

**MYSTATS 2012, Bank Negara Nov.7, 2012**

**STATISTICAL DATA FOR APPROPRIATE  
POVERTY MEASUREMENTS AND  
POLICY FOR ERADICATION: A  
MALAYSIAN CASE**

**MOHAMED SALADIN ABDUL RASOOL**

**ARIFIN MD SALLEH**

**Universiti Teknologi Mara (UiTM)**

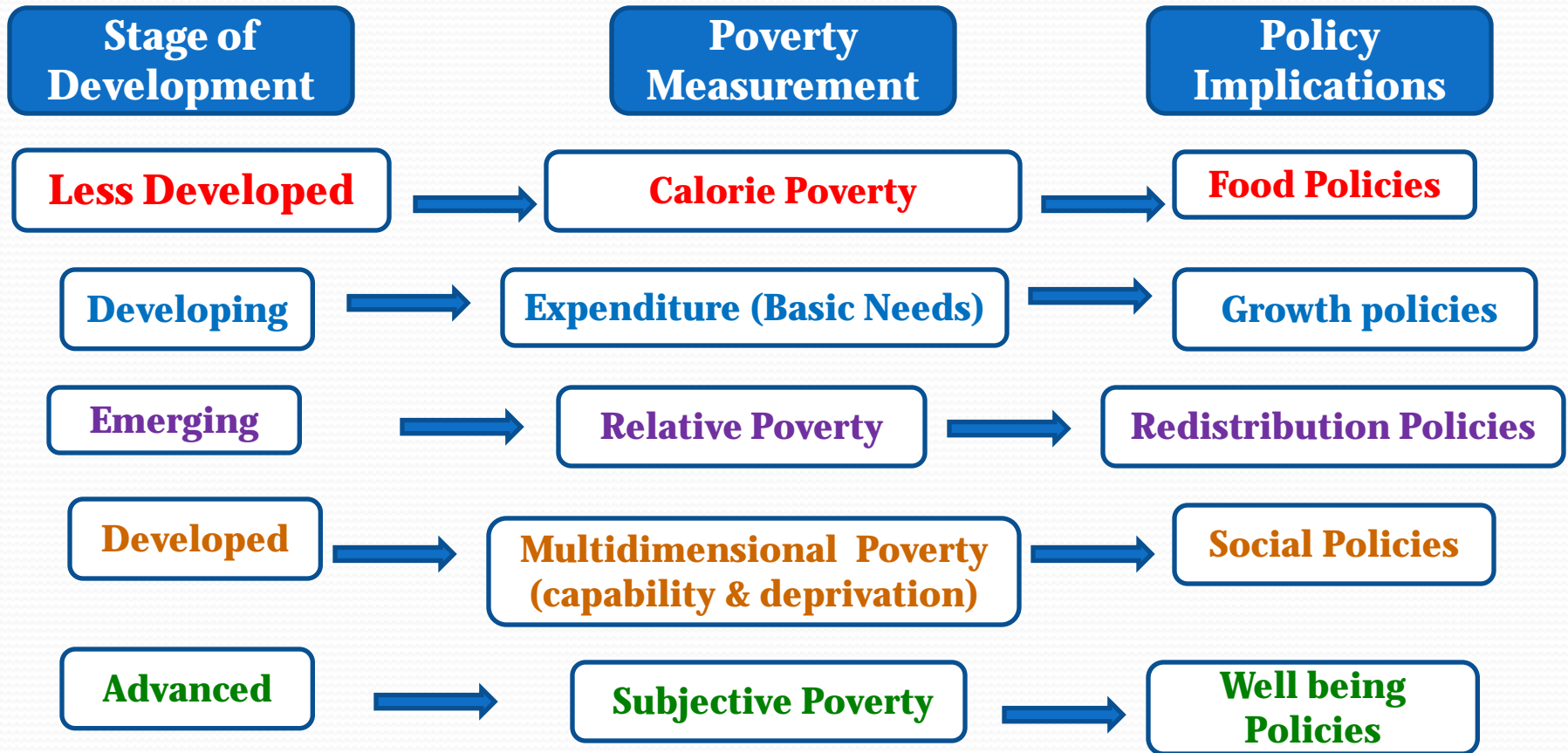
# OUTLINE

- Introduction
- Global Perspective of Measurement
- Malaysian Scenario
- Gap of Measurement in Malaysia
- Conclusion

# INTRODUCTION

- Economists agree poverty measurement related to the development status of nations
- Three main measurement:
  - Absolute
  - Relative
  - Multidimensional (capability & deprivation) --->> objective and subjective wellbeing

# GLOBAL PERSPECTIVE OF MEASUREMENT



*Source: Authors*

# GLOBAL PERSPECTIVE OF MEASUREMENT

- Developed nations are shifting to wellbeing method especially subjective wellbeing
- Developing nations gearing towards multidimensional poverty index (MPI) introduced by UNDP, developed by Oxford Poverty & Human Development Initiative (OPHI) 2010

# MALAYSIAN SCENARIO

**EPU: PLI method using COST OF BASIC NEEDS (CBN).** This method identifies a consumption bundle deemed sufficient to meet basic consumption needs and then estimates the cost of purchasing such a bundle (**Food and Non-food component**)



**ZAKAT INSTITUTIONS: PLI method using FOOD ENERGY INTAKE (FEI)** where the actual per capita calorie food energy intake of each household is estimated; **known as *Had Al kifayah* (household necessities based on age group)**

# POVERTY RATE

<i>Year</i>	<i>Headcount Ratio</i>	
	<i>Absolute(%)</i>	<i>Relative(%)</i>
<b>1995</b>	<b>9.86</b>	<b>24.5</b>
<b>1997</b>	<b>6.67</b>	<b>25.2</b>
<b>1999</b>	<b>8.14</b>	<b>24.4</b>
<b>2002</b>	<b>6.19</b>	<b>25.7</b>
<b>2004</b>	<b>5.96</b>	<b>25.6</b>

Note: relative poverty based on 60% median

Source : UNDP Malaysia 2007

# GAP IN MEASUREMENT

## MALAYSIAN SCENARIO

Calorie poverty measurement (EPU) & basic needs (Zakat Institutions)

## GAP IN MEASUREMENT

Mismatch in the measurement for a high middle income economy like Malaysia

## GLOBAL SCENARIO

Calorie poverty measurement in less developed nations) & basic needs (developing nations)

**Source: Authors**



# PROPOSAL

- Relative Poverty (as in developed nations in Europe with 50 or 60% median)- income of household based on gap of the population
- Multidimensional poverty or MPI
- Household Income Survey (HIS) or Household Expenditure Survey (HES) to include appropriate data mentioned above

# MULTIDIMENSIONAL POVERTY STUDY IN SELANGOR – EMPIRICAL STUDY

- Based on MPI launched by UNDP 2010
- Study with collaboration with Lembaga Zakat Selangor (LZS)
- To enhance poverty measurement **carried out by LZS**

# CONCEPTUAL FRAMEWORK(CONT.)

- **MONETARY POVERTY MEASUREMENT (poverty gap/adequacy of necessities):**

$$Z = (1 - (Y/K)) \times 100\% \text{ or } (Y/K) \times 100\%,$$

where , Y-income, K-poverty line income using FEI and CBN method

- **NON-MONETARY POVERTY MEASUREMENT (based on the works of Alkire & Santos, 2010)**

$$IPI = (W_1P_1 + W_2P_2 + \dots + W_5P_5) \times 100\%,$$

where , W-weightage, P-poverty dimensions

# Conceptual Framework (cont.)

$$- \text{IPI} = (W_1\text{PS} + W_2\text{WE} + W_3\text{OS} + W_4\text{KN} + W_5\text{RE}) \times 100\%$$

where ,

**PS-physical self**

**WE-wealth**

**OS-offspring**

**KN-knowledge**

**RE-religiosity**

**are dimensions according to maqasid al-shariag  
(objective of the religion while,  $W_1, W_2, \dots, W_5$   
determined by expert opinion**

# CONCEPTUAL FRAMEWORK (CONT.)

$$- \text{IPI} = (0.252\text{PS} + 0.129\text{WE} + 0.1380\text{S} + 0.186\text{KN} + 0.295\text{RE}) \times 100\%$$

– Main contributors of poverty:

1. Deprivation in religiosity-29.5%
2. Deprivation in physical self - 25.2%
3. Deprivation in knowledge-18.6%
4. Deprivation in offspring-13.8%
5. Deprivation in wealth-12.9%

# INDICATORS AND WEIGHTAGE

<i>VARIABLE</i>	<i>RELATIVE WEIGHT (%)</i>	<i>DEPRIVED IF...</i>
<b>PHYSICAL SELF</b>		
Dwelling	12.6	Dwelling is deteriorating
Health	12.6	HH member with disease or disabled
<b>WEALTH</b>		
Employment type	4.3	HHH without permanent job
House ownership	4.3	HHH do not own house/land
Savings and investment	4.3	HHH without savings or investment
<b>OFFSPRING</b>		
No of children	6.9	HH without children
Attend schooling	6.9	Any child did not attend school
<b>KNOWLEDGE</b>		
Education Level	9.3	HHH did not attend secondary school
Skill	9.3	HHH without any skills
<b>RELIGIOSITY</b>		
Religious knowledge	7.4	HHH without basic knowledge
Religious obligation	7.4	HHH unable to perform basic obligations
Contribution to others	7.4	HHH unable to contribute to others
Religious commitment	7.4	HHH unable to attend mosque programs

# DETERMINATION OF POOR

- Cutoff, **k** or total weightage of indicators, **(TWI)=40%** for poor and **70%** for destitute
- For example, deprivation of all indicators in the two highest weightage dimension, PS & RE:

$$\text{TWI} = 12.6 + 12.6 + 12.6 + 12.6 + 7.4 + 7.4 = 54.7 (> 40) \text{ à } \text{poor}$$

- Deprivation of other all indicators in other three dimensions, WE, KN & OS:

$$\text{TWI} = 4.3 + 4.3 + 4.3 + 6.9 + 6.9 + 9.3 + 9.3 = 45.3 (> 40) \text{ à } \text{poor}$$

# IPI SCORE

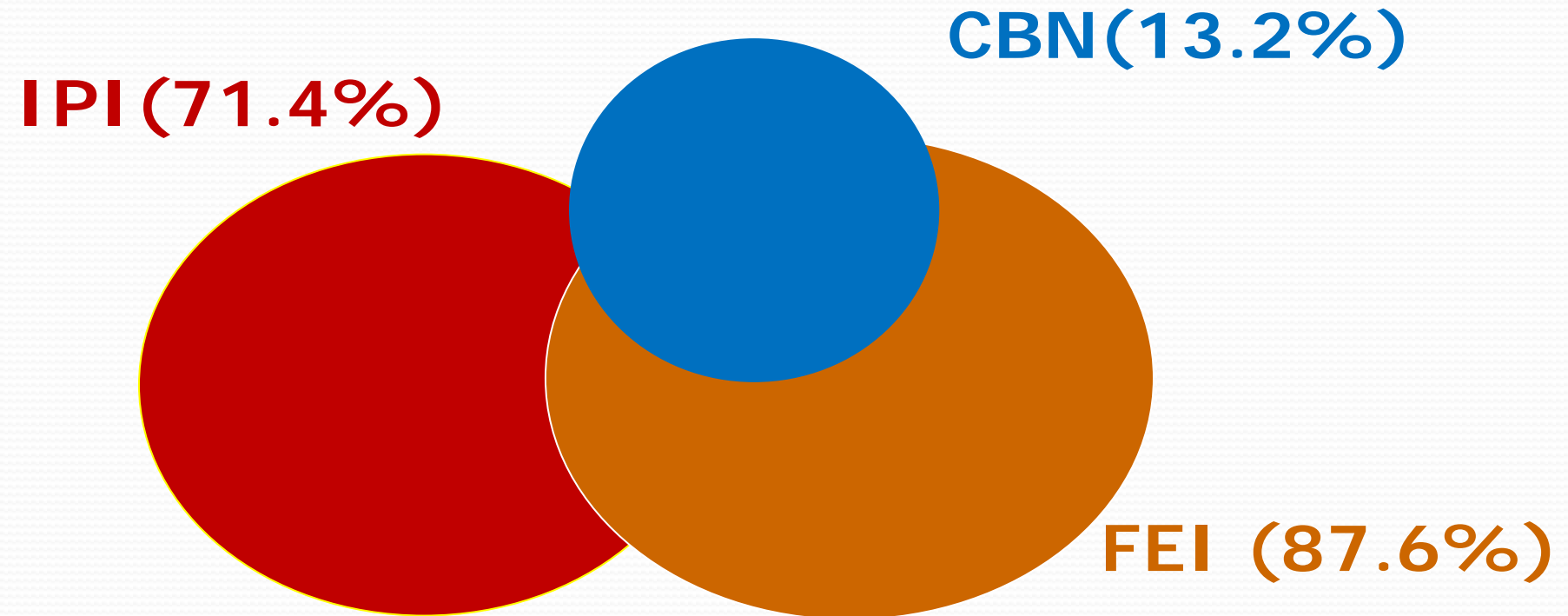
<i>IPI RANGE (%)</i>	<i>FREQUENCY</i>	<i>PERCENTAGE (%)</i>
0-40 (not poor)	74	28.7
40.1-70.0 (poor)	157	60.9
> 70.0 (destitute)	27	10.5



# Adequacy of Income Using Calorie & Basic Needs (Had Al Kifayah)

<i>ADEQUACY OF INCOME (%)</i>	<i>HAK (%)</i>	<i>PLI (%)</i>
<b>&lt;50</b>	<b>28.3</b>	<b>0.4</b>
<b>50-99</b>	<b>59.3</b>	<b>12.8</b>
<b>≥100</b>	<b>12.4</b>	<b>86.8</b>

# COMPARISON OF POOR GROUP



**ONLY 8% RESPONDENTS POOR ACCORDING TO ALL THREE METHODS**

# DISCUSSION

- Only a small group poor from all three methods (23 persons or 8%)
- Both the monetary and non-monetary measurement (multidimensional) have their own importance delivering different insights with different focus à different measurement identify different poverty groups
- Monetary together with non monetary data would be able to enhance th understanding of poverty (Nolan & Whelan, 2010 & 2012)

# CONCLUSION

- **Paper highlights various poverty measurement & relevant statistical data across the globe**
- **Gap in measurement scenario since there is a mismatch between measurement method and status of the nation**
- **Propose relative poverty and multidimensional poverty as an alternative measurement suited to the development status of Malaysia**
- **Thus, appropriate statistical data to be collected in the HES & HIS survey**



**Thank You For Your  
Attention & We Welcome  
Comments for A Better  
Poverty Measurement for  
Malaysia**