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## Improving the quality of life for sustainable development

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# Improving the quality of life for sustainable development

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**Abstract.** Development will grant people with a new form of living security and hope. Besides, one of the major objectives for development is to ensure that the society who lives will experience a good quality of life by managing to fulfil the human needs. There are two central needs by inhabitants'; first, the biological needs that are essential to the survival of the society and second, cultural requirements that are necessary for the functioning and growth of the residents of the development area. In order to fulfil the human needs, development has become an important tool to deliver the requirement of the society. However, intense development generates many demands on natural environment. Development is often cited as one of the major agent that has led to the transformation of the four main components of the natural environment -- land, water, air and biological aspects. Besides, developments often embark on a chain of result of environmental systems disruptions and ecological damage. In addition, if these requirements of human needs cannot be fulfilled or is below the minimum input, this situation tends to lead to the vulnerability of the society. Conflict between human needs and environmental sustainability has guided many authorities to engage sustainable development concept for the development planning. The concept of sustainable development was described by the 1987 Bruntland Commission Report as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable development is regarded as understanding the strength and links among the human needs and the environment. Improving quality of life of the society is the key for sustainable development. Thus, in order to improve quality of life appreciating the potential of development area such as improves land utilization; efficient use of resources as well as creating more opportunities to the society will be the catalyst to achieve sustainable development.

## 1. Introductions

Sustainable development is an initiative plan advised by the United Nation for the remarkable future nation. In common words sustainable development is defined as: 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' [1]. The primary principle for sustainable development is that: 'human beings are at the centre of concerns' [2]. However, what is the connection between human needs and sustainable development? There are four dimensions to sustainable development derived from Bruntland Report: society – satisfying basic human needs, environment – long term ecological sustainability, culture and economy – which are linked collectively. Besides, sustainable development is robustly linked to the quality of life of the society – it is about whether the social, environmental systems and economic activities that build up the community are providing a healthy and significant life for all the current living society and future.



Since the early introductions of the concept of sustainable development, studies show that the concept of sustainable development has become enormously complex [1]. Rapid development around the world has created a huge concern on how the natural environment will be able to cope with the continuous changes. Environmental degradation has been experienced by all environmental components since the development is taking place. Besides, the growth and successful society will depend on various development activities. Undoubtedly, human fundamental needs are to be satisfied. By managing to conquer the nature with the knowledge of concept of possibilities where men are able to explore and develop sensitive space and environment with the help of technology, land is easily to be developed. In order to fulfil the needs of the society towards a better nation, the great challenge is to protect all the natural system from being deteriorated. However, in many aspects of development, its processes and activities are exceeding the natural limits of carrying capacity of the natural environment.

From the historical perspectives, the industrial revolution marked the era of increasing land use development. In order to support the creation of new technology for industrial activities, basic facilities for example roads, railways, factories, housing and business area were built. Hence, the emergence of new city and urban development was generally recognized due to industrial revolution. Migration processes become significant to the city of London, Manchester, Leeds and few other cities in Britain following to secure job opportunities. However, the industrial revolution which began in Britain in 1760 shows the evidence of serious industrial pollutions which brought the issues of air, water and soil pollutions. Nevertheless, development processes not only create conflict with natural environment but to the society as a whole. The most significant social issues during the era of industrial revolution was about the industrial development that has produced imbalance in human needs which brought to the issues such as poverty, disease, welfare services and criminals. It is crucial to seek balance between development and human needs for achieving sustainable development.

In addition, sustainable development is also about dealing with equity [1]. Frequently, poor society and marginal groups are most exposed to environmental hazards, live in fragile environment and low excess to adequate general infrastructure. According to United Nations Universal Declaration of Human Rights: 'all people have the right to a standard of living adequate for the health and well-being of themselves and their family, including food, clothing, housing health care and the necessary social services' [3]. Concerned by the United Nations, the World Bank, world leaders and scholars over the variety social fabric that primarily demand the developments to fulfil their needs becoming the centre issue in achieving sustainable development. Improving quality of life by supporting the economic growth, reduce inequality of the society and improving the environmental management will lead to realization of sustainable development. Thus, a number of scholars suggested that the concept of sustainable development have to set up with sustainable development goals. In 2015, the UN-2030 Agenda for Sustainable Development [4] agreed in Sustainable Development Goals (SDGs) on the Millennium Development Goals (MDGs). Balance among the three components of sustainable development which are social, economic and environment and improved the exposure of coverage in order to reduce the obstacle to sustainable development [4]. Since 1980s some Asian countries have experienced rapid urbanization.

The consequence of such rapid urbanization in some developing countries is the inability of the authorities to provide adequate infrastructure facilities and services to keep pace with population growth. This resulted in the formation of squatter settlements that accelerate environmental deterioration. Environmental degradation poses a serious threat to the general urban society, but more so to the urban poor, most of whom are settled in squatter settlements in hazardous areas where the degree of environmental hazards is higher than in other parts of the city. Therefore, serious conflicts have arisen to achieve sustainable development because of the interaction between man and the environment that has led to various environmental problems [5]. For example, discovered that rapid urbanization in developing countries of Southeast Asia, which had forced the convergence of population, built-up areas and the use of technology into the cities, has modified the urban environment into a vulnerable and more

hazardous situation. Cities are sometimes located in floodplains or coastal areas, which are susceptible to various environmental impacts. Hence, changes to the natural environment and concentration of humans and their activities due to rapid urbanization have led to the city becoming at risk and vulnerable. Hence, together with the situation of urban development it has impacted the quality of life of the society. With respect to issue of improving quality of life for sustainable development, this article will focus on the impact of human needs to the environment. Besides, urban development has become a major contribution to fulfil the human needs in order for the people to have a quality of life. Increasing land use development, the emergence of mega cities and rapid urbanizations in a global context this paper will convey the sustainable development towards the event mentioned. .

## 2. Discussion

### 2.1 *Quality of life: a growing responsibility*

Studies explain that quality of life is one of the most important criteria when human started to develop the area for the purpose of fulfilling the human needs. However, development created by the people has the potential to combine safe and healthy living conditions [6]. In general, quality of life is related to changes in society or the social system from the level of dissatisfaction to the level of satisfaction when there is improvement in life conditions. Felce and Perry [7] argued that interaction in personal values, life conditions and life satisfaction will determine quality of life. Besides, there are variations in the understanding and perceptions given for quality of life among places and individuals [8]. As discussed by Sirgy [9], environments that insult or injure the humans who live in them inevitably will decrease the quality of life. Therefore, if one of the variables mentioned above reaches unsatisfactory levels, individual will experience a deterioration of quality of life.

On the other hand, Felce and Perry [7], identifies a more comprehensive approach by seeing the dimensions of quality of life as physical wellbeing, material wellbeing, social wellbeing, psychological wellbeing, religious wellbeing, and development and activity. In the similar direction, according to Massam [8], quality of life is very much related to public planning. Referring to Cutter Massam [8] defines quality of life as:

“... an individual happiness or satisfaction with life and environment, including needs and desires, aspirations, lifestyle preferences and other tangible and intangible factors which determine overall well being. When an individual's quality of life is aggregated to the community level, the concept is linked to existing social and environmental conditions such as economic activity, climate or the equality of cultural institutions. It includes both tangible and intangible measure reflecting local consensus on the community's values and goals”.

In practice, quality of life is traditionally defined under economic considerations. However, Diener and Suh [10] has raised concerns on the economic sole factor as the economic growth may not secure other important social well-being factors such as crime rates and stress levels among the citizens. Instead, economic growth might have divergently associated with certain indicators of quality of life such as leisure time or a healthy living environment. The recent understanding has seen the new scientific approach to measuring quality of life, e.g., the measurement of subjective well-being, human needs and social indicators [11]. Subjective well-being concerns about the individuals' subjective experience of their lives and advocates the assumption that well-being can be defined by people's personal experiences such as feelings and satisfactions. Thus, empirical study is significant in which it reveals the findings in relevance to the individuals, thus the society at large. A human need is to satisfy their basic needs which come from opportunities offered from social, built environment and natural resources. Social indicators, on the other hand, question the validity of solely using economic progress as the fundamental in measuring quality of life- whether more is always better.

### 2.2 *Human needs and environmental transformations*

In order to provide good living environment, human continuously interact with the nature by exploiting the natural resources. A resource is everything gained from the environment to meet human needs [12]. Hence, increasing population means increasing consumption of natural resources. Environmentally

sustainable society will not compromise the ability of future generation in order to fulfil their needs. However, in the course of time human needs will change particularly with the respect of needs to improve living conditions. One of the four primary dimensions from the Brundtland Report mentioned that satisfying basic human needs is a fundamental objective value which is not negotiable [1]. Discussed by Holden [1], the concept of need is embedded in the definition of sustainable development: 'It [sustainable development] contains [...] the concept of 'needs,' in particular the essential needs of the world's poor, to which overriding priority should be given' [1]. Hence, precondition for sustainable development are to ensure long term environmental sustainability and satisfying basic human needs.

Environmental systems stability will support the ability of natural component to deliver their services and goods that will allow mankind to live. There are three types of classification given to understand the function of natural resources as perpetual (such as sunlight, water and winds), renewable (such as soil, fresh water and air, vegetation and food crops) and non-renewable (such as fossil fuel, mineral and metals) [12]. Thus, some environmental components are unable to cope with the human demands when natural supply started to reduce. Currently at any classification of natural resources, human usage rate generally exceeds the natural resources replacement rate. As a result some environmental problems starts to exist and it is known as environmental degradation.

Stern [13] and Greer and Perry [14] stress that, there are two important needs which are influenced by population factors. First, there are biological needs that are essential to survival of the population, and second, cultural requirements that are necessary for the developed area functioning and growth (see table 1). If these requirements cannot be fulfilled or are below the minimum input, this situation can lead to the vulnerability of the developed society. However, in order to fulfil the human needs some migrating process for instance from rural to urban areas are the most common actions of the people. The focuses of migrating people are seeking for the living security and quality of life. Thus, urban functions require creating opportunities on demands of the increasing urban societies.

### *2.3 Biological requirements*

The biological needs of people living in the city are essentially the same as those of people who live in the country, and biological resources are currently being exploited [14]. Thus, in high density populations, these requirements cannot always be met by the immediate environment in the city [13]. Undoubtedly increasing population leads to increase the human needs and become a driving force of environmental change [13]. It is common for most of the cities in the world to draw food, energy sources, and material for shelter from an extensive hinterland. Hence extremely urbanized areas are increasing their levels of consumption and forcing the urban people to seek natural resources at a greater distance from the urban fringe, usually at greater expense because of the distance. With the urban population's basic needs as mentioned above, it is now appropriate to view the role of the environment in the urban environment or developed areas. Substantial attention with the growing population is the provided of adequate housing. The first industrial revolution was the catalyst for rural to urban migration in industrialised countries. Since the 1970s, industrialisation has been the driving force behind rapid urbanisation in Southeast Asia, and new industrial producers have emerged such as Indonesia, Malaysia and Thailand. Consequently, Southeast Asia presents the same result as developed countries in terms of rural to urban migration in the early stages of urban development.

### *2.4 Cultural requirements*

'Cultural requirement' here encompasses the totality of people's ways of living, built up by people and transmitted from one generation to another [15]. The urban ecosystem has survived under a variety of political and economic system and each leads to a different imprint on the urban environment. Successful urbanized areas generally have advanced technology and transportation. Transportation and technology allow the city to absorb the basic resources needed to fulfil the cultural requirements of its dense population. For example fuel, construction material and urban industries need natural materials for their production purposes and generate the urban activities. Input, storage and output are functions of the rates

at which energy flows through the ecosystem. The human element is most important in the manipulation of this energy. Cities are strongly influenced by the rates at which energy is imported and utilized.

**Table 1.** Some requirements of the urban ecosystem [30]

Biological Requirements	Cultural Requirements
Air	Political organization
Water	Economic system (including labour, capital, material and power)
Food	Energy
Space	Social and intellectual activities
Shelter	Education and information
Waste disposal	Recreation, cultural facilities and religion sense
	Transportation and communication
	Technology

Source: Modified

The opportunities availability constructed from social, natural capital and built area is the basic needs of the ability of humans to satisfy their basic needs [12]. Social capital, human capital, built capital and natural capital as input to persuade the human needs. Besides, sustaining the natural capital will allow the continuous living of organism and supports the economies development. Resources are obtained by an interaction between natural capital and human capital.

The accelerated growth of world population shows a sign of the needs in rapid and stable economic growth and innovation of new technology. The most significant trend following to increasing population is socio and economic transformation – from rural environments to urban environments [2]. Besides, it is a normal approach where human constantly change and assess their quality of life throughout their living process. Therefore, the transformation of mankind has constantly brought the new socio-cultural of human needs and environment interactions.

### 2.5 Urban development and environmental crisis

Urbanization is a system in organizing security and survival of the people at a certain level in a given environment [16]. Besides, urbanization is a man-made environment where the natural resources such as vegetation, land, water and air have been modified. Classical function of urban as an economic system primarily offers opportunities and potential for improving the standard of living of the society. Following to the modern urban environment, industrial activities and services have become the priority for the urban society. Urban activities require new urban landscape without agricultural activity.

Many researchers point out that the urban area is an open system. This means that an urban area cannot function independently and in isolation from other parts of the world. The urban area cannot emerge without changing its environmental components. As an open system, urbanisation is thought of as a box that receives inputs, throughputs, and outputs of energy and mass [17]. Most of the inputs are transformed or stored within the city, although some move through the system with little alteration or resistance. Generally, a portion of the transformed products and waste is sent out from the city as output. The balance between various inputs and outputs provides a simple measure of the city's metabolism; it indicates whether the city is in the state of growth, equilibrium or decay. According to Goudie [18], three self-evident interactions are apparent within the urban ecosystem: first, urbanisation involves a modification of the environment; second, the natural environment may influence the form, functions and growth of the city; and third, continuous feedback occurs in the city between man, culture, and the physical environment.

The core of development challenge is to understand the complex relationship between man and the environment. It is also how the society deals with each other when urbanisation is often cited as one of the major agents that have led to the transformation of the four main components of the natural

environment -- land, water, air and biological aspects. These environmental components play an important role in an urban environmental context. Jackson and Jackson [19] mention the fact that changes of the environment induced by man tend to be massive, and that in a previously undisturbed natural environment, the effects are usually more dramatic. As Douglas [20] explains, modification of land for the construction of a new landscape for a city will soon lead to massive modifications in the circulation of energy, water and biological aspects. Expanding numbers of factories and transportations have led to increased pollutant emissions affecting air and water quality, and public health. Besides, the increase in the dimension of cities for example, has affected the biosphere and the local climate.

Development processes particularly through urbanization have led to changes in human needs. For the cultural needs of the society in urban conditions it has illustrated the improvement of the standard of living and life style. However, in many places in the world, there are disproportionate distributions of wealth which creates the imbalance in the urban society. The rich society and poor community generally will have their own preferable of choosing the living environment to settle due to the expenses ability. Poverty of the urban society leads them to live on fragile environment such as hill slopes, flood plain areas. Therefore, urban environment explains the issues of quality of life following to less comfort level experienced by the urban poor.

When the population increases, the need for land and other resources also increases. The sudden increase in the rate of development growth has resulted in a significant change to the land use patterns of urban areas. In recent years, ever more forests are being converted into built-up areas and natural resources are being over exploited for human needs. Land has become the most sought-after commodity for the development of all kind of economic activities. Economic restraints have increased the demand for land. Land clearance for housing, commercial areas and industrial development has led to severe erosion and mass movement processes, leading to massive sediment loss. When changes occur in one component of an environmental system, this will naturally cause changes in another component of the system, which will react in order to return to equilibrium. Hence, natural processes that have been altered by human mismanagement will eventually lead to the risk of environmental change and disaster, either directly or indirectly [21]. These are the results of natural resource development and population encroachment into process-event systems such as floodplains and mountainous terrain. Moreover, urbanization can be thought of as being reflexive, contributing towards its own increasing risk, at local, regional and global levels [22].

The problem of affordable housing in suitable locations for the urban poor persisted as a crucial issue for cities in Southeast Asia [23]. Migrants to the urban areas were faced with the problems of a shortage of convenient housing. Thus, these migrants created new settlement areas located on any vacant land within the city. Squatter settlements form a significant feature of cities in Southeast Asia. The occurrence of squatter settlements is an example of the imbalanced development of the city that will affect the natural environmental components in many ways. As cities expand, it is common for low income groups to develop settlements on land subject to flooding or on or beside wetlands, as inhabitants have more chance of being permitted to stay there [22]. The mushrooming growth of squatter settlements in Asian countries contributes indirectly to environmental decline, which in turn influences their well being and quality of life. Being located in sensitive and hazardous site, combined with the lack of basic facilities, leads to environmental impacts, for example housing in floodplain areas is risk to floods. Furthermore, pollution levels contributed by the informal settlements are tremendously high. Inadequate water and sanitation, overcrowded houses, air and water pollution and uncollected garbage lead to an enormous toll on human comfort and health.

In terms of layout, the squatter settlements are not properly planned, with overcrowded dwellings, poor drainage systems, poor sanitation and no adequate waste disposal system. Bad housing is a main feature of squatter settlements conditions. Bad housing refers to the material used to build the houses, which is normally cheap and flammable material such as wood, zinc and hardboard [22]. The structure of the

houses are usually temporary, as there is no plan for the house. The inhabitants also cannot predict how long they will live in a particular area, as some of them will move from one place to another according to job opportunities. Dwellings also have inadequate lighting, air, toilet and bathing facilities and improper heating that is subject to fire; they over spill the land and leaving no space for recreational purposes. These scenarios tend to exacerbate environmental problems and become potential sites of environmental deterioration.

Rio de Janeiro and Sao Paulo cities in Brazil, for example, often experience flooding and landslides with many victims coming from the urban poor who live in the many squatter settlements within the cities [24]. Besides, another example of the case of the landslide disaster in Manila where the settlements were located in a dumping site. A large rain-soaked mountain of rubbish collapsed and covered highly populated settlements, killing 205 urban poor inhabitants [22]. Indeed, in these circumstances, it is the vulnerable urban poor who suffer most from environmental decay and inadequate service provision.

### *2.6 Improving quality of life on fragile environment*

Improve land use utilization under development planning is one of the action that should be taken by the respective authority. Land use planning need to understand the social needs and the priority given to each requirement. Land use utilization provides compact development and help to prevent urban sprawl. By concentrating the development and human activities at one centre the services and infrastructure will be provided efficiently. Land use planning measures the land utilization by different land-use types in each zone. Residential, commercial area, schools and basic infrastructure such as hospitals are closely related to needs of living and working. Therefore, land-use utilization refers to the continuation of different types of land use development to improve the society quality of life. Propensity of people to walk and thus to be physically active absolutely demand a greater combination of land use types which is related to the human needs.

Pelling [5] shows that ‘planned and unplanned developments were seen to have contributed to increased city-wide environmental risk’ by manipulations and adjustment that had been made to natural resources such as land. Smith [25] points out that, “risk is sometimes taken as synonymous with hazards but risk has the additional implication of the chance of a particular hazard actually occurring”. Risk is the actual exposure of something of human value to a hazard, and is often regarded as the connection of probability and loss. It is also viewed as “the probability of a specific hazard’s occurrence” [25]; for example, the risk when people build a house on a steep slope is the probability that the house will be exposed to a landslide. Therefore, fragile environment demand stringent regulations if the areas propose for development. However, by understanding the environmental system processes together with planning instruments it can help the sensitive environment to be developed more efficient and innovative uses. For example, the constructions of recreational park in the flood plain will allow the space to be used effectively which could lead to improve quality of life of the society in gaining healthy lifestyles. Besides, during the flooding the flood plain will still able to cope with the process and the continuous event exist will giving no harm to the society.

Urban areas facilitate the living society with knowledge, economic activities and institutions [2]. By coordinating diverse back ground of urban people, an urban area offers a great possibility for improving quality of life [2]. Hence, sustainable development as an initiative plan concerning the future is to balance the environmental, societal and economic in the pursuit of an improved quality of life. For example, a prosperous society relies on a sustainable environment to provide food and resources, secure drinking water and clean air. However, the fact that together with the benefits of agglomeration of urbanization, the situation has increased environmental problems due to the increasing demand for goods in order to fulfil various human needs. Human needs in the act to achieve quality of life allow the society to acts upon the natural environment in constructing the material world. Thus, the situation has been resulted in rising development activities and production. As been discussed earlier, the



environmental equilibriums have tremendously been disturbed by human activities which request a solid solution in solving the conflict between man and environment.

During 1960s and 1970s, many countries in Southeast Asia were in the phase of new town growth. The phenomenon of rapid urbanization calls for a higher level of urban management. Continuous migration to urban areas and the emergence of extended metropolitan regions, specifically in Southeast Asia, should lead to the highest priorities in the national agenda being to determine and improve the quality of life of the urban community as a whole. The most fundamental move made by the government should be to improve housing setting and conditions for the urban poor [26]. Relocation of the squatter settlements is one of the alternatives to enhance conditions for the urban poor, and in addition, the urban condition should be overhauled. However, in Manila for example the resettlements project for slum dwellers along the river banks into another new location have not been success. It was the fact that living on the edge of town, far from urban amenities and from areas where work is located, most of them returned to the original settlements within a few months [27]. Efforts should be made by the government or the private sector to improving the incomes of the poor and enhance their ability to access the job market through better education.

In many developing countries, unemployment is high, productivity is low and economic growth is slow [2]. By some means the escalating number of urban population need to be balanced with the requirement of human needs. It is understood that the principle of sustainable development is to influence quality of life which in returned will achieve long term sustainability. Nevertheless, unemployment will influence the quality of life where it will increase poverty and creates unstable societies. In this context, certain measures in economic policy, changes in employment requirement and improve skills among society will rise the potential of employment. Living standard of the society will be improved together with the life satisfaction [28]. The Millennium Development Goals (MDGs) (UN, Millennium Development Goals, 2019) focus on reducing poverty; illiteracy; hunger; lack of education; gender inequality; improving child and maternal mortality rates; preventing disease and reducing environmental degradation [3]. Therefore, the goals are important global agenda which concerning good governance and human rights for improving quality of life. The segregation between high, middle and low income society particularly in the city has realized the significant impact on land utilization and job opportunities.

The high incidence of urban poverty constitutes a major challenge for governments [29]. As highlighted by World Development Report [2], poverty has been identified as one of the major causes for environmental problems. Most significantly, the urban poor will prefer to reside at squatter a settlement which is generally located in hazardous area. Largely the urban sensitive land such as flood plains and hill slopes are the housing sites of the urban poor. Hence, developments on the fragile environmental systems will gradually disturb the environmental stability. The humanity principle tackles the importance of quality of life for sustainable development. Therefore, improving quality of life for urban poor by having job security is a comprehensive tool in order to achieve sustainable development.

### **3. Conclusion**

Sustainable development means to protect, preserve and conserve the natural environment for the future needs. Besides, sustainable development will only succeed if the environmental components achieve their stability and the society experience good quality of life upon the natural environment. Quality of life cannot be reached unless the society is secure and the basic human needs are met. The utilization of environmental resources should not go beyond the pace of replenishment. The survival of living society greatly depends on the natural resources. Thus, understanding the consequences of human actions towards environment is highly appreciated. Complex relationship that has been demonstrated by the environmental systems on how they work to support all life, societies and economies shows the successful of natural relationship.

Cities are designed and developed for the establishment of nation. Growing urban population means that the requirement of better coordination between the urban development and fulfilling the human needs. Urban land use development planning with the high understanding of the human needs nodes the standard in improving quality of life. This action brought out an issue of the urban poor on why they were choosing to live close to the city centre. Without proper arrangement on housing the urban poor by the authorities, squatter settlements have become the solution for this group. Therefore, inhabited on sensitive land has put the society on risk due to environmental degradation.

The bright light syndrome of the city has become a catalyst for the reason of migration from rural to urban areas. The hope of migration is to achieve quality of life in the city by working and living in a good urban environment. Hence, the city development might be designed with the optimal chances of job opportunities for diverse level of urban society. Job security indirectly improves the quality of life when urban people manage to appreciate the urban lifestyles and have desire to live in sustainable space. With all the complex set of link between human needs and the environmental supply, this paper raised the issues of the challenge to achieve sustainable development by improving quality of life. Thus, improving quality of life requires significant changes in how standards of living need to be guided and economic activities are coordinated.

#### 4. References

- [1] Holden E, Linnerud K and Banister D 2014 Sustainable development: Our Common Future revisited. *Global Environmental Change* **26** pp 130 -139
- [2] World Development Report 2003 Sustainable Development in a Dynamic World, Transforming Institutions, *Growth and Quality of life* (New York: The World Bank and Oxford University Press)
- [3] Landon M 2006 *Environment, Health and Sustainable Development* (Berkshire: Open University Press)
- [4] Costanza R, Daly L, Fioramonti L, Giovannini E, Kubiszewski I, Mortenson L F, Pickett K E, Ragnarsdottir K V, De Vogli R and Wilkinson R 2016 Modelling and measuring sustainable wellbeing in connection with the UN Sustainable Development Goals *Ecological Economics* **130** pp 350-355
- [5] Pelling M 2003 *The Vulnerability of Cities: Natural Disaster and Social Resilience* (London: Earthscan Publications Ltd. London)
- [6] Redclift M 1984 *Development and the Environmental Crisis: Red or Green Alternatives* (London and New York: Muthuen)
- [7] Felce D and Perry J 1995 Quality of life: Its Definition and Measurement *Research in Development Disabilities* **16** (1) pp 51-74
- [8] Massam B H 2002 Quality of life: public planning and private living *Progress in Planning* **58** pp 141-227
- [9] Sirgy M J, Widgery R N, Lee Dong-Jin and Yu G B 2010 Developing a Measure of Community Well-Being Based on Perceptions of Impact in Various Life Domains *Soc Indic Res* **96** pp 295-311 doi: 10.1007/s11205-009-9479-9
- [10] Diener E and Suh E 1997 Measuring quality of life: Economic, social and subjective indicators *Social Indicators Research* **40** pp 189-216
- [11] Costanza R, Fisher B, Ali S, Beer C, Bond L, Boumans R, Danigelis N L,... and Snapp R, 2007 Quality of life: An approach integrating opportunities, human needs, and subjective well-being *Ecological Economics* **61** pp 267-276 doi: 10.1016/j.ecolecon.2006.02.023.
- [12] Miller G T J 2006 *Environmental Science: working with the earth (eleventh edition)* Thomson, United States of America
- [13] Stern P C, Young O R and Druckman D 1992 *Global Environmental Change* (Washington: National Academy Press)
- [14] Greer T And Perry M 2003 Environmental and Natural Resources, towards sustainable

- development, in L. S. Chia (ed.) *Southeast Asia Transformed: A Geography of Change Singapore: The Institute of Southeast Asian Studies* pp 143- 189
- [15] Goudie A and Viles H 1997 *The Earth transformed: An introduction to human impacts on the environment* (Oxford: Blackwell Publishers)
- [16] Douglas I 1988 *Urban planning policies for physical constrains and environmental change*, J.M. Hooke (ed.). *Geomorphology in Environmental Planning* (Chichester: John Waley and Sons) pp 63-86.
- [17] Chorley, R J, Schumm, S A and Sudgen, D E 1984 *Geomorphology* (London and New York: Methuen and Co Ltd)
- [18] Goudie A 1993 *The human Impact on the Natural Environment (4<sup>th</sup> edition)* (Oxford: Blackwell Publishers)
- [19] Jackson A R W and J M Jackson 1996 *Environmental Science: The Natural Environment and Human Impact* (Essex: Longman)
- [20] Douglas I 1983 *The Urban Environment* (London: Edward Arnold)
- [21] Eden M J and Parry J T 1996 Land degradation in the Tropics: The way ahead, in M. J. Eden. and J. T. Parry. *Land degradation in the Tropics: Environmental and Policy Issues* (London: Pinter) pp 277-281.
- [22] Hardoy J E, Mitlin D and Satterthwaite D 2001 *Environmental Problems in an Urbanizing World: Finding Solutions for Cities in Africa, Asia and Latin America* (London: Earthscan Publications)
- [23] Barter P 2002 Transport and housing security in the Klang Valley, Malaysia. *Singapore Journal of Tropical Geography*, **23**:3, 268-287.
- [24] Mueller C C 1995 Environmental problems inherent to a development style: degradation and poverty in Brazil. *Environment and Urbanization* **7** (2) pp 67-84
- [25] Smith K 1992 *Environmental Hazards: Assessing Risk and Reducing Disaster (2<sup>nd</sup> edition)* (London: Routledge)
- [26] United Nations Human Settlements Programme (UN-HABITAT) 2003 *The Challenge of Slums: Global Report on Human Settlements 2003* (London and Sterling: Earthscan Publication Ltd)
- [27] United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 2003 Overview of the stage of implementation of agenda 21 and JPOI in the human settlements in Asia and the Pacific *Regional Implementation Meeting for Asia and the Pacific* pp 27-28
- [28] Aceleanu M I 2012 Links between education, employment and quality of life. The case of Romania. *Management & Marketing Challenges for the Knowledge Society* **7** (4) pp 717-730
- [29] United Nations Development Programme (UNDP) 1991 *Cities, People and Poverty: Urban Development Cooperation for the 1990s* (New York: UNDP)
- [30] Marcus M G and Detwyler T R 1972 *Urbanization and environment: The physical geography of the city* (Belmont: Wadsworth Publishing Company Inc.)

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