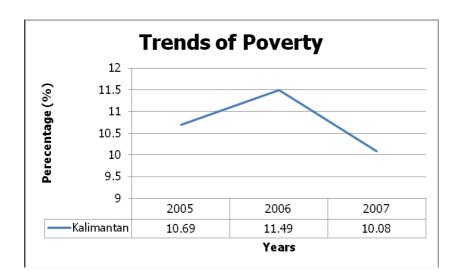


Table 1.1 (Source: Data adapted from Badan Pusat Statistik)

#### Sulawesi

Sulawesi is divided into six provinces, Gorontalo, East, South, West, North and Central Kalimantan. Based on Badan Pusat Statistik (Statistics Indonesia) total population was 16,767,700 (2009), with South Sulawesi having the largest population (7,908,500). In 2008, the GRP per capita for Gorontola was \$670, East Sulawesi was \$1,181, South Sulawesi was \$1,205, West Sulawesi \$832, North Sulawesi was \$1,393 and Central Sulawesi was \$1,275. The country GDP income per capita was \$2,395.

Table 1.2 shows the percentage of population living below the poverty line from 2005 to 2007. West Sulawesi was the poorest among the four provinces with 27.35% living in poverty. Over the years, there had not been any significant improvement in poverty eradication.

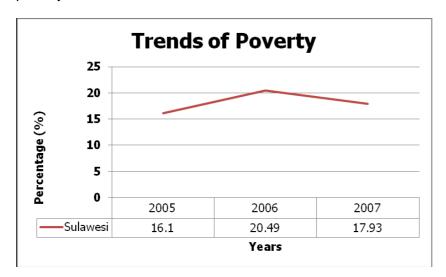


Table 1.2 (Source: Data adapted from Badan Pusat Statistik)

## Malaysia

Overall, Malaysia's GDP per capita (purchasing power parity) was \$13,771 in 2009. There was no published data for GDP per capita for each of the states in Malaysia.

# Sabah

Total population for Sabah was 3,202,880 in 2009. In recent history, Sabah's population recorded a significant growth over a short period of time mainly due to illegal immigration from the Muslim-dominated southern provinces of Philippines. Data from the Department of Statistics showed in 2009, 25% of the total population in Sabah was made up of non-Malaysian citizens. The state capital is Kota Kinabalu, formerly known as Jesselton.

Table 1.3 shows that, in 2009, a total of 19.7% in Sabah fell below the Poverty Line Income (PLI), which is defined as the income level that is considered sufficient to maintain basic needs of a household. PLI for Sabah was RM1,048 (approximately \$327) per month. The result had improved since 2004 where 24.2% of the total population in Sabah fell below PLI.

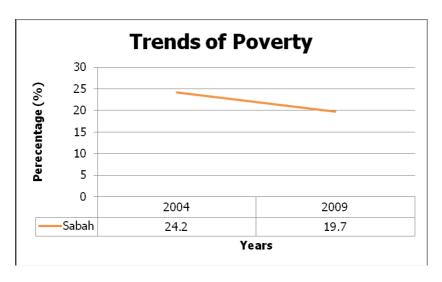


Table 1.3 (Source: Data adapted from Economic Planning Unit)

## Sarawak

Sarawak is the largest state in Malaysia. Total population for Sarawak was 2,504,000 in 2009. The state capital is Kuching, which has a total population of 579,900.

Table 1.4 shows that, in 2009, a total of 5.3% in Sarawak fell below the PLI, which was calculated to be RM912 (approximately \$285) per month. The result had improved since 2004 when 7.5% of the total population in the state fell below PLI.

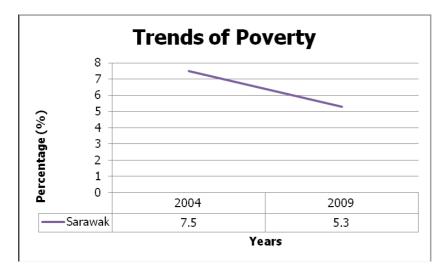


Table 1.4 (Source: Data adapted from Economic Planning Unit)

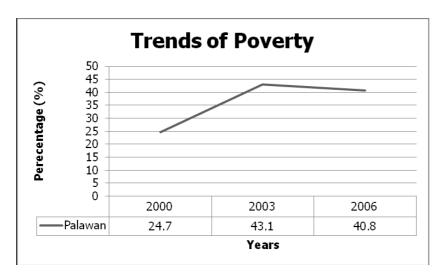
## **Philippines**

The National Statistical Coordination Board recorded the per capita gross domestic product of the Philippines in 2010 at P90,552 (exchange rate of P45.1097: US\$1) which translated into \$2,007.37. In 2000, the per capita GDP was less than \$1,000.

#### Palawan

Palawan is an island province of the Philippines with a total population of 682,152. Its capital is Puerto Princesa City with a population of 210,508 (as of 2007).

Table 1.5 shows that, in 2006, a total of 40.8% incidence of poverty was recorded in Palawan. The result was a slight improvement as compared with 2003 where 43.1% was recorded.



**Table 1.5 (Source: Data adapted from National Statistics Coordination Board)** 

#### Mindanao

Mindanao is the second largest island in the Philippines with a total population of 21,582,540 (as of 2007). Davao City is the largest city for this region. The poorest region is Caraga, which recorded the highest poverty household between 2004 and 2007 (National Statistics Coordination Board).

Table 1.6 shows that, in 2006, a total of 37.6% incidence of poverty was recorded in Mindanao. The result was a slight improvement as compared with 2003 where 38% was recorded.

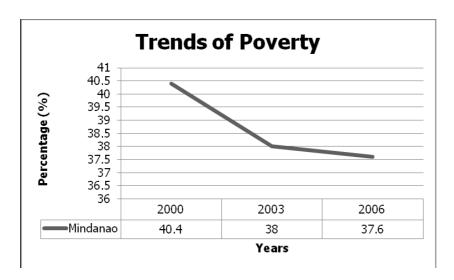


Table 1.5 (Source: Data adapted from National Statistics Coordination Board)

#### 4.0 DISCUSSION

#### Brunei Darussalam

Within the BIMP-EAGA region, Brunei Darussalam is the wealthiest country with a per capita income of over \$50,000. Officially, there is no record of incidence of poverty. As regular data or published data on poverty in Brunei Darussalam is limited to that of the Department of Statistics under the Department of Economic Development and Planning, a broad descriptive study is required to establish how monitoring of the situation within the country can be determined. Indications of poverty are assumed to be emerging as a recent study is commissioned by the Ministry of Culture, Youth and Sports. In addition, the consideration placed in allocating over 30% of its development budget to social services and maintaining its welfare state.

## Indonesia

Due to its geographical nature and large population, Indonesia faces tremendous difficulty in conducting survey accurately, especially in poverty. Kalimantan registered a rising poverty trend in 2006 in all its provinces; albeit a slight decline between 2007 and 2009. However, the percentage of the destitute in Sulawesi's provinces showed a heavily fluctuating trend. Both of these may be attributed to changes in global and domestic economic environments which affected Indonesia nationally. Detailed data, such as unemployment rate by provinces in Kalimantan and Sulawesi were readily available but aggregate data for the whole region of Kalimantan and Sulawesi were not.

#### Malaysia

In Malaysia, in the Ninth Malaysia Plan, 2006–2010, the commitment is to achieve country targets in reducing the overall poverty rate to 2.8 per cent and eradicating hard-core poverty by 2010. Sabah showed a slight dip from 23% in 2004 to 19.2% in 2009; in Sarawak, 7.8% poverty incidence was documented in 2004 with a drop to 5.3% in 2009. This study identified that statistical data compiled from the states of Sabah and Sarawak differs from each other in terms of not only the indicators used, but also in its measurement. For example, the literacy rate for Sarawak published in the Year Book of Statistics, Sarawak 2009 was not available in the Year Book of

Statistics, Sabah 2009. As explanations to the choices are not documented, it can only be assumed that this may be due to specific state interests in the compilation of data for publication. The new tenth Malaysia Plan will provide insight into spending in this particular sector to reveal future directions in poverty alleviation.

# **Philippines**

For the Philippines, poverty trends in Palawan was comparatively low at 24% in 2000, rising to 43% in 2003 and a slight dip 40.8% in 2006. In Mindanao, changes in the incidences of poverty were minimal; at 40% in 2000, 39.1% in 2003 and 40.2% in 2006. Mindanao has the highest recorded incidences of poverty within the BIMP-EAGA region. Most of the data collected for Palawan and Mindanao were broken down into regions, which was similar to Kalimantan and Sulawesi in Indonesia. With such detailed breakdown in regions, it was difficult to determining an aggregate for the whole of Palawan and Mindanao.

#### 5.0 CONCLUSION

This study found that among the four countries, the highest percentage of poverty was recorded in the Philippines (Mindanao and Palawan), which was slightly above 40%. Due to a lack of poverty data, the assumption is that there is no recorded poverty in Brunei Darussalam at the present time. The other two countries, Malaysia (Sabah and Sarawak) and Indonesia (Kalimantan and Sulawesi), recorded poverty incidences within a range of 7% to 25%. As a region, it is evident that participating countries are committed to achieve growth and a concerted effort is made for a fairer distribution of development in the rural areas. Without a detailed examination of the conditions in which indicators and measurements are used, a more balanced regional perspective to poverty alleviation cannot be determined.

This exploratory study has identified some similarities and differences in not only the definitions of poverty used by each country but also, the measurements and indicators in its determination to alleviate poverty situations. Due to the reliance on secondary data only, the emphasis placed was in getting the most current poverty data for each country where available.

In addition, several constraints were encountered in the process of data collection. Of most relevance is the inconsistency in data compilation between countries and/or within the same country. In addition, the years of statistical data collection and compilation was not consistent among the four countries. For example, in Malaysia, the data for recording the number of poor households was taken in 2005 and 2009; whereas in the Philippines, data is collected on a yearly basis. In general, all four countries rely on data from their respective Country Population Census (every ten years) or Household Income Surveys (every five years) in determining poverty status.

Given that the BIMP-EAGA region aims to improve on their countries' poverty targets set through the United Nations' Millennium Development Goals by 2015, it would be important for policy decision-makers to work with consistent, refined and aggregated measures of poverty and inequality. With the set of data identified, a better description and demonstration of a range of approaches could be recommended to measure and monitor poverty alleviation in the near future.

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