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MONITORING OF CHILDREN'S WELL-BEING IN MALAYSIA

by

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ABSTRACT

Malaysia is committed to addressing inequities of socio-economic development as part of its aspirations to become a high income nation by 2020. The Tenth Malaysia Plan (2011-2015) adopted a socio-inclusive development approach that aimed to contribute to achieve not only the national 2020 vision but also the Millennium Development Goals 2015. The progress towards the achievement of these goals is tracked under the MalaysiaInfo web data platform.

UNICEF Malaysia is currently in discussion with Malaysia Economic Planning Unit of the Prime Minister's Department and the Department of Statistics to establish a centralized database on children (ChildInfo) as a web data platform – under the umbrella of MalaysiaInfo - to compile, analyze and publish information on children rights and development, based on these and other child well-being indicators mutually agreed with the Government.

ChildInfo will ensure adequate monitoring and access to reliable and robust data on children's well-being. This will facilitate the design and implementation of better targeted and more efficient policies and programmes, which are key to children's survival, protection and development. These policies and programmes enabled by ChildInfo will thus contribute to the achievement of not only Malaysia national 2020 vision, but also the Millennium Development Goals 2015, since children represent a large and vulnerable group for which the above development goals are critical. Most importantly, it will help address the inequity challenges that remain in an upper middle income country.

Introduction

According to the World Bank Malaysia is categorized as an upper middle income country with a GDP per capita of \$10,381 USD and a GDP growth rate of above 5% from 2010 to 2012 (World Bank, 2012). The national development goal stated in the Tenth Malaysia Plan (2011-2015) adopted a socio-inclusive development approach to achieve not only the national 2020 vision but also the Millennium Development Goals 2015 (EPU, 2010). The Plan also outlines areas of growth and the challenges that remain in order to propel Malaysia to become a developed nation by 2020. Monitoring of progress towards the Vision 2020 and the MDGs is tracked under the Malaysialnfo web database platform.

The Malaysian government has made substantial investment towards children under the age of 18 years, who make up about 10 million of the 29 million total population (UNICEF, 2013) These investments are reflected in the children and maternal health outcomes. For example, rates of child mortality and maternal mortality have fallen sharply in the last fifty years. Under-five mortality rate a leading indicator in child health dropped from 70.2 deaths per 1,000 live births in 1965 to 17.7 in 1989. The rate drops further to 7.8 deaths per 1,000 live births for 2008. Another indicator that allows to measure child survival and health is maternal mortality rate (MMR) that plummeted from 140 per 100,000 live births in 1970 to 20 in 1990. According to the Ministry of Health's Confidential Enquiries into Maternal Deaths the MMR declined from 44 per 100,000 in 1991 to 27.3 in 2008 (UNCT and EPU 2010).

Malaysia has achieved halving poverty from 1990 at 17 per cent to 8 per cent in 2000 and to below 4 per cent in 2009 (UNCT and EPU 2010). Inequities remain significant in the country in

the state of Sabah in eastern Malaysia, based on the Household Income and Basic Amenities Survey 2012, the rural poverty rates declined to 12.7 per cent in 2012 (DOS, 2012). Inequalities also exist for children living in poor households measured by using monetary income based child poverty rates. The 2007 child poverty rate of 9.4 is more than double the overall poverty rate of 4.0. The states that have the three highest child poverty rates are Sabah, Kelantan and Terengganu as compared to the national child poverty rate (UNCT and EPU, 2010).

Addressing inequities is a major factor for successful socio-economic development and this will require continued investment in children. Apart from the morale obligation, measuring a child's well-being is also a pragmatic step to ensure that risks and costs are managed that may burden the country later when children become adults. Some of those cost implications include increase in crime rate and social ills, burden in health conditions and diseases, rise in unemployment and high occurrence of teenage pregnancies to name a few.

Development of the Child Well-Being Indicators Framework

In 2011 the Malaysia UNICEF country office initiated a data mapping exercise together with the Economic Planning Unit (EPU), Prime Minister's Department, Malaysia to identify data gaps that exist against international and national social indicators on children. This initiated the work in establishing a national child well-being framework and indicators for policy makers to monitor progress for children, but also a main tool to address inequities in the country. The indicators of the Millennium Development Goals (MDGs) were not holistic enough for an upper middle income country that have a different and new set of economic and social challenges when compared to developing countries. There was also interest to consider adopting international best practices from developed nations that mirror closer to the socio-economic growth of Malaysia.

The development of the framework was undertaken with technical input from the School of Social Policy of University New South Wales (UNSW) in Australia lead by Gerry Redmond and Melissa Huang. Numerous multi-stakeholder consultations took place with government agencies to propose dimensions, components and indicators to understand what set of child well-being indicators would best capture progress in children for an upper middle income country like Malaysia. In January 2013, the final core set of indicators were presented at a national consultative workshop hosted by EPU, Prime Minister's Department, and Malaysia. Outcomes of the discussion lead to a key recommendation to set up a centralized child database. This would allow for the database to systematically monitor child well-being among all government agencies but also accessible for all relevant stakeholders to encourage to promote child sensitive evidenced based policy making and programme development for children.

Data and Methodology

Data sources mapped for the exercise included national data sources from Population and Housing Census, population based surveys as well as administrative/routine data. Malaysia does not carry out the Demographic Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) and therefore national population based surveys that capture a variety of child sensitive data from one central data source are non-existent.

The child well-being indicators framework adapted and included proposed core set of indicators from the MDGs with 5 dimensions, 18 components, and 24 indicators. The Malaysia child well-being indicators framework was guided by the MDG indicators, Organization for Economic Cooperation and Development (OECD) indicators framework and UNICEF Innocenti Report Card 7 indicators (UNICEF, 2007).

A workshop in January 2013 led to the agreement of the core set of Malaysia child well-being indicators framework. Additional components and indicators proposed by various

government agencies were also included in the framework. Refinement and development of the additional proposed indicators are still a work in progress and requires further consultations with selected line Ministries.

The complete dimensions, components and indicators with the national data sources are found in Annex 1.

Findings

Many of the indicators in the 5 dimensions are already calculated and regularly disseminated by the Malaysian Government and captured in national documents. For example, these indicators include infant mortality, immunization and school enrolment rates. However, there are many indicators that have yet to be calculated under each of the dimensions. This paper will share some of the indicators to date that have been analysed under a total of 4 dimensions: 1)material well-being, 2)education and development, 3)health and 4)subjective. Analysis of indicators is derived from national data sources except for the subjective indicators that are sourced from the Global School-based Student Health Survey (GSHS), which is a global survey conducted in many Asia-Pacific countries. At this point the core set of Malaysia child well-being indicators only apply for within country comparison. Many of the data reported is from published sources except for the child poverty indicators which is based on author's own calculation deriving from primary data sets provided from the Household Income Survey 2012.

Material Well-being Dimension

There are two components on poverty and living condition, accompanied with 3 and 4 indicators respectively. For the poverty component, indicator selected is based on absolute income poverty and relative income poverty. The methodology used by Malaysia to report the incidence of poverty is based on absolute income where those who are considered poor are from households having a monthly gross income below the poverty line income (PLI). Therefore, child poverty indicators selected are based on the percentage of children living in poor households below the PLI.

The child poverty indicator shows that about 4.4 per cent of children in Malaysia come from poor households or about 400,783 children living in households below the national poverty line.²

The indicator on relative poverty is also altered to include percentage of children in households with equivalent income than the agreed median. For 2012, the median used is the bottom 40% of income (<RM 3050/month), a national policy benchmark to address solutions to close the gaps in income inequality and improve the quality of life of Malaysians. The indicator used is on the percentage of children living in households in the bottom 40% of income is 38.1 per cent, which translates to 3,470,415 children.³

Education and Development Dimension

For this dimension we have 3 components on school completion, educational achievement, and access to early childhood care and education. The indicator used for school completion is net enrolment ratio in primary education, which was 98% in 2009 (UNCT and EPU, 2011).

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¹ 2012 PLI for Peninsula Malaysia is RM 830/month; Sabah and W.P Labuan is RM 1,090/month; and Sarawak is RM 920/month.

² Author's own calculation based on Household Income Survey 2012 data.

³ Author's own calculation based on Household Income Survey 2012 data.

For educational achievement, the three indicators selected are the Programme for International Student Assessment (PISA) literary scores and the Trends in International Mathematics and Science Study (TIMSS) math and science scores. The 2009 PISA literary scores the figure is 414 and in 2007 the TIMSS the math score is 474 and science is 471. Early childhood care and education (ECCE) indicators are enrolment rate of 0-4 years old is 4.7% and pre-school enrolment rate for 5-6 years is 73% (Ministry of Education, 2012).

Health Dimension

There are a total of 12 components under the health dimension. Below are analysis for 6 indicators in the 6 components that are described in this paper based on availability and accessibility of data to date. These indicators are infant and under-5 mortality rates of 6.7 per 1,000 live births and 8.4 per 1,000 live births, which are both, collected systematically and disseminated by the Government of Malaysia (DOS, 2011). Indicator on immunization rates with a figure of 95.2% also regularly collected and disseminated (Ministry of Health, 2012).

Adolescent birth rate of 1.4 % is a recent indicator being collected and disseminated regularly since the concerns of adolescent health was marked with incidents of reported increase in cases where newborn babies were dumped in public areas (Ministry of Health, 2012).

Subjective Dimension

For subjective well-being the indicator is reflected as percentage of students who are bullied on one or more days during the past 30 days with a figure of 20.9 % (CDC and Ministry of Health, 2012). The subjective indicator here is based on school children's self-reported answers of the GSHS recently published in Malaysia 2012. A comparative Asia-Pacific country analysis of this indicator is made later in this paper.

The discussion among stakeholders on the first set of core indicators is on-going. The initiative to develop child well-being indicators continues and the proposed set up of a platform, proposed to be called ChildInfo with intention to monitor and access reliable data on children's well-being, is still a work in progress. This will facilitate the design and implementation of better targeted and more efficient programmes, which are key to children's survival, protection and development.

The policies and programmes enabled by the proposed platform will thus contribute to the achievement of not only Malaysia national 2020 vision, but also the Millennium Development Goals 2015, since children represent a large and vulnerable group for which the above development goals are critical. Most importantly, it will help address the inequity challenges that remain in an upper middle income country.

Comparative Analyses of Child Well-Being indicators

A comparative analysis of selected indicators to assess child well-being development would provide an idea of where Malaysia and other countries stand in terms of socio-economic development and progress made on children. For regional comparison in this paper we sourced data from international published document. For this section, country comparison analysis was made with data from the United Nations Children's Fund (UNICEF) State of the World Children 2013, United Nations Development Programme (UNDP) Human Development Report 2013 and the World Bank, World Development Indicators database. Malaysia was compared with countries like Philippines, Thailand, and Indonesia.

From the various international sources above, information has been compiled in Table 1 to demonstrate selected indicators to compare children's well-being in the respective countries.

Other indicators could also be included; however, the ones selected here are close to the indicators proposed in the Malaysia child well-being indicators framework.

Table 1. Country Comparison of Children's Well-being					
Indicators	Malaysia	Philippines	Thailand	Indonesia	
Total Population	28,859,000	94,852,000	69,519,000	242,326,000	
Children under 18	10,244,000	39,205,000	17,111,000	77,471,000	
Proportion of children population	35%	41%	25%	32%	
GNI per capita USD (current \$)	\$9,800	\$2,470	\$5210	\$3420	
IMR	5	23	11	27	
U5MR	6	29	13	35	
MMR	29	99	48	220	
Means years of schooling	9.5	8.9	6.6	5.8	

Philippines has the highest proportion of children as compared to the country's total population with 41%, while Malaysia and Indonesia is a about a third, and with Thailand the lowest at a quarter. Malaysia is highest with gross national income (GNI) per capita of \$9,800 that indicates the rapid economic progress of the country. This is supported by the health indicators where all three indicators infant mortality, under-5 mortality and maternal mortality ratio are lowest among the four Asia Pacific countries.

As for education, it should be noted that the difference in mean years of schooling between Malaysia and Philippines is only 0.6 years. While between Malaysia and Indonesia the difference is 3.7 years.

For the dimension in subjective well-being and peer relationships in the same Asia Pacific countries the indicators are best captured from the GSHS. The survey is supported technically by the Center for Disease Control (CDC), Atlanta and World Health Organization (WHO) and carried out by the respective national governments. The school based survey collects self-reported data from students aged 13-17 years of age. The information measures student's dietary behaviours, alcohol use, hygiene, mental health, protective factors, and sexual behaviours to name a few.

Below is a table with comparison of selected indicators for the cohort of 13-15 years. Selection of indicators comes from GSHS Factsheets from 2007 to 2012.

Table 2. Country Comparison of Subjective Well-being					
		Total, aged 13-15 years			
Dimension	Indicator	Malaysia (2012)	Philippines (2011)	Thailand (2008)	Indonesia (2007)
Alcohol Use	Percentage of students who drank so much alcohol that they were really drunk one or more times during their life	4.9	15.5	6.1	2.7
Dietary Behaviours	Percentage of students who were overweight (>+SD from median for BMI by age and sex)	23.7	10.2	16.4*	9.9*
Mental	Percentage of	7.8	16.3	8.5	4.0

Health	students who ever seriously considered attempting suicide during the past 12 months.				
Protective Factors	Percentage of students whose parents or guardians understood their problems and worries most of the time or always during the past 30 days	32.4	27.0	N/A	N/A
Sexual Behaviours	Percentage of students who have ever had sexual intercourse	8.1	N/A	6.4	0.3
Violence and Unintentional Injury	Percentage of students who were bullied on one or more days during the past 30 days.	20.9	47.7	27.2	50.0

^{*}According to the WHO growth reference for school-aged children and adolescents.

In mental health, schools students in Philippines reported highest among the countries on ever seriously considered attempting suicide during the past 12 month with 16.3 %. Philippines also reported highest percentage of 15.5 % in drinking alcohol and getting drunk one or more times during their life.

Malaysia in dietary behaviour possessed the highest percentage of 23.7% who were overweight as compared to the other countries, which may link to economic development and implications in changes of dietary practices and lifestyles.

The prevalence of unintentional injury and violence is high. In Indonesia, students reported highest in violence and unintentional injury where 50 % of students indicated that they were bullied on one or more days during the past 30 days. Philippines is ranked 2nd with 47.7 %, next is Thailand with 27.2 % followed by Malaysia with 20.9 %.

Discussion

The Malaysia child well-being indicators framework utilized data from national population and administrative data sources, with the exception of the subjective indicators. There are limitations that it serves to only monitor well-being within the national context for now based on the discussions held with stakeholders; therefore, regional or cross-country comparison would not be able to take place unless the country shares the same data sources. This could lead to implications on methodology of indictors where many are not consistent and can lead to disagreement of the final indicators figures. Data source from TIMSS, PISA and GSHS are the only data sources in Malaysia that can allow for regional and even global country comparison.

The GSHS and PISA are the very first sets of surveys conducted in Malaysia that collects subjective information from school children. The practice to utilize subjective information and systematically translate into policy development is still a work in progress. It is timely that the findings from GSHS and PISA are to be used for not only programmatic changes related to school children but also for macro level national planning, monitoring and evaluation for the well-being of

all children. For example, these subjective indicators are well suited to be considered as part of Malaysia's upcoming development to produce a Well-Being Index to assess the "happiness" of society and the people.

Furthermore, the proposed ChildInfo, a centralized database can help in improving monitoring and evaluation, which is known to be the weakest link in child sensitive policies and programmes. The centralized database may also serve as a useful tool to strengthen and monitor the implementation of the Convention on the Rights of the Child (CRC) and influence national policy and programme development. Involvement of multiple stakeholders has been apparent in the work of the indicators framework that has facilitated cross-sectoral collaboration among different line government ministries involved in programmatic and policy work.

The leadership of Economic Planning Unit of the Prime Minister's Department has been key in the development of the child well-being indicators framework. This shows that commitment towards child sensitive evidenced based policy making is present in Malaysia and an important factor for becoming a developed nation by 2020. Placing children's needs in the forefront of socio-economic development shapes the path forward for Malaysia to address inequities efficiently and effectively. When a third of Malaysia's total population is made up of children, monitoring of their progress will not only ensure sustained socio-economic development but also fulfilment in the implementation of the CRC.

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Annex 1: Malaysia Child well-being Indicators Framework a work in progress.

Dimensions, components and indicators that are italicized are indicators yet to be identified and confirmed by government partners and stakeholders.

Dimension	Components	Indicator	Source
Material	Poverty	Percentage of children 0-17 living in households below the national poverty line (PLI).	Household Income Survey (2009, 2012)
		Percentage of children receiving financial and non-financial assistance.	e-Kasih database
		Percentage of children aged 0-17 in households with equivalent income than the agreed figure for median.	
	Living Condition	Over-crowding condition Physical conditions of the house Accessibility to basic infrastructure, education for employment and health.	Household Income Survey- Basic Amenities Survey (2009, 2012)
		Children with disabilities	Administrative Data from Department of Social Welfare, Ministry of Women, Family and Community Development.
Education and Development	School Completion	Proportion of pupils starting grade 1 who reach last grade of primary school. Adjusted to net enrolment ratio in primary education.	Administrative Data from Ministry of Education
	Educational Achievement	Percentage of students achieving basic literacy and numeracy skills after 3 years education (LINUS scores).	
		Average combined mathematics,	PISA 2011 * (Pilot)

		reading, and science PISA literary	
		scores, aged 15. Average combined mathematics and science TIMSS scores, aged 14.	TIMSS 2011
	Educational and Employment Opportunities	Percentage of youth not in employment, education or training (NEET).	Labor Force Survey 2011, Population and Housing Census 2010.
	Access to early childhood care and education (ECCE).	ECCE enrolment rate of 0-4 years old. Pre-school enrolment rate 5-6 years old.	Administrative Data from Ministry of Education, Prime Minister's Special Programme on Early Childhood (PERMATA), Department of Social Welfare, Ministry of Rural Affairs and Development (KEMAS) and other
Health	Child mortality	Infant mortality rate	agencies and Department of Statistics. National Registration Department,
nealli	Crilla mortality	Child mortality rate; 0-5 and 0-19	Ministry of Health and Population and Housing Census.
	Low birth weight	Proportion of infants born with weight less than 2,500g.	Department of Statistics
		Prevalence of underweight children under 5 years.	National Health Morbidity Survey 2006, 2011 and administrative
	Breastfeeding	Proportion of children at age six months who have been exclusively breastfed since birth.	data from Ministry of Health.
	Maternal health	Maternal mortality ratio	National Registration Department, Department of Statistics and Population and Housing Census 2010.
	Immunisation	Proportion of infants immunised against measles, aged 12-23 months.	Administrative data from Ministry of Health and Population Census 2010.
	Teenage births	Adolescent birth rates for women	National Registration Department,

		aged 15-19 years.	Department of Statistics and Population an Housing Census 2010.
	Reproductive health	Contraceptive prevalence rates, aged 15-19 years.	Malaysia Population and Family Survey 2004, Ministry of Women, Family and Community Development.
	HIV	HIV prevalence rate for 15-24 years old.	Administrative Data from Ministry of Health
	Obesity	Percentage of 12 year old/year 6 school children who are obese (BMI for age > +2SD).	Administrative Data from Ministry of Health and Ministry of Education.
	Teenage smoking	Prevalence of smoking among 13-15 years old.	National Health Morbidity Survey (2006, 2011)
	Home injury	Prevalence of home injury among children under 7 years old.	
	Children with disability	Indicator to be determined	
	Hours of sleep	Indicator to be determined	
Subjective well-being	Personal well-being	Percent of young people who never or rarely felt lonely. * indicator to be revised.	Global School-based Student Health Survey 2012
	Health well-being	Percent of young people who reported themselves as having right weight. * indicator to be revised	
	School well-being	Percentage of students who were bullied on one or more days during the past 30 days.	
Family and peer relationships	Family relations	Percentage of young people whose parents spend time "just talking to them" several times a week. * indicator to be revised.	Global School-based Student Health Survey 2012, Malaysian Population Family Survey 2004, Ministry of Youth and Sports Youth Index, Economic Planning Unit and PISA.
		Percentage of parents eating	Malaysian Population Family

		meals with their children. * indicator to be revised.	Survey 2004, and PISA.
		Percentage of young people who turn to their peers for advice and reproductive health.	Malaysian Population Family Survey 2004
	Relationship with friends	Indicators to be determined.	Ministry of Youth and Sports Youth Index
Safety and Security	Child abuse (physical and verbal) Child sexual abuse	To be developed further	To be identified
	Child labour		
	Children in conflict with the law	_	
	Child neglect	1	
	Youth participation	-	
	Play and recreation		