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Modelling economic wellbeing and social wellbeing for sustainability: a theoretical concept

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Abstract

The purpose of this paper is to explore relation between wellbeing and sustainability in an attempt to establish theoretical concept for sustainable wellbeing. Over the years, growing number of researches seek to understand and reason with factors that influence and constitute wellbeing and its potential synergy with sustainability. Recent studies have highlighted that factors constituting wellbeing do not necessarily indicate sustainability. Despite sustainability, studies share the same aim that is to improve wellbeing. The distinction between sustainability and wellbeing is clear. Sustainability is more of a future-oriented concept, while wellbeing accounts for present condition. Consequently, wellbeing indicators fail to capture issues, such as inequalities, climate change, scarcity of natural resources and many others. Malaysia Wellbeing Report 2014 established 14 components of wellbeing that constituted under economic and social wellbeing. In Malaysia Wellbeing Report 2014, environment and family institutions indexes correlated negatively with national economic growth. Social participation, public safety and health indexes also had weak positive correlation with the national economic growth. Two important components in sustainability are awareness and participation. Ethical and moral knowledge, as well as environmental responsibilities, are among obligations owed to as far as distant strangers at a distant time and space. Thus, sustainable wellbeing encompasses interconnectedness with people and interconnectedness with nature. Therefore, the discovery of synergy between wellbeing and

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sustainability involve not only measuring human capital but also the contribution of their conscious decisions to the wellbeing of the future. The paper summarized how reconciling wellbeing and sustainability unlocks opportunities for better and all-inclusive indicators for sustainable wellbeing.

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1. Background

The need of a theoretical concept on sustainable wellbeing has grown over the past years^{9,11,15}. Most studies observed that, although wellbeing studies and sustainability studies aim to provide better wellbeing, wellbeing and sustainability were highly separated^{11,15}. However, sustainable wellbeing offers potential of more comprehensive wellbeing indicators which account for a long term use¹¹. This study is intended to establish the theoretical concept of sustainable wellbeing that completes concepts of economic wellbeing and social wellbeing.

Malaysia, comprised of a heterogeneous society, was chosen as a case study. Multi-ethnics and multi-cultures were among strong elements in Malaysia that have played a great role in politics of the country. The country's economy is traditionally fueled by natural resources expanded in sectors, such as commerce, science and tourism. Since the independence in 1957, Malaysia Growth Domestic Product (GDP) has annually increased at 6.5% for over the past 50 years. Despite the government's goals at balancing economic growth and environmental conservation, Malaysia has been alleged to give preferentiality to affluent corporate industries over environment and ecological biodiversity. More than 60% of the Peninsula forest and 80% of Sarawak rainforest have been cleared. Urbanization, mining, logging and various agricultural practices have resulted in severe environmental degradations, such as loss of tree covers, climate change, erosion and sedimentation, flood, imbalance of water cycle and loss of biodiversity^{9,12}. Malaysia is in need of sustainable wellbeing approach to prepare for the country's future. The primary document being assessed was Malaysia Wellbeing Report 2014. The report delivered conditions of Malaysia's economic wellbeing and social wellbeing based on 68 indicators.

The first section of the paper discussed on the theories, issues and methods to develop sustainable wellbeing indicators. The second section revised the progress of Malaysia Wellbeing Indicators as a case study. The third section delivered the theoretical concept of sustainable wellbeing. The paper concluded with a summary and future direction of the research.

2. Key concepts of Wellbeing

Wellbeing is a positive physical, social and mental state which stems from a host of collective goods and relations with people and places. It requires basic needs to be met and enhanced by conditions that include supportive personal relationships, community empowerment, financial security, rewarding employment, good health, and a healthy and attractive environment^{2,11}.

Researchers recognized wellbeing as an intricate state and multifaceted process that it undertakes constant dispute over the years. Wellbeing takes different forms conflicted across different time, setting and societies demanding for all-inclusive environment for human settlement. It embraces personal, interpersonal and mutual needs that influence each other. Intertwining elements, such as physical, cultural, and natural settings, as well as technological environment, manipulate wellbeing and are manipulated to achieve wellbeing. Critical international and national perspectives and movements realize positive changes or interventions in achieving wellbeing. The changes and interventions recognize diversity, inequalities, common mindsets and intended and unintended consequences of approached actions^{5,11,15}.

On the other hand, sustainable wellbeing entails pursuing sustainability towards achieving wellbeing. The approach of sustainable wellbeing is to place maintenance and expansion of wellbeing onto a sustainable basis where it is being provided by unsustainably in the present^{6,11,15}. In other words, sustainable wellbeing is achieving

wellbeing without compromising others' abilities to achieve their wellbeing. 'Others' is in reference to the present society, the future generation and the surrounding environment.

3. Lessons from Earlier Approaches to Sustainable Wellbeing

Past researches had hopeful approaches towards integrating sustainability in wellbeing. Some findings of such approaches recognized disappointing issues in realizing the connection between sustainability and wellbeing. ^{13, 15}. The following points summarize major obstacles addressed by past researches on sustainability and wellbeing:

- Modern government efforts in containing immense issues, such as terrorism and moribund economies, overthrew political interest to tackle the reality of limits¹⁵.
- Skeptical ambitions of the corporate sectors to deliver sustainable development were ended up by being common oxymoron due to lack of attention in fixed policies and pattern of international trade ¹⁵.
- Modern markets increasingly (i) designed to favor access to those who were wealthy and powerful at the
 expense of those who were poor and defenseless, (ii) preoccupied to guarantee profit in short term, thus,
 limited ability to plan for sustainability, and (iii) were failed to confront indirect relations of unstable
 commodity prices towards natural-resource scarcities, socio-economic issues of developing countries and
 climate change 4,5,15.
- Corrupted bureaucratic influences, among which include corporate globalism, market fundamentalism, privatization of public services, unofficial influence of political parties' donators and ready access to politicians to get ahead, treacherous access of business advisors into public service and many others, demoralized democracy rights of the citizens^{5,15}.
- Ineffective use and misuse of science and technology, misdistribution of consumption and investment, incompetence, mismanagement and corruption, continuing population growth, ignorance, apathy and denial led to the persistence of poverty and inequality, preventable diseases, oppression of human rights and wastage of human capital⁵.

Based on the obstacles addressed, it is understood that the most hopeful scenario to realize sustainable wellbeing is at the local level^{5,15}. However, there are distinguished organizations which approach sustainable wellbeing at international level using objective indicators. One of which is the Sustainable Society Index.

The Sustainable Society Foundation (SSF) introduced Sustainable Society Index (SSI) in 2006 to gauge development of societies towards achieving sustainability. The SSI consists of 21 indicators arranged under eight categories and three dimensions. The three dimensions are human wellbeing, environmental wellbeing and economic wellbeing. In human wellbeing, there are indicators categorized under (i) basic need, (ii) health, and (iii) personal and social developments. In environmental wellbeing, there are indicators categorized under (iv) nature and environment, (v) natural resources, and (vi) climate and energy. In economic wellbeing, there are indicators categorized under (vii) transition and (viii) economy. The three cores of human wellbeing, environmental wellbeing and economic wellbeing are interdependent. The dimension of human wellbeing manifests the fundamentals of human beings. The environmental wellbeing represents the ecosystem where humans live and economic wellbeing is the essentials which humans need to be able to do what they want ^{18,19}.

SSF believes that sustainability is not merely a concern on depletion of resources; but, it stands on four principles. The first and the second principles are intra-generational equity which refers to solidarity in the present society and inter-generational equity that is not to deprive the environment and resources so that the next generation will not live in deficiency. The third is the ecological limits, i.e. to live within Earth's carrying capacity. The fourth principle, which SSF considered to be precautionary, is in the event of inadequate information – it is better to err on the side of caution rather than risking irreversible decline. Therefore, SSF recognizes sustainable society as the society that: (i) meets the needs of present generation, (ii) does not compromise the resources of future generation's necessities for their needs, and (iii) believes that every human being is given the opportunity to progress in freedom within well-balanced society and in harmony with the surroundings^{18,19}.

Arguably, although SSF emphasizes the importance of meeting needs and opportunities of present society without compromising the needs for future generation, the organization of the indicators barely recognizes the idea of wellbeing limits. There are no indications of (i) essential needs of the society which recognize elements that humans cannot live without, (ii) complementary needs of the society which recognize elements that would be better

to live without them, the living system is disrupted and (iii) desired opportunities in life which may require cautions so that achieving opportunities will not compromise the resources of the future generation.

Dimensions	Categories	Indicators
	Basic Needs	Sufficient Food
		Sufficient Drink
		Safe Sanitation
	Health	Healthy Life
Human Wellbeing		Clean Air
		Clean Water
	Personal and Social Development	Education
		Gender Equality
		Income Distribution
		Good Governance
	Nature and Environment	Air Quality
Environmental Wellbeing		Biodiversity
	Natural Resources	Renewable Water Resources
		Consumption
	Climate and Energy	Renewable Energy
		Greenhouse Gasses
Economic Wellbeing	Transition	Organic Farming
		Genuine Savings
	Economy	Gross Domestic Product
		Employment
		Public Debt

Table 1. Sustainable Society Index¹⁵

An approach of social indicators, which cater on the idea of essential needs and opportunities, is Social Progress Index (SPI) developed by an organization called Social Progress Imperative. Social Progress Imperative is a nonprofit, nongovernmental organization established in 2012 in the United State. The SPI is the aggregated indexes of social and environmental indicators which are represented under basic human needs, foundations of wellbeing and opportunity. The indexes represent the outcome of success and not the extent of effort which the country makes. An example would be the achieved health in a country instead of how much the country spent for health.

Social progress is "...the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential..." ^{13,20}.

The followings are three important questions in developing social indicators for SPI:

- i. Does a country provide for its people's most essential needs?
- ii. Are the building blocks in place for individuals and communities to enhance and sustain wellbeing?
- iii. Is there an opportunity for all individuals to reach their full potential?¹³

The Social Progress Imperative claims that SSI compliments economic growth, yet it does not include indicators of economic growth, such as Gross Domestic Product and employment rate. The SSI skips most of common economic indicators to avoid the utilization of economic proxies. The aim of SSI is to exclusively measure social progress through combination of social and environmental indicators at given dimensions.

The indicators in the social progress are organized under 12 components and the components are classified under three dimensions. Basic human needs refer to the rights to basic survival. This implies to live in security and shelter with sufficient water food and basic medical care to be able to survive to maturity. Foundation of wellbeing refers to the moral basis to happiness which highly relates to basic knowledge, health and balanced ecosystem. Finally, opportunity refers to equality of opportunity to all citizens. Equality of opportunity is also the key element in freedom and liberty²⁰. Table 2 shows the indicators and components categorized under the three dimensions.

Table 2. Social Progress Index²⁰

Dimensions	Components	Indicators
		1. Undernourishment
	Nutrition and	2. Depth of food deficit
	Basic Medical	Maternal mortality rate
	Care	4. Stillbirth rate
		5. Child mortality rate
		6. Deaths from infectious diseases
	Water and	7. Access to piped water
Basic	Sanitation	8. Rural vs urban access to improved water source
Human		9. Access to improved sanitation facilities
Needs	Shelter	10. Availability of affordable of housing
		11. Access to electricity
		12. Quality of electricity supply 13. Indoor air pollution attributable deaths
		14. Homicide rate
	Dona amal Cafatz	15. Level of violent crime
		16. Perceived criminality
	Personal Safety	17. Political terror
		18. Traffic deaths
		19. Adult literacy rate
		20. Primary school enrollment
	Access to Basic	21. Lower secondary school enrollment
	Knowledge	22. Upper secondary school enrollment
		23. Gender parity in secondary enrollment
	Access to	24. Mobile telephone subscriptions
	Information and	25. Internet users
Foundations	Communications Health and	26. Press Freedom Index
of		27. Life expectancy
Wellbeing		28. Non-communicable disease deaths between the ages of 30 and 70
		29. Obesity rate
	Wellness	30. Outdoor air pollution attributable deaths
		31. Suicide rate
	F	32. Greenhouse gas emissions
	Ecosystem Sustainability	33. Water withdrawals as a percent of resources
		34. Biodiversity and habitat
		35. Political rights
		36. Freedom of speech
	Personal Rights	37. Freedom of assembly/association
		38. Freedom of movement
		39. Private property rights
	_	40. Freedom over life choices
	Personal	41. Freedom of religion
	Freedom and	42. Modern slavery, human trafficking and child marriage
	Choice	43. Satisfied demand for contraception
Opportunity		44. Corruption
	Tolorongo and	45. Women treated with respect
		46. Tolerance for immigrants
	Tolerance and	47. Tolerance for homosexuals
	Inclusion	48. Discrimination and violence against minorities
		49. Religious tolerance
		50. Community safety net
	Access to	51. Years of tertiary schooling
	Advanced	52. Women's average years in school 53. Inequality in the attainment of education
	Education	53. Inequality in the attainment of education 54. Number of globally ranked universities

The overarching findings of the Social Progress Imperatives include the facts that there are some of the social progress components and indicators which closely relates to economic development of a certain countries. Additionally, certain prosperous countries show low social progress index, while other countries with less economic progresses exhibit higher social progress index²⁰. Thus, it suggests that social wellbeing is somewhat independent from economic wellbeing. Perhaps, exclusively measuring the progress of the society in terms of their social wellbeing and economic wellbeing can be skipped or, later, correlated. Yet, in measuring sustainable wellbeing as a whole, economic wellbeing is an important dimension as it represents the key to which human beings are able to achieve material wealth and able to do what they want to do. A favorable finding to this research is that all of the dimensions in SSI are distinct and the components of SPI are also distinct²⁰. This shows that there are existing levels

of wellbeing. In other words, wellbeing exists independently in basic needs, foundations of wellbeing and opportunities.

4. Methodology

The concept addressed in this paper was based on literature reviews. Literature reviews serve as a purpose to indicate and discuss significant issues and justify findings in the attempt to explain and support the findings from two data-collection methods – in this case, questionnaire survey and interviews. Literature review is useful in most schemes of triangulation research²¹. It is an important tool involving readings on numerous important materials. Some of the materials include official documents gathered from government bodies, museums, public papers and the media ²². In relation to the study, literature review was an important tool involving readings from numerous important materials gathered from government bodies, journals, public papers and media on issues pertaining to sustainable wellbeing and social indicators.

Development of social indicators is a two-way process. The indicators stem from policy objectives; they also concretize and shape the policies. So, developing indicators cannot be a purely technical or scientific process; rather, it should be an open communication and policy process¹.

In order for indicators to be suitable for components that they are measuring, indicators must be simple and directionally clear. In order to be simple, the number of indicators must be limited, and the method of calculating them must be transparent. Directionally clear means that they should indicate items and trends obviously relevant in terms of importance for sustainability, sensitivity and ability to signal progress or the absence of progress.¹

Studies on social indicators or development indicators addressed that the dimension of indicators existed in two ways, i.e. objective and subjective indicators. Both objective and subjective indicators were either measured quantitatively or qualitatively, based on the nature of the data and the purpose of the measurement. Fig. 1 illustrates the types and example of indicators. Objective indicators alone cannot comprehensively measure a certain component without subjective indicators (refer to Fig. 2)^{5,8}. Subjective wellbeing indicates a system of decisions and causes which enable researchers to observe, predict and manipulate the consequence of a certain change in the environment of the social aspects⁸.

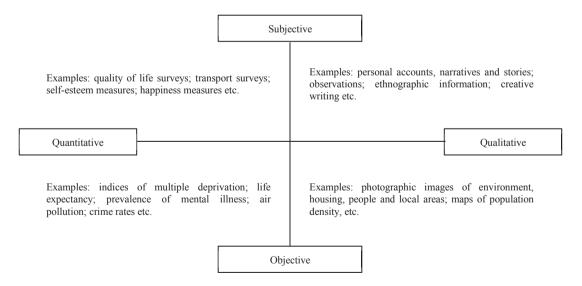


Fig. 1. Dimension of Indicators by John Haworth and Graham Hart 2007⁵

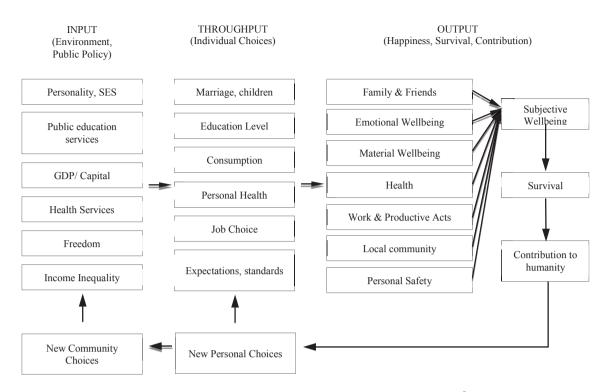


Fig. 2. System theory structure of concepts and causes by Mark Rapley 2003⁸

5. Malaysia Wellbeing Indicators

Malaysia Economic Planning Unit (EPU), which prepared Malaysia Wellbeing Report, defined wellbeing as the physical, social, and economic benefits that contributed to the enhancement in the quality of life and satisfaction of an individual, family and the community³. In Malaysia Wellbeing Report, there were 14 components of wellbeing introduced. 68 indicators in total were used to measure each component. The components constituted under economic wellbeing were transport, communications, education, income and distribution and working life. Components constituted under social wellbeing were housing, leisure, governance, public safety, social participation, culture, health, environment and family. Table 3 lists the components and indicators of the Malaysia Wellbeing Reports.

In recent presentation of MWI, EPU addressed that there was a need for a comprehensive strategies to tackle what matter most to the citizens. EPU also addressed that (i) the increase in cost of living, (ii) low housing affordability, (iii) deterioration of family institution, (iv) increase of and non-communicable diseases and (v) environmental degradation were among critical issues faced by the citizens of Malaysia¹⁷. Sustainable wellbeing focused on what was most important to the citizens through levels or limits and interdependencies with environment and other human beings.

In reference to the indicators of Malaysia Wellbeing, it was found that some of the indicators measured for the components were inconclusive. Some of the examples could be evaluated under housing components of Social Wellbeing. One of the items being measured in housing components was the provision of low-cost housing units. Other indicators included crowdedness and proportion of households with treated water supply, electricity supply and garbage collection services³. Indicator for Malaysia housing components was found different and rather inconclusive from other countries. While other countries measured housing ownerships, Malaysia was measuring annual growth in developed units of low-cost housing.

Alternatively in Canada, the housing component comprises of indicators of housing quantity and quality. Publichousing waiting list, rental affordability, annual percentage of owners and renters, and correlation between income and house cost are the items measuring housing quantity. Additionally, real estate sales per resident and the proportion of the population living in dwellings that contain no more than one person per room are also necessary items in measuring housing quantity in Canada. In addition, housing quality is as the proportion of the population living in dwellings that are not in need of major repairs ¹⁶. Additionally, a study on Thailand housing wellbeing indicated that health status was attributed to congestion and lack of privacy in housing quality ¹⁴. Therefore, household health status was among indicators of housing components. There are similarities and differences found in terms of social wellbeing components and indicators across different countries. The similarities are likely attributed to basic human's necessity and differences are likely attributed to different social conditions. Nevertheless, comparisons of indicators for every component revealed the gaps in Malaysia Wellbeing Indicators. Greater number of indicators accounts for higher availability and transparency of data that Malaysia is currently lacking of.

Apart from inconclusive indicators, Malaysia also faces alarming issues in the discovered wellbeing indexes (refer to Fig. 3). Malaysia Wellbeing Report 2014 stated that 1% of growth in GDP contributed to 0.28% of improvement in economic wellbeing; yet, only there was 0.16 per cent growth in social wellbeing. The most alarming issue is that the Environmental index responded negatively to the GDP growth. Other components in need of attention include health, family, social participation and public safety³. The necessary process of urbanization has brought great pressure to the current social facilities in Malaysia. Improvement of social facilities must be accomplished at the same pace, or rather faster than population growth. There is a common tendency for the state and local authorities to pay attention more on economic and physical development without balancing social progress of the citizens⁴. Economic development should not isolate social progress in an attempt for modernization. Crucial social wellbeing components, such as environment, education, health and welfare, family and public participation, are essential in modernization process^{4,5}.

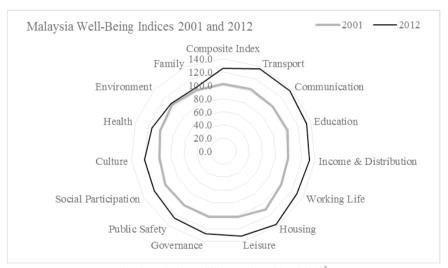


Fig. 3. Malaysia Wellbeing Index 2001 and 2012³

In order to gauge Malaysia's progress, determining social development of the citizens through sustainable wellbeing indicators is crucial. The criteria for selecting variables for monitoring system are (i) meaningful at the community level, (ii) available and consistent data at national level annually and (iii) easily understood by the public ¹⁶. Comparisons across countries indicate gaps and profundity in the existing indicators and practicality of the indicators in relation to the social condition of Malaysia. Suitability and conclusiveness of the indicators in measuring components of wellbeing are important; not only to truly measure the social progress of the nation, have

they also provided accessibility and transparency of social-related information to the public. This way enables the government and the public to plan for a better future.

Table 3. Malaysia Wellbeing Indicators by Malaysia Economic Planning Unit³

	Components	Indicators	
Economic	Transport	Road Development Index (RDI) (+)	
Wellbeing		Private motorcars & motorcycles (per '000 population) (+)	
		Road length per capita(km) (+)	
	Communication	Rail ridership (million) (+) Fixed and mobile telephone line subscriptions (per '000 population) (+)	
	Communication	Internet subscribers (per '000 population) (+)	
		Number of hotspot locations (+)	
		Number of domain name (per '000 population) (+)	
	Education	Equality Pre-school participation rate (+)	
		Primary school participation rate (+)	
		Secondary school participation rate (+)	
		Tertiary participation rate (+)	
		Quality Literacy rate (+)	
		% of graduate teachers in primary schools (+)	
		% of graduate teachers in secondary schools (+)	
		National Average Grade (UPSR)(+)	
		National Average Grade (SPM)(+)	
		Number of lecturers with PhD (+)	
		Primary education survival rate(+) Secondary education survival rate (+)	
	Income	Real per capita income (GNP) (RM) (+)	
	meome	Gini coefficient based on disposable income (-)	
		Incidence of poverty (-)	
	Working Life	Trade disputes (-)	
	8	Man-days lost due to industrial action ('000) (-)	
		Industrial accidents (-)	
		Average working hours (-)	
Social	Housing	% of low-cost housing units to bottom 40% (+)	
Wellbeing		% of households with treated water(+)	
		% of households with electricity (+)	
		% of households with garbage collection services (-)	
	T -:	Crowdedness (no.of persons per room) (-)	
	Leisure	No. of households with paid TV subscription ('000) (+) Domestic hotel guests (per '000 population) (+) Recreational parks visitors (per '000 population) (+)	
	Governance	Cinema goers (per '000 population) (+) % of corruption cases prosecuted (+)	
	Governance	No. of e-payment transactions (million) (+)	
		% of cases solved by Biro Pengaduan Awam (+)	
		% of e-Filing users (+)	
	Public Safety	Crime rate (per '000 population) (-)	
	,	Road accidents (per '000 vehicles) (-)	
	Social	% of registered voters (per population aged 21 years and above) (+)	
	Participation	No. of registered non-profit organisations (per '000 population) (+) No. of registered residents' associations (+)	
		Membership in RELA and Rakan Cop (per '000 population)(+)	
	Culture	Membership in public libraries (per '000 population)(+)	
		No. of Istana Budaya visitors (per '000 population) (+)	
		No. of museum visitors (per '000 population) (+)	
	Health	No. of Kompleks Kraf visitors (per '000 population)(+)	
	meann	Level of Life expectancy at birth (+) Health Non-communicable disease cases (per '000 population) (-)	
		Infant mortality rate (per 1,000 live births)(-)	
		Maternal mortality rate (per 100,000 live births) (-)	
		Healthcare No. of beds in hospitals (per '000 population) (+)	
		Services Doctor to population ratio(-)	
		Hospital waiting time for out-patients (minute) (-)	
	Environment	Air quality (% of station with API<50) (+)	
	211 TOTHINGIN	Water quality (% of clean river monitored) (+)	
		% of forested land (+)	
		Quantity of scheduled waste generated (tonnes/year)/population (-)	
		Maximum mean temperature (°C) (-)	
	Family	Institution Divorce rate (% of population aged 18 and above) (-)	
	·· J	Domestic violence cases (per '000 population) (-)	
		Juvenile crimes (% of population aged 10 -18) (-)	

Financial	Mean monthly household income (RM)(+)
Health	Household debt per capita (RM) (+)
	Dependency ratio(-)

6. Theoretical Concept for Sustainable Wellbeing

Based on past research, particularly the obstacles discovered in delivering sustainability in wellbeing, sustainable wellbeing was found to be in another realm. In order to determine sustainable wellbeing of economic and social aspects, economic wellbeing and social wellbeing needed to be measured interdependently. Due to the earlier obstacles addressed in the paper, the most promising transition towards sustainability was laid at the local scale provided that the national and international framework would support the local actions. Sustainable wellbeing sought for capabilities in recognizing limits in development and lifestyle, change of mindset and empathy towards humans and other living things^{18,19}. Additionally, in relation to the existing wellbeing, sustainable wellbeing offered opportunities for economic wellbeing and social wellbeing to be more integrated and inclusive. Fig. 4. illustrates the theoretical concept of sustainable wellbeing.

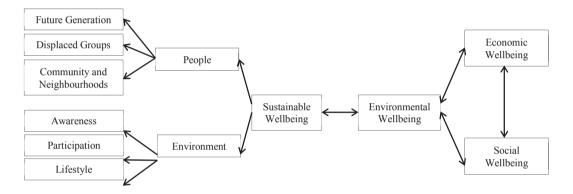


Fig. 4. Concept of Sustainable Wellbeing

Sustainable wellbeing highly depends on two essential components which are people and environment. "People" points to the association of a person or a community with other human beings. Thus, the wellbeing of a person or a community should not be on the expense of others' wellbeing. In this sense, other's wellbeing are the future generation's wellbeing and the displaced group's wellbeing. "Environment" indicates the awareness, participation and lifestyle. The three components account for knowledge, sensitivity and everyday activities that attentively recognize boundaries of use of the environment.

In order to ensure that the economic and social wellbeing achieve sustainability, sustainable wellbeing unlocks the opportunities of greater numbers of indicators and measurement methods. Thus, some indicators need to be correlated with another indicator in the attempt to determine the sustainability of a certain component. Economic and social wellbeing components for Malaysia require more indicators in shaping sustainability of basic human needs and opportunities of every individual as a citizen.

Since indicators vary across locations and communities, indicators and data for different states are obtained and measured in different ways⁸. Based on the nature of the intended data (refer to Fig. 1)⁵, indicators can be developed according to the readiness of the government and the public^{5,8}. In order to ensure the continued positive efforts towards sustainable wellbeing of the public, subjective sustainable wellbeing studies should also be carried out for each component of sustainable wellbeing in relation to the economic and social aspects of the public. Subjective measurement (refers to Fig. 2)⁸ enables researchers to predict the mindset and decisions of different communities across locations and time.

7. Conclusion

This research discussed theories and concepts of sustainable wellbeing. The study discovered that sustainable wellbeing should be initiated at local scales. The future direction of the research is to produce indicators of sustainable wellbeing in relation to economic and social aspects. The economic and social aspects display interconnections with people and interconnections with the environment.

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