



1. INTRODUCTION

Preamble

Over the last four decades, Malaysia has made remarkable achievements in terms of its economic growth as well as its socio-economic development. Driven by the need to measure the nation's progress beyond Gross Domestic Product (GDP), the Malaysian Quality of Life Index (MQLI) was developed in 1999. The MQLI underwent several changes; it expanded from 10 components and 38 indicators to 11 components and 45 indicators to capture the socio-economic fabric of the multi-ethnic society and better reflect the quality of life.

As Malaysia progresses towards a high-income economy, there is a need to further strengthen the indicators of the MQLI to be more comprehensive. Hence, the MQLI was enhanced and reformulated into the Malaysian Well-being Index (MWI). The MWI was constructed based on domestic and internationally recognised indices and indicators

while taking into account Malaysia's status as an upper middle-income nation and its uniqueness as a multi-ethnic society. Regular assessments of the nation's social, environmental and economic progress will be made through the MWI to guide the formulation and implementation of socio-economic policies.

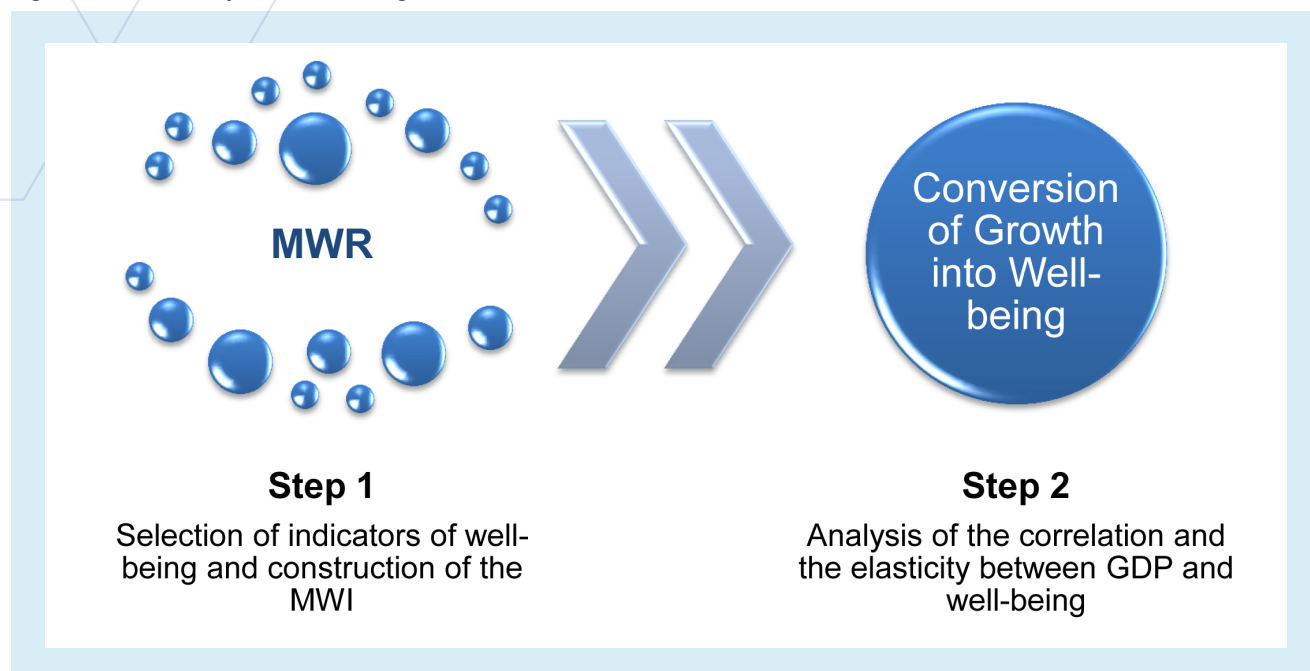
This report is organised into four chapters. Chapter 1 discusses the structure of the Malaysian Well-being Report (MWR) and presents the overall performance of the MWI. Chapter 2 is dedicated to detail out the performance of economic well-being sub-composite index and its component indices. In Chapter 3, the performance of the social well-being sub-composite index and its component indices are reported. Chapter 4 discusses the relationship between economic growth and well-being.

The Structure of the Malaysian Well-being Report 2013

The MWR 2013 analyses the effectiveness of the Government's various socio-economic development policies in improving the well-being of the *rakyat*. This is accomplished by constructing the MWI as well as examining the relationship between economic growth and the well-being of the *rakyat* at both, aggregate as well as component levels. The analysis will give a better understanding about the

state of well-being as a consequence of changes in the country's socio-economic development. The framework for this analysis is illustrated in *Figure 1.1*. In addition, several box articles on related topics were incorporated throughout the report. The purposes of the articles are to complement the chapters that could be linked to the performance of the components and indicators.

Figure 1.1 The Malaysian Well-being Framework



There were two steps involved in assessing the well-being of the *rakyat*. The **first step** was the selection and construction of the MWI, which involved defining well-being and selecting components and indicators through a rigorous quantitative method. There is no exact definition of well-being in existing literature. However, for the purpose of developing the MWI, 'well-being' refers to the various direct and indirect benefits acquired and enjoyed by the *rakyat* as well as contributed to the life satisfaction of individuals, families and communities. These benefits cover the social, environmental and economic aspects.

The components and indicators were selected based on international best practices as well as current issues and challenges faced by the *rakyat*. Among the issues that were identified included those that were related to the quality of education, health status, quality of infrastructure, information and communications technology (ICT) services and availability of affordable housing. Once the

components and indicators were sorted, the suitability of the grouping of indicators under each proposed component were statistically tested using factor analysis¹. Generally, factor analysis serves to discover the underlying patterns in data and to find the groups with the smaller number of unobserved variables that could explain observed variables. In the case of the MWI, the unobserved variables were the components that could not be measured directly such as education or family, while the observed variables were students' performance or divorce cases.

The MWI was then constructed as a composite index comprising the economic and social well-being sub-composite indices, as shown in Figure 1.2. This was to assess well-being from the economic and social perspectives since they affect well-being differently. The economic well-being sub-composite index consists of five components, namely, communications, education, income and distribution, transport and working

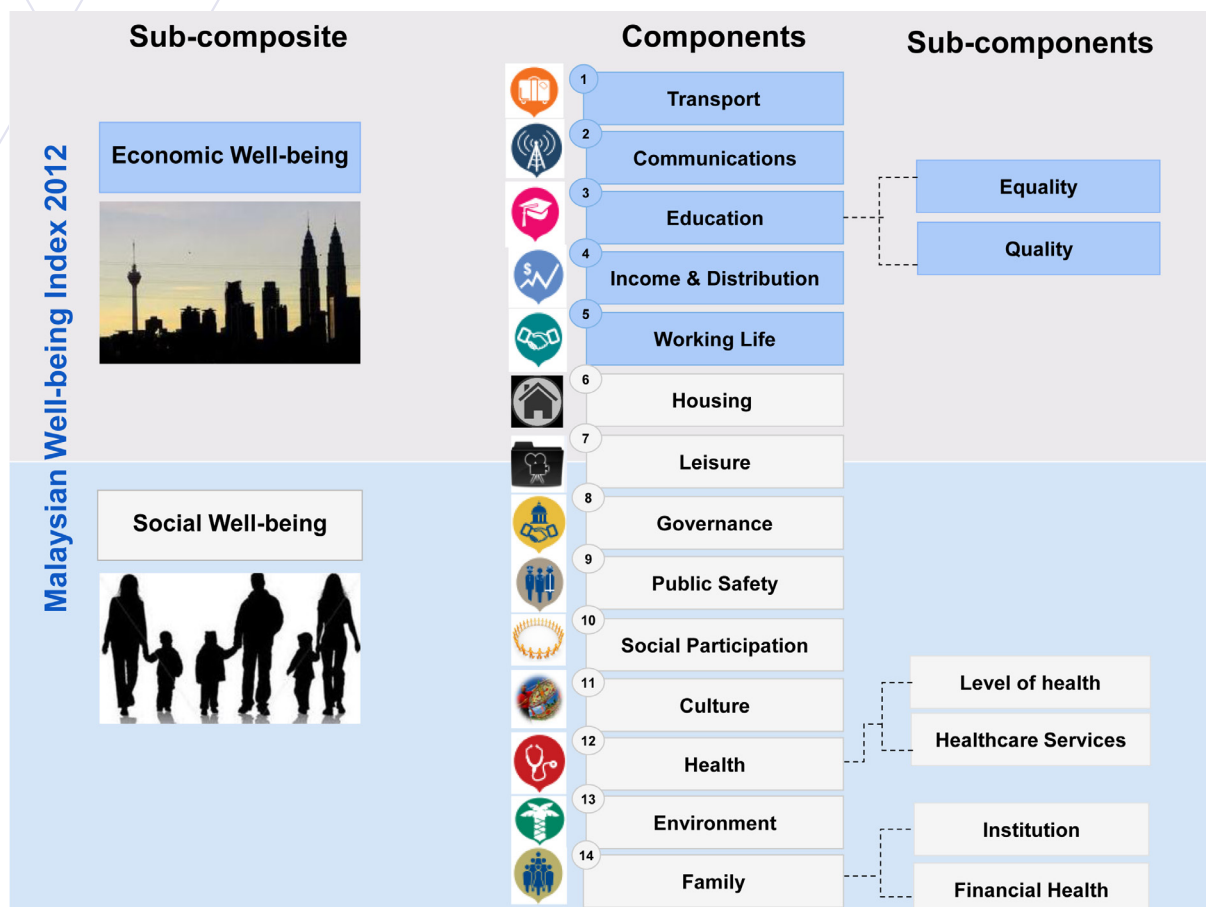
¹ Refer to Appendix 1 for detailed methodology of MWI 2012

life. The education component was further divided into equality and quality sub-components. The social well-being sub-composite comprises nine components, namely, culture, environment, family, governance, health, housing, leisure, public safety and social participation. The family component is divided into family institution and financial health sub-components while the health component is subdivided into the level of health and healthcare services sub-components. The division of components into sub-components was undertaken

to differentiate the performance of the components from the perspective of output and outcome. This was possible for only three components due to data limitations. A total of 68 indicators were selected to construct the MWI 2012.

The detailed methodology for constructing the composite index as well as explanation about component indices and their indicators are presented in *Appendix 1: Technical Notes*.

Figure 1.2 Components of Malaysian Well-being Index 2012



The **second step** in analysing the well-being was to examine the relationship between economic growth measured by GDP and well-being measured by MWI. This involved testing the relationship of the indices with GDP as well as their elasticity with changes in GDP. This was carried out in tandem with existing literature which confirmed a reciprocal relationship between economic growth and well-being (Stiglitz, 2012). The analysis in this report was confined to establish the notion that economic growth affects well-being. A similar approach was used by Boston Consulting Group (2012) in examining how well a country was able to convert its wealth into well-being.

For the MWI, the relationship and elasticity between the indices and GDP were examined by testing the correlation coefficient and the coefficient

of elasticity. The correlation test was applied to determine the magnitude of the relationship. Basically, correlation coefficient measures a linear association between two variables and the degree of linearity present as well as its direction, either positive or negative. A zero correlation indicates there is no linear trend between the two variables but does not necessarily mean that there is no association. The association could be strong but not in a linear form.

The elasticity of the MWI and its component indices to GDP were then calculated to examine how well the GDP was converted into well-being. Simply put, the coefficient of elasticity measures the sensitivity of the change in the MWI and the indices to the changes in GDP.

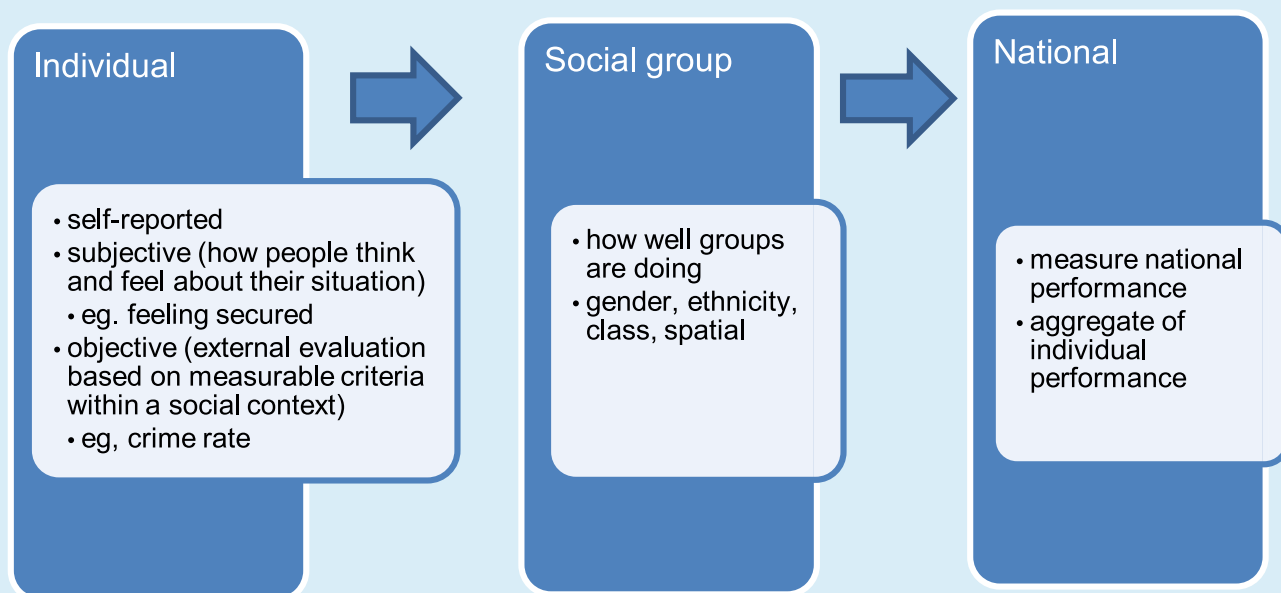
BOX 1.1 MEASUREMENTS OF WELL-BEING

Internationally, the measurement of well-being takes several directions based on different areas of focus. The scope of the index developed under each measure generally comprised three interfaces, as shown in *Figure B1.1*. The first interface is at the individual level. An example of the measure of well-being based on individual level is the poverty measure from a study entitled “Voices of the Poor” (Narayan-Parker & Patel, 2000). The measurement of well-being that is developed based on personal perspective can either be in a subjective/perception or objective form. The second interface is based on social groups. Most of the studies about social exclusion for

dimensions of human development, namely long and healthy life, access to knowledge, and standard of living. In 2012, the HDI of 186 United Nations (UN) member states were calculated and Malaysia was ranked 64.

Quality of Life Index (QOL) was developed by the Economist Intelligence Unit (EIU) and measures both objective and subjective determinants of quality of life across countries. This index was published once in 2005 and Malaysia was ranked 36 out of 111 countries. QOL is measured through a life-satisfaction survey and nine quality of life factors, namely material well-being, health,

Figure B1.1 Interfaces of Well-being Measurement



instance, focus on this type of interface such as those undertaken in the European Union (Atkinson, Cantillon, Marlier, & Nolan, 2005). The groups can be based on gender, ethnic, age group and occupational types. The third type of interface is related to performance of a nation across many countries.

The Human Development Index (HDI) developed by the United Nations Development Programme (UNDP) was first published in the Human Development Reports of the UNDP in 1990. The index compares the level of well-being of countries at the national level by measuring three basic

political stability and security, family life, community life, climate and geography, job security, political freedom and gender equality.

The Gross National Happiness Index of Bhutan to measure collective happiness of the population is another example of measuring well-being mostly referred to. This index uses nine domains which are psychological well-being, time use, community vitality, culture, health, education, environmental diversity, living standard and governance. A report of the Commission on the Measurement of Economic Performance and Social Progress for

Organisation for Economic Co-Operation Development (OECD) countries proposed that economic progress and development measures to go beyond production to well-being (Commission on the Measurement of Economic, Social, Stiglitz, Sen, & Fitoussi, 2009). It was suggested that for material well-being the indicators should move from production to income and consumption, focus on household perspective and use a balance sheet

approach-income, consumption and assets. It also recommended that distribution be assessed jointly and a multidimensional approach be adopted.

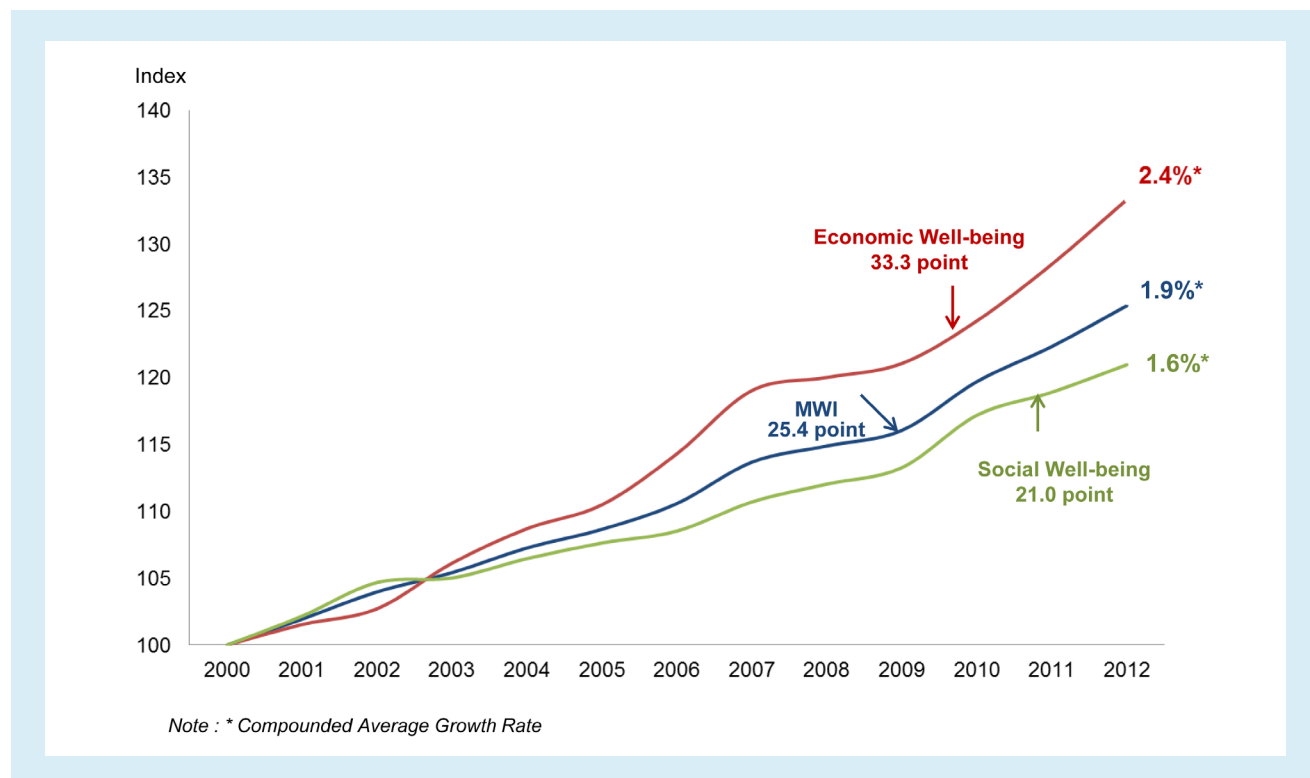
Source: UNDP (2013); EIU (2005); Royal Government of Bhutan (2010); Commission on the Measurement of Economic et al. (2009)

Overall Performance of MWI, 2000 - 2012

The performance of the MWI from 2000 to 2012 showed that the country's development policies and strategies were able to increase the level of well-being of the *rakyat*. During 2000 to 2012, the index increased by 25.4 points or grew by 1.9 per cent per annum, as shown in *Figure 1.3*. The economic well-

being sub-composite index improved by 33.3 points as compared to the social well-being sub-composite index which increased by 21.0 points. The economic well-being sub-composite index recorded a growth rate of 2.4 per cent annually, compared to 1.6 per cent for the social well-being sub-composite index.

Figure 1.3 Malaysian Well-being Index, 2000 - 2012



All components in the MWI have improved over the period of 2000 to 2012 with the **transport** and **housing components** recording the highest increase reaching 136.9 points each, followed by the **communications component** at 136.2 points and the **education component** at 132.9 points. Meanwhile, the **family component** recorded the lowest improvement, achieving only 104.6 points, as shown in *Table 1.1*.

The **transport component index** improved over the period, mainly due to the increases in private cars and motorcycles ownership and rail transport users.

Meanwhile, the significant rise in the percentage of households with improved access to treated water and electricity as well as reduced number of persons per room contributed to the increase in the **housing component index**.

The increasing numbers of telephones and domain name subscribers have contributed positively to the **communications component index** over the period. This is in line with the rapid development in communications technology and better Internet infrastructure that provided greater access to internet services.

Table 1.1 Malaysian Well-being Index, 2012

COMPONENTS	INDEX
Economic Well-being	133.3
Transport	136.9
Communications	136.2
Education	132.9
Income and Distribution	131.8
Working Life	128.6
Social Well-being	121.0
Housing	136.9
Leisure	131.4
Governance	128.1
Public Safety	125.6
Social Participation	120.6
Culture	120.3
Health	114.1
Environment	107.3
Family	104.6
MALAYSIAN WELL-BEING INDEX (MWI)	125.4
<i>Note : Base year 2000 = 100</i>	

The **education component index** also recorded a notable performance during the period. Greater access to all levels of education as well as improvement in the quality of education showed by higher literacy rate and better achievement of students in national examinations contributed to the index performance.

The **income and distribution component index** improved to 131.8 points, mainly due to higher per capita income and reduction in poverty rate. Meanwhile, the lower value of the Gini coefficient of 0.414 in 2012 reflected a more equitable wealth distribution which contributed to the higher index.

In line with the higher per capita and monthly household income, demand for leisure and travel activities increased as more people could afford vacations and holidays. The increased number of cinema goers and visitors to recreational parks and outdoor activities as well as paid television subscriptions were the major contributors to the **leisure component index**, which increased to 131.4 points in 2012.

The **working life component index** improved to 128.6 points in 2012. This was contributed mainly by a low number of industrial accidents and a decrease in the number of trade disputes, as well as lower average working hours. These reflected the existence of a more conducive working environment and healthier employer-employee relationships.

The **governance component index**, which is used to gauge the efficiency of the delivery system, also improved to 128.1 points. This is mainly due to the increased number of electronic payments reflecting customer confidence. The higher percentage of cases solved by the *Biro Pengaduan Awam* also contributed positively to the performance of the index.

The **public safety component index** recorded 125.6 points as the number of crimes and road accidents reduced during the period. The positive performance of the index was due to concerted

efforts undertaken to reduce crime rates, particularly street crimes, as well as to provide better road conditions for the *rakyat*.

The **social participation component index** also showed improvement. The index increased to 120.6 points in 2012. A substantial increase in the number of registered non-profit organisations and residents' associations reflected encouraging efforts towards creating a united and harmonious community. The increased membership in *Ikatan Relawan Rakyat Malaysia* (RELA) and *RakanCop* also indicated greater awareness and responsibility of communities in making the neighbourhoods safer. However, the decline in registered voters slightly affected the overall index score.

The **culture component index** also improved to 120.3 points. This was mostly contributed by a higher number of membership in public libraries and visitors to museums, *Kompleks Kraf* as well as *Istana Budaya*. More people were appreciating arts and traditional craft and thus positively influenced this index.

The **health component index** improved to 114.1 points mainly supported by the increase in life expectancy at birth, improvement in the doctor to population ratio and shorter hospital waiting time for out-patients. The significant improvement in the doctor to population ratio reflected greater access for higher quality of health services.

The **environmental component index** increased to 107.3 points during the 2000 to 2012 period. The major contributors to the increase were improvements in water quality and maximum mean temperature.

The **family component index** improved to 104.6 points. The increase in mean monthly household income and improvement in dependency ratio contributed to the index performance. However, the increase in the number of divorce and juvenile crime cases softened the overall performance of the family index.

The MWI measures well-being of the *rakyat* from a multidimensional perspective. The index was formulated as a composite index using 14 components and 68 indicators. In this report, the performance of the MWI is complemented with

a detailed analysis of the country's achievement in translating national income into well-being of the *rakyat*. Overall, the well-being of the *rakyat* has improved with most of the indices moving positively with the change in national income.