Sustainable Solutions for Holistic Well-being: A Conceptual Framework

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Abstract

Sustainable development has been cited in a plethora of research time and again. Nevertheless, the emergence of interest from industries and research has significantly surged in recent years as evidenced by innumerable research insights provided every year. This era has been a testament to disruptions and uncertainties like never before. It has challenged mankind to inculcate sustainable practices in our lifestyles and make it a part of our routine. Past events, such as the pandemic, war, economic fluctuations, political instability, mindless infrastructural development and climate change, are a wakeup call for embracing our true self in unison with nature. This calls for tireless efforts and actions to revive the loss and bounce back. The fact of imbibing sustainability has to be adapted across all sectors. Today, where we are selling everything right from basics to luxury products and services, it is all the more important to bear in mind that not only manufacturers but also customers need to have sustainability parameters in what they are producing, and what we are consuming. Therefore, this study is an attempt to dive into the depths of sustainability with a focused mindset to keep doing the right things despite the hardships. Interviews of experts from across industry and society were taken in addition to an in-depth analysis of sustainability models. The research will be helpful to corporate professionals, researchers, academicians and society at large.

Keywords

Sustainable development, sustainable innovation, quality of life, sustainable culture, human well-being, models of sustainability

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Introduction

Sustainable development, a concept gaining momentum in recent decades, is fundamentally concerned with achieving economic, social and environmental progress without compromising the ability of future generations to meet their needs. At its core, sustainable development can be understood in two key components: The meaning of development—encompassing economic growth, the fulfilment of basic needs and the protection of rights—and the conditions required for sustainability. This dual focus has led to an increasing global emphasis on sustainable solutions, reflecting growing concerns from diverse sectors of society and the economy, including influential entities such as the United Nations (2016) and the European Union (2014).

In recent years, there has been a marked shift in the expectations placed on organisations, pushing them towards creating innovations that harmonise economic, environmental and social objectives. This convergence of goals is commonly referred to as sustainable innovation. Sustainable innovation refers to the development and application of new ideas, processes or products that improve sustainability performance—measuring success through ecological, economic and social criteria. As defined by Kneipp et al. (2019), sustainable innovation is the creation of something new that enhances performance across these three interconnected dimensions. It is a process that demands time, as the macro effects—particularly in terms of economic growth and employment—are often slow to materialise, as noted by Freeman (1982).

However, for sustainable development and innovation to truly be meaningful, there must be a focus not only on ecological and economic progress but also on the quality of well-being. The quality of well-being is the corner-stone that ties these concepts together, as it directly influences human flourishing and societal health. Sustainable development cannot be fully realised without ensuring that the wellbeing of individuals and communities is prioritised, maintained and continuously improved. The definition of the quality of life highlights the significance of humancentric considerations when striving for sustainability. It is not enough to just improve the environment or achieve economic growth; these developments must contribute to a tangible improvement in people's lives, health and holistic happiness. According to research, a person's level of well-being is greatly impacted by a number of factors, including income, social support, healthcare access and environmental quality. According to a study by Helliwell et al. (2020), published in the World Happiness Report, social trust, financial security and physical and mental health are all positively connected with well-being. Furthermore, the study indicates that the environment is important, with access to green spaces and cleaner air both promoting higher levels of well-being. In order to improve the overall quality of life, the study emphasises the necessity of policies that not only promote economic growth but also guarantee social equality and environmental sustainability. Therefore, initiatives to improve well-being by addressing these larger societal drivers must be combined with the quest for sustainable innovation.

Therefore, a key principle in the pursuit of sustainable development is sustainable well-being, which is about ensuring that the quality of life is not only

preserved but also enhanced for current and future generations. In this context, sustainable innovation is not just about technical advancements or resource efficiency—it also entails developing systems and solutions that improve social and emotional well-being, equity and the accessibility of resources for all. This shift in focus underscores the idea that the essence of sustainable innovation lies in its capacity to foster meaningful and equitable improvements in the quality of life for individuals, communities and societies at large.

This article critically examines the role of sustainable development and sustainable innovation in improving the overall quality of life. The article explores various sustainable development models and their implications, seeking to establish a connection between human well-being and ecosystem health. Furthermore, it highlights the importance of integrating sustainability into business practices, focusing on the application of diverse models for sustainable business. These models—diversity, modularity, openness, slack resources and matching cycles are explored for their potential in promoting sustainability in the production and selling of goods and services. As the earth's resources become increasingly scarce, businesses face the challenge of reducing waste and reliance on virgin materials. The current business model, which often encourages the production of goods at low cost with minimal waste, has contributed to the depletion of resources and environmental degradation. This article, therefore, delves into these challenges, offering insights into how businesses can transition towards more sustainable practices that benefit both the environment and society as a whole, while ensuring that the quality of well-being remains at the forefront of these innovations.

Models of Sustainability

The models of sustainable development take into account eight models that can be adopted as conceptual frameworks to understand how sustainability can be achieved or targeted to make the world a better place to live as shown in Figure 1.

The first is the three-pillar model (United Nations Summit, 2005) (three interlocking circles models) (Thatcher, 2015). This model takes into consideration environmental, economic and social resources as its dimensions. Sustainable development is attained once all three pillars move in unanimity with each other. This model has been associated with its numerous critiques, which include diversion from the primary connection between economy, environment and society, which further assumes that a compromise can be made between any one of the three pillars, and that resources built can alternate for natural resources and systems, as also that it is impracticable to exclude human development from services to humans in the arrangement (Figure 2).

The second model is the prism model (Figure 3), which specifies four dimensions: economic extent (man-made capital), environmental dimension, that is, natural resources, social dimension (human capital), which acts as a base for the fourth one-institutional dimension, that is, social capital (Herath & Rathnayake, 2019).

Figure 4 shows the third model is the egg or three nested dependencies model. Environment is the precondition for the growth of human well-being. This

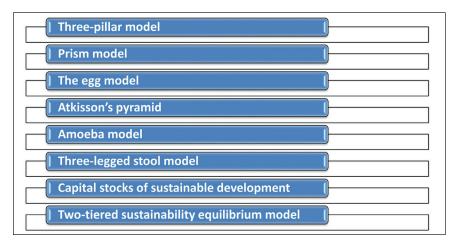


Figure 1. The Models of Sustainable Development.

Source: The author.

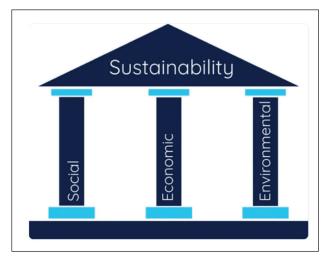


Figure 2. The Three-pillar Model (North Mist).

Source: NorthMist.

sustainability model keeps the environment at the centre and elucidates the correlation between people and the ecosystem in similarity to egg and yolk, that is, one circle inside another. This indicates that people are within the ecosystem and that there is a mutual dependency on one another.

The fourth model is Atkinson's pyramid, which emphasises five steps: (a) indicators, measuring the trend; (b) systems, making the connection; (c) innovations, ideas that make a difference; (d) strategies, from idea to reality; and (e) agreement,

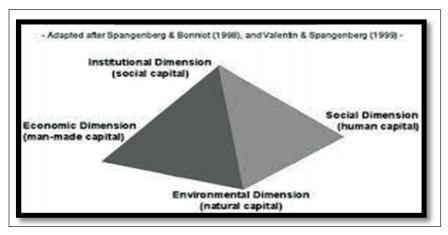


Figure 3. The Prism Model.

Source: Thakshila Ruvini Herath and Prabodha Subhashini Rathnayake (2019).

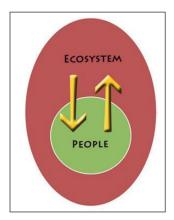


Figure 4. The Egg Model.

Source: The authors' representation based on Robert Prescott Allen.

from workshop to real world. This further assisted communities to move up the sustainability learning curve for action (Figure 5).

The fifth model is the amoeba model. This model is a robust tool for pacing up the innovation process in an effective manner towards achieving sustainable development as shown in Figure 6.

The sixth model is the three-legged stool model. The model stands on the pillars of environment, economy and society and is represented by the three legs of a stool. For this model to work, there has to be unison between the legs without which the model loses its significance (Figure 7).

The seventh model is capital stocks of sustainable development (Figure 8). A rarely used model highlights the fact that the capital stock of environment has



Figure 5. Atkisson's Pyramid.

Source: Atkisson Inc.



Figure 6. The Amoeba Model.

Source: Atkisson, Believing Cassandra (Hamedani, 2010).

to be kept intact to accomplish sustainability. However, the terms 'interest' and 'capital' have not been explained in the model.

Finally, the eighth model is the two-tiered sustainability equilibrium model of sustainable development. This is a holistic model of sustainable development where the first step is about the interdependence of the social, environmental and economic aspects at a single point in time (Figure 9). The second step involves the factor of time dimension, and the third step, therefore, involves the certainty that sustainability



Figure 7. The Three-legged Stool Model.

Source: Nexus Point Blog.

 $CSD = \sum (CEn, CEc, CS)$

Where; CSD = Capital stock of sustainable development

CEnv = Capital stock of the environment

CEc = Capital stock of the economy

Cs = Capital stock of society

Figure 8. Capital Stocks of Sustainable Development.

Source: Thakshila Ruvini Herath and Prabodha Subhashini Rathnayake (2019).

is a forever continuous process, thus making time a more crucial aspect of sustainable development.

Besides, sustainable development has been intricately linked with the quality of life. From economic activities, environmental systems and the social set-up

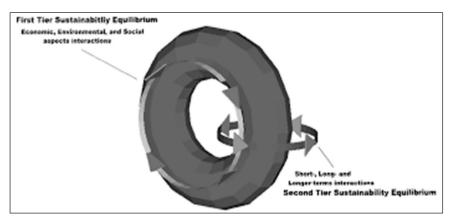


Figure 9. The Two-tiered Sustainability Equilibrium Model.

Source: Lozano (2008).

together aim at providing a healthy and significant life for everyone. As per the study, it is highlighted that an individual's holistic quality of life is cumulated to a community level, which further promotes and enhances its values and goals, thus approaching sustainable development and well-being.

The quality of life cannot be reached unless society is secure and the basic human needs are met. The utilisation of environmental resources should not go beyond the pace of replenishment. The survival of a living society greatly depends on natural resources. Thus, understanding the consequences of human actions towards the environment is highly appreciated. The complex relationship that has been demonstrated by the environmental systems on how they work to support all life, societies and economies shows the success of natural relationships.

Extant research has taken the environment, economy and society as independent constructs, without human intervention. Also, the time dimension has not been well studied and researched barring a few. The article, thus, highlights innovation as the core of sustainable development. The study shows the existence of models discussed above that support the idea.

Literature Review

Sustainable development requires radical and systemic innovations. Such innovations can be more effectively created and studied when building on the concept of business models. This concept provides firms with a holistic framework to envision and implement sustainable innovations while keeping time dimension and sustainable culture in the loop which in turn also contributes in the betterment of quality of life.

Sustainable Development

Sustainable development has been defined as 'meeting the needs of the present without compromising the ability of the future generations to meet their own needs'. Crises, such as climate change, poverty, food and energy, are matters of concern and are highly interconnected. The concept of green economy needs an economic arrangement that can prevent these crises while also shielding and nourishing the earth's ecosystems (Elliott, 2013). Sustainability has, without a doubt, been given primary focus, but what needs to be understood here is that there is equally a dire need of development wherein it is warranted that all human entities shall obtain resources necessary for their survival and development (Mitlin, 1992).

Sustainable Innovation

It has been progressively expected to develop sustainable innovation that converges economic, environmental and social goals. However, the road to achieving this is not straight and an arrangement of existing findings is lacking (Cillo et al., 2019). Peter Drucker rightly has stated that it is not how social responsibility can be profitable for businesses but how profitable businesses can make social responsibility. There are major discoveries happening in every industry; for example, supply chain is getting greener, huge investments are being made in alternative sources of energy such as wind and solar, organic food, organic apparels and designing of sustainable fisheries and farming. From CEO of Walmart around 2009 intending to completely eliminate waste from its operations to the president of Toyota, Katsuaki Watanbe wanting to design a car that purifies air that we breathe, designing has played an instrumental role in sustainable innovation (Zandee & Cooperrider, 2008).

Human Well-being

Many verifiable studies fail to contemplate human well-being and environmental quality together, but it is a significant aspect. To stop snowballing compression on ecological resources, improvement in human well-being is required, and this is at the centre of sustainable development goals agenda (Kassouri & Altıntaş, 2020). In order to stimulate well-being and socio-economic transformations in areas of education, inequality, growth and influence dynamics in lesser income countries should be placed in order and education can be reoriented to achieve the sustainability goals (UNESCO, 2017). According to a research study, which expanded the multiple connections between human well-being and environmental degradation, it was found that globalisation, life expectancy and human capital development, which were the adopted human well-being indicators, have enriched in the short and long term.

Quality of Life

Due to the increased saturation of population growth in urban areas, it is required to create an adaptability to at least a minimum quality of life. Thus, the governance of urban centres requires innovations, creativity and planning to meet these needs and challenges of the social life (Guimarães et al., 2020). There exists extensive agreement that the quality of life is multidimensional, which could be categorised into physical well-being, material well-being, social well-being, emotional well-being, development and activity (Felce & Perry, 1995).

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Objectives of the Study

- To understand the relationship between sustainable development and sustainable innovation;
- 2. To understand how sustainable development and sustainable innovation contribute to enhanced quality of life;
- 3. To identify the roadmap to ecosystem well-being;
- 4. To identify the sustainability models that can promote environmental benefits through the marketing of products and services.

Research Methodology

The article is based on exploratory research, which aims at investigating and presenting a systematic framework for linking sustainable innovation to quality of life through sustainable development. It aims at achieving a more appropriate and more doable mainstream view of sustainability. The article is primarily qualitative in nature. The methodology adopted has been mixed, comprising primary data in the form of interviews and secondary data from research papers and articles. Interviews were conducted with experts from the field of education and genetic counselling and varied journals and articles.

Data Analysis

Interviews with experts were based on the questions of their approach towards sustainable development. How important they feel is the inclusion of sustainable innovation and human well-being in order to better quality of life. Also, what are

the different characteristics that they have come across that will accelerate the journey of sustainable development? According to one of the interviewees, it is of significance to highlight the importance of sustainable culture, which means that individuals should not be told what they are required to do, but it should come naturally by means of the culture in which the individual has been raised. He also mentioned how it is necessary to understand what are we putting in our air and body, it all begins with self and if each one of us care enough it will eventually sum up to a sustainable ecosystem. Based on Urban Sustainability Research (2021), communities that embrace sustainable development concepts, such as energy-efficient buildings, green public transit systems and renewable energy utilisation, have higher citizen satisfaction rates. These variables are critical for promoting pleasant feelings and improving the quality of life.

According to the United Nations Development Programme (UNDP) (2020), community-led sustainable initiatives are highly associated with increased social cohesion, mental health and life satisfaction. People who participate in these activities report greater social bonds, which improves the overall quality of life. In addition to addressing environmental concerns, communities that take the lead in creating and executing sustainable solutions also boost local social capital, promote empowerment and enhance both individual and group well-being. They discovered that sustainable practices, such community farming, ecotourism and renewable energy projects, improve mental health by lowering stress and anxiety while also strengthening resilience and community cohesion. The global environmental conservation community acknowledges that the involvement of local communities is crucial for the success of conservation efforts; however, there is still significant work to be done in integrating conservation with human well-being (Wali et al., 2017).

Scientists and genetic counsellors bring to perspective a new notion of sustainable inheritance, which precedes sustainable development, values which are passed on as a legacy to the next generation. If they are sustainable in nature, it can pace up the growth of sustainable development.

Findings

It has been demonstrated that incorporating sustainable solutions—which include energy efficiency, community involvement and urban planning—significantly improves quality of life for both individuals and communities. It is clear from examining the complex relationship between sustainability and well-being that sustainable practices have a direct positive impact on social interactions, emotional stability and physical health. This emphasises that sustainability is not just an environmental issue; it is inextricably linked to human welfare and is essential to creating a more just and inclusive framework for improving living conditions in both urban and rural areas.

There are real advantages to integrating ecological ideas into daily living. Research has demonstrated that sustainable solutions, such as the use of green energy technology and the construction of environmentally friendly infrastructure,

help lower the health risks related to pollution and resource depletion. For instance, a healthier living environment, lower energy costs and better air quality have all been associated with the installation of renewable energy systems and energy-efficient homes (Ward, 2015). Additionally, by lowering urban heat islands, improving air quality and encouraging community involvement, eco-friendly transit and urban green spaces benefit the environment and society (Purohit, 2025). To boost emotional and psychological well-being, these developments encourage more social engagement, better physical activity and a sense of togetherness.

The contribution of urban green areas to improving community health outcomes has also been recognised by research. The World Health Organization (2018) claims that by offering easily accessible places for leisure and recreation, green spaces in cities have been demonstrated to lower stress levels, increase physical activity and promote mental health. According to Hartig et al. (2014), communities that embrace eco-friendly methods also report improved general health outcomes, such as decreased rates of respiratory ailments, mental health disorders and cardiovascular diseases. Furthermore, sustainable practices, such as using renewable energy sources and energy-efficient equipment in homes, improve living circumstances by lowering exposure to pollutants and poisons, which eventually raises the quality of life.

Furthermore, sustainable urban planning is becoming more widely acknowledged as a vital instrument for improving the urban quality of life. It has been demonstrated that implementing policies that support sustainable development, such as waste reduction initiatives, green building regulations and sustainable transportation networks, enhance social cohesion, lower inequality and cultivates a sense of pride and ownership in local communities (United Nations, 2016). Not only do these rules help to create a cleaner environment, but they also help to democratise access to necessary resources, protect mental health and foster social interactions.

Research on urban sustainability and secondary data from reputable sources, such as the World Health Organization and the United Nations, support the need to connect sustainable innovation to quality of life. According to the World Happiness Report (Helliwell et al., 2020), nations that embrace sustainability—through actions such as the adoption of renewable energy and environmental protection laws—report higher levels of happiness and life satisfaction. This suggests a strong relationship between sustainable practices and well-being outcomes.

Furthermore, research indicates that adopting sustainable living habits significantly improves the mental and physical health of both individuals and communities. According to a 2017 study by *Sustainable Cities and Society*, having access to green spaces in cities lowers stress and encourages physical exercise, all of which are directly beneficial to public health (Sai Charan & Venkataraman, 2017). With the economy refocusing on a low-carbon future, what was previously ignored as a climate mitigation option may become the basis of a large, multipronged market under a carbon capture, storage and utilisation framework. Enhanced Oil Recovery is one way that existing infrastructure can best leverage carbon prices to develop a climate mitigation technology for a shifting energy landscape. Similarly,

energy-efficient housing solutions—such as installing solar panels and energy-saving appliances—help lower indoor air pollution and improve general comfort, creating healthier living environments, while also contributing to the reduction of carbon emissions. Together, both approaches play crucial roles in the transition to a sustainable and healthier energy future (Moskal & López, 2019).

To sum up, the results indicate that improving human well-being requires sustainable solutions. Sustainable innovations boost physical, mental and social health by promoting a harmonic balance between environmental stewardship, economic viability and social inclusivity. The relationship between sustainability and quality of life is becoming more evident as cities and communities embrace sustainable practices, providing important insights into how we may create societies that are healthier and more resilient.

Conclusion

Extensive research has brought to light the significance of sustainability, sustainable development and sustainable innovation. Nevertheless, to create a linkage between sustainable development and innovation without separating out the core of every ecosystem, that is, the human element, a dive into creating a safe and quality space for human beings is vital, which this study has attempted. Quality of life is a concept that emerges when innovation and human well-being are effectively addressed. The study effectively addressed how to enhance quality of life, revealing the role of sustainable culture and inheritance. Not only is culture the social behaviour portrayed by a group of people belonging to a particular society, but it is also a set of beliefs and institutions that are passed on from generation to generation. According to Schein (2012), culture brings stability and deals with the aspect of sharing on a consensus basis. When lessons of sustainability are inculcated within the minds of individuals as a part of culture, innovation and development become natural progression to it. Sustainable culture strives to work on sustainability practices at the individual level. When a certain habit becomes a part of an individual, no external motivation is required for the individual to perform the action. Hence, introducing sustainable innovation and human well-being into our cultures can give massive results, thus resulting in overall growth. Our ancestors demonstrated foresight in recognizing the importance of safeguarding nature, which is reflected in certain traditions and rituals that promote the protection of natural resources. The need of the current and future generations is vastly diverse than that of the past generations. Therefore, values unique to us and sustainable in nature should be formed for the upcoming generation. This sustainable inheritance will lead to sustainable innovation and will thus achieve sustainable development. The UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (2003) created the first international agreement aimed at preserving intangible cultural heritage, highlighting its significance as an essential element of sustainable cultural development (Yan & Li, 2023). This research highlights the significant role that sustainable innovations play in enhancing holistic well-being and improving the overall quality of life. The findings underscore the interconnectedness between sustainability, innovation and the

multidimensional aspects of well-being—physical, mental, emotional and social. Through the systematic exploration of sustainable solutions for holistic well-being, it is evident that fostering sustainable development is not only a matter of environmental preservation but also an essential driver of human health and happiness.

Declaration of Conflicting Interests

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