

ADOPTION OF SUSTAINABLE REAL ESTATE DEVELOPMENT IN SRI LANKA: A GAP ANALYSIS

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ABSTRACT

The real estate sector in Sri Lanka has been experiencing more remarkable growth during the past decades. The emergence of innovative local and foreign investors, favourable government policies, urbanisation, enhancement of housing requirements and other socio-economic factors have driven the scope of the real estate sector to a greater extent. The drastic demand for investments and economic policies has transformed traditional real estate values into an innovative range while intersecting globalisation. The vast competition in the market, innovative trends, expansion of infrastructure, direct ownership opportunities, enrichment of living standards and growth of human needs have inspired real estate investors to achieve greater profits. Although such investment processes are empowered by governmental laws, regulations, policies and standards, the present nature of real estate investments exhibits a tendency not to sustain the future needs of Sri Lanka when achieving profits. Moreover, according to the literature and existing case studies, it is evident that investors avoid considering long-term solutions in real estate. Hence, this investigation demonstrates the necessity of adopting sustainable approaches to define a baseline for real estate investors' financial perspectives within the Sri Lankan context. It examines the nature of practice in real estate to address the necessity of sustainable real estate development in Sri Lanka. The study has adopted a qualitative approach and aimed at obtaining data via secondary sources. The analysis of data was subjected to be undertaken through a content analysis for a better overview. The research findings are significant in assessing investment opportunities, value-added real estate developments, sustainable necessities, and future trends in real estate development in Sri Lanka.

Keywords: Real Estate, Sustainable Real Estate Development, Sri Lanka.

1. INTRODUCTION

Real estate is land and all-natural and manmade developments permanently embedded to it, and the rights appurtenant, including air and mineral rights (Sirota, D., 2004). The 'Essentials of Real Estate Investment' published by Sirota, D (2004) exposed that 'fixity' (real estate is fixed in a location) challenges the marketability of real estate. Thus, later technological developments have addressed the matter of fixity emphasised by the author and other attributes of real estate such as longevity, permanence, risk, and market segmentation. Technological variations have prolonged the geographic scope and weakened the nexus between "local" and "location" and initiation of previously closed economies in the emerging world has provided substantial opportunities for real estate firms across the world (Bardhan, A. and Kroll, C.A., 2007). These impacts have resulted in accelerating innovative competition and innovative trends of the market, expansion of infrastructure, direct ownership

opportunities, enrichment of living standards and growth of human needs while inspiring real estate investors to achieve greater profits. Thus, ways of achieving profit exhibit non-sustainable to a considerable extent. The ecosystem has been manifested by non-sustainable land use patterns (Abu-Sharar, T.M., 2006). Consequently, sustainability is found significant in empowering values within the real estate sector in Sri Lanka.

According to Adamczyk et al.,(2019),The Brundtland Commission's critical publication "Our Common Future" has a definition of sustainable development. This concept is frequently used in its abbreviated form: "Sustainable development is a development that fulfils current demands without compromising future generations' ability to satisfy their own needs." However, Sustainable development is unachievable without a strong real estate market that delivers facilities for all human activities while enhancing the common spaces in cities and towns (Trinkūnas, et al., 2018). Hence, the present study analyses the degree of sustainability exhibited in Sri Lankan real estate investments to address the necessity of a 'sustainable real estate sector' for the nation.

2. BACKGROUND OF THE STUDY

Real estate is a set of business activities related to the development, construction, acquisition, operation, and disposition of real property assets (Li, J., Hu, Y. and Liu, C., 2020). Many scholars have examined aspects of sustainable construction investment and real estate development and their interrelatedness (Kaklauskas et al., 2021). Further, Trinkūnas et al.,(2018) stated that real estate development consists of creativity, research and art. The theoretical illustration of Sirota, D (2004) has emphasised that investing in real estate is noteworthy to preserve capital, earn profits, experience a flexible income tax, enhance leveraging opportunities and control high yields. The nature of land development mechanisms and policies adopted by nations considerably impacts on future progression of the world. Like many sectors, the scope of real estate has been subjected to being impacted by sustainable needs to preserve the potentials to the future. This has been highly concerned as desertification, deforestation, urbanisation, ineffective water and waste management, excessive removal of trees and various other negative causes resulted from the activities undertaken during land development processors. As these causes implied negativities not only on the environment but also on societies and economies, the preservation of sustainable values in real estate became significant. Sustainability refers to improving the quality of life within 'supporting ecosystems' carrying capacity (UNEP, 1991). Sustainable development is that kind of growth that 'meets the needs of the present without compromising the wellbeing of future generations' (World Commission on Environment and Development, 1987). Rajnoha, R, et al (2016) emphasised perspectives of environment, society, and economy as major dimensions of sustainability, which were also known as "triple bottom line". Thus, later theoretical developments emphasised the integration of 'technology' as a measure of sustainability. One measurement that is becoming more conventional in the literature is the technological feature of sustainability (Danish,et al 2020). The companies are able to expand the quality of their project portfolio, which, in turn, permits them to fulfil the requirements of stakeholders and, accordingly, awards the opportunity to expose into new markets (Kildiene, S.,2014).

2.1. Problem Statement

The real estate sector in Sri Lanka has been subjected to numerous changes during the past decades. The massive competition and relative advancements in the market have enlarged the number of investments within the country. In assessing the nature of these investments, a majority is found environmentally unsustainable due to the resultants such as land clearance, deforestation, urbanisation and desertification while socially unsustainable in achieving better

living conditions, wellbeing, health and interrelationships. Therefore, the present study examines ways of enhancing environmental and social sustainable values in real estate investments in Sri Lanka.

3. RESEARCH METHODOLOGY AND AIM

The research has adopted a qualitative methodology in attaining study objectives. Qualitative data inquiry is the instrument adopted by scholars to create a sense of the enormous quantities of data so that the data can be accessible systematically to their readers (Archer, 2018). The collection of data for the research aimed at attaining data via secondary sources such as research publications, journals, regulatory publications, books, official websites and newspapers while the analysis of data was subjected to content analysis in order to reach the best. The research aims at examining the nature of environmental and social sustainability exhibited by real estate investors and agents in Sri Lanka.

4. COMPREHENSIVE LITERATURE REVIEW AND GAP ANALYSIS

- *Nature of the practices*

Over the last decade, sustainability principles have grown more significant in the real estate and construction industries (Apanavičienė et al., 2015). Despite the fact that an increasing number of real estate businesses are professing an interest in sustainable development, there is still a significant gap between their stated intentions and their actual actions. The majority of them lack the strategy, culture, and tools required to put sustainability promises into action (Ionaşcu et al., 2020). The present study examines the state of sustainability in real-estate investment. Accordingly, a majority of previous studies have evident that real estate investment practices are challengeable in attaining sustainable needs. The analysis of human land use and its consequences impact changing land cover patterns on various spatial and temporal scales (Meyer 1996). In discovering outcomes of real estate investment land development processors, urbanisation influences both environmental and social sustainability. According to Ye, L. and Wu, A.M (2014) research, land development and land financing are found accelerators of urbanisation. The process of urbanisation has been severally impacted by land development throughout history. It is a complex social, economic, political and technological process, and there are no uniform patterns in common (Izakovičová, Z., et al., 2017). Urbanisation is one of the major global megatrends with a significant impact on world environmental quality (EEA, 2015). The study has also emphasised the impact of urbanisation on social sustainability as both the physical and mental health of a majority is influenced destructively. The research undertaken by Izakovičová, Z., et al (2017) revealed endangerment of natural resources, landscape spatial stability and human health as some of the main negativities resulted from urbanisation. The study of Ye, L. and Wu, A.M (2014) has significantly addressed the relationship between urbanisation, land development and land financing based on a case study in China. The findings have addressed issues of attaining social sustainability under the consequences of urbanisation. Accordingly, economically more developed cities with a higher GDP per capita are found exhibiting aggressive urban land expansion. It was also found that the average wage of staff and workers in the city had negative impacts due to the causes of land urbanisation. In assessing the Sri Lankan context, Dissanayake, P., Hettiarachchi, S. and Siriwardana, C (2018) emphasised that unplanned expansion of urbanisation generates environmental, social and economic hazards in Sri Lanka. As real estate investments exhibit a positive relationship with urbanisation degrees, the study revealed the significance of preserving sustainable needs in real estate investments to address challenges of urbanisation. The research undertaken by Saparamadu, S., Yi, Z. and Zongping, Z (2018) became important as the findings revealed a considerable degradation of surface water and soil quality due to rapid land-use caused by urbanisation. As real estate investments become responsible for the nation's environmental, social and economic outcomes, the study stresses considering sustainable aspects in real estate investment. There should be control

mechanisms for land reclamation and prevention of wetland encroachment (Saparamadu, S., Yi, Z. and Zongping, Z., 2018).

In assessing common impacts of real estate development, deforestation has become influential for several years. It is the transformation of forest to a different permanent non-forested land use such as agriculture, grazing or urban development (Van Kooten and Bulte, 2000). In accordance with the explanations by Pearce and Brown (1994), deforestation is a consequence of competition between humans and other species for the lasting ecological slots on land and in coastal regions and fails to with the economic systems to reflect the true value of the environment. These illustrations have moreover emphasised land development and urban development as a threat. In examining the degree of necessity of deforestation in real estate development, Sands (2005) interpreted the relationship between development and deforestation as a complex and dynamic one. Desertification results from extremes in climatic variants and unsustainable land-use practices including overcutting forest cover (Anon., 1994). According to Savithri Sellapperumage (2020), most of the practices of construction and other development projects in Sri Lanka are unsustainable. The author has stressed the matter of deforesting for construction of the Neluwa-Lankagama-Deniyaya Road, along with Anawilundawa in order to establish a prawn farm. Development projects within forest areas have failed to produce environmental assessments and make little effort to steer clear of illegal intrusion (Savithri Sellapperumage, 2020). The author has moreover stressed the emergence of the Extraordinary Gazette 2192/36 of September 10, which aimed at issuing legal documentation to confirm ownership rights to eligible claimants who have occupied state lands, for agricultural or any development activity, without possessing formal documents.

According to the FAO, the forestry sector contributed a net 1.3 million USD to the economy in 2000, approximately 0.1% of Sri Lanka's GDP. Sri Lanka met a daily loss of 10 acres of forests in 2020 (Kariyawasam, R., 2021). Thus, real estate investment and related developments negatively enforce the nation's need to attain sustainable real estate sector goals. For example, Sinharaja Forest and Yala National Park are some of the rarest forest reserves in Sri Lanka. Satharasinghe, U., Perera, M. and Amarasinghe, U (2021) denoted that Sinharaja forest heritage has been subjected to the influences of real estate investments and land developments during past years, while Hance, J (2021) stated that a company was accused of illegally clearing land, building access roads and refusing to get the required permissions at Yala national park in the year of 2012. Rodrigo, M (2021) has addressed a similar matter stating that the Sri Lankan public and environmentalists have been alleging for a long time that protected sections of Wilpattu National Park are being cleared to build settlements. As Ucanews (2021) reported, Archbishop of Colombo His Eminence Malcolm Cardinal Ranjith declared that some of the areas in Negambo which were preserved as a sanctuary as per the gazette 947/13 published on October 30 1996 are being subjected to land development under the gazette issued on October 13 in 2006. The evidence also proves the implementation of deforestation during the covid-19 phase whereby Zulfick Farzan (2021) reported that the leader of the indigenous community Uru Warige Wannila Aththo, implied that if deforestation continues to take place in Sri Lanka, the loss of life in the country would be far greater than those who died of COVID-19 in the United States and China.

Desertification is defined as 'land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities (UNEP, 1995). However, it is highly influenced by real estate investments and land development processors, Ghrefat, H.A (2011) denoted that unsustainable practices decline the economic productivity of real estate. The relative consequences of desertification challenge achieving social sustainability in several means. For example, the publication of UNDP (1997) denoted

a considerable amount of population growth within drylands across the world. The global population living in urban areas is expected to increase following a historical trend, with the urban fraction increasing to around 52% by 2010 and 60% by 2030 (UN 2002). In assessing the living conditions of these communities; MA (2003) indicated challenges in attaining human well-being by preserving basic materials due to lack of water resources, health; resulted by malnutrition and limited access to purified water for drinking, social relationships due to the difficulties undergo with political upheals and being refugees, food security caused by climatic circumstances such as lack of water, and freedom. The population has increased within these areas, without considering if these regions have undertaken proper planning and provision of services, infrastructure, and facilities (Wessels, K.J., 2006). The 2030 Agenda's 17 sustainable development goals (SDGs) form a coherent and integrated framework for addressing the world's most pressing sustainability challenges, which require all individuals, organisations, and governments (Ionaşcu et al., 2020).

As most real estate investors cleared lands to fulfil mobilisation, easy access and land value enhancements, it has become a necessity in attaining real estate economic values. Although land clearance is generally engaged with the removal of trees and green spaces to attain better profits by real estate investors, Elmendorf, B (2005) implied that green spaces allow the advantages and values for improvements, such as the ability of trees to develop the quality of water, soil and air, and to extract contaminants. Accordingly, Clark, C., Ordóñez, C. and Livesley, S.J (2020) explored the need of considering a 'sustainable future' via government policies, laws and planning processors. Unsustainable practices decline the quality of environmental systems (Benites, J.R., Shaxson, T.F. and Vieira, M., 1997). In relation to the Sri Lankan context, Jayasooriya, S.P (2019) emphasised the necessity of adopting safeguard policies to increase the social sustainability of a person's livelihood and living standards. Accordingly, integration of green financing for real estate investments is revealed significant.

- **Governance**

One of the sustainable development process bases is the real estate legislative system (Jadalhaq, 2017). Sri Lankan laws have already addressed the necessity of adopting and developing sustainable principles in various ways. The Sustainable Development Act, No. 19 of 2017 is an influential legal compliance that implemented a systematic legal framework in establishing sustainable strategies and national policies in Sri Lanka. Accordingly, all the ministries, departments, provincial councils, provincial ministries, departments and local authorities must comply with the defined act. Consequently, the performance report published by the Ministry of Lands & Parliamentary Reforms, Sri Lanka indicated that the ministry aimed at an 'optimally utilised land resource towards sustainable development'. The National Land Use Policy of Sri Lanka is another baseline for sustainable investment and land use which was established with the aim of 'providing a framework only to provide a path for protection, conservation and sustainable use of land resources but also to meet the needs of the present generation while safeguarding the land resources for the future generation as well'. The National Environmental Act, No. 47 of 1980, becomes significant in establishing a central environmental authority to assess the acquisition, utilisation and disposition of lands in Sri Lanka. Accordingly, the provision no 15 and 16 emphasised the requirement of accomplishing sustainable needs. The act has also assigned powers to the central environmental authority in directing the local authorities as necessary.

Land development becomes essential in achieving the economic values in real estate. As most land development practices are unsustainable, the National Environmental (Amendment) Act, No. 53 of 2000 and National Environmental (Amendment) of 1988 have reinforced controlling its negative environmental impacts. Consequently, the replacement of section 23A

of Act No. 47 of 1980 (under the 2000 amendment) enabled issuing a license in discharging, depositing or emitting waste into the environment, causing pollution. Although Sri Lanka has applied various legal frameworks to achieve sustainable needs in real estate development, most of them are found ineffective based on various study outcomes. The explanations of Wijayadasa, K.H.J. and Ailapperuma, W.D (2014) are evident to the deficiencies of The National Environmental Act, Sri Lanka. Accordingly, although the Act aims to establish management policies and institutional practices for the betterment of the environment, its content is oriented on colonial administration where revenue collection and maintenance of law and order were not concerned. It is also revealed that the laws are not enacted with conservation and resource management in mind. Although rigorous and elaborate legislation exists, the application can often be insufficient, as in Sri Lanka, due to various causes ranging from insufficient funds and personnel to sometimes the lack of a singleness of purpose and the mixture of priorities (Wijayadasa, K.H.J. and Ailapperuma, W.D, 2014). The performance report issued by the Ministry of Lands & Parliamentary Reforms (2018) aimed at 'optimally utilising land resource towards sustainable development. The main thrust areas of the ministry included sustainable concerns of implementing land policies to meet the timely requirements, state land management, execution of land use plans for sustainable development and application of national databases or information systems for land development. The performance report published by Land Use Policy Planning Department (2018) has also remarked its mission as 'formulation of policies, preparation of plans and facilitating their implementation to achieve the optimum utilisation of land resources while maintaining sustainability and environmental balance' while specifying its objectives to the extraordinary Gazette no. 1654/21 in 2010 on use of lands.

Moreover, law no. 41 of Urban Development Authority (1978) emphasised the necessity of obtaining a Preliminary Planning Clearance (PPC) for any development activity in Sri Lanka. In assessing the Sri Lankan context, the Green^{SL} rating system issued by Green Building Council, Sri Lanka (GBSL) plays a predominant role in evaluating sustainable needs during construction. The authority has issued seven sustainable parameters to define the state of sustainability as follows.

- Management
- Sustainable Site
- Energy and Atmosphere
- Material and Resources
- Indoor Environmental Quality
- Innovation and Design Process
- Social and Cultural Awareness

Although GBSL is one of the leading authorities in implementing green principles in Sri Lanka, its aim is revealed being specifically pioneered on Sri Lankan 'construction sector' as the authority's aim indicated 'transforming Sri Lanka's construction industry with green building approaches and completely adopting sustainability as a means of ensuring prospects of our environment and the economy. Society grows to ensure the future wellbeing of our motherland'. Hence, integration of sustainability towards the real estate sector becomes noteworthy in attaining sustainable resolutions for real estate investments.

Real estate brokers and land sellers play a predominant role in real estate investments. In evaluating the assessment of the quality of real estate stakeholders, The Department of Registrar of Companies, Sri Lanka, have real estate developers registered under private

company names. The main objective of the department is stated as ‘efficient and effective implementation, administration and enforcement of several legislative enactments assigned to Companies Act No 7 of 2007, The Societies Ordinance No 16 of 1891, The Cheetus Ordinance No 61 of 1935 and Public Contracts Act No 3 of 1987’. Thus, practical implementation of real estate investments and developments vary to greater extents. In Sri Lanka, the legislation partly governs the real estate brokerage industry (Edirisinghe, J.,2005). Hence, the sustainable needs are not considerably focused in real estate investment procedures, although most of the laws and policies emphasised the need to acquire sustainable goals during land development processors. Karunaratne has also underlined the matter, V.P (2018) as the author stated that ‘the intellectual investigator could invariably visualise a magnitude of flaws and unethical practices in operation in its current behavioural patterns, on the one hand, displayed by the not-so-honest buyers who resort to various deceptions in duping the sellers and, on the other, by the unprofessional activities of the agents/brokers who act as middlemen or intermediaries in bringing the buyer and the seller together. LMD -The Voice of Business (2016) has also pointed that Sri Lanka does not have adequate regulations to govern the registration and qualifications of real estate agents. Hence, the overall assessment reveals the necessity of adopting certain legal constraints on Sri Lankan real estate brokers and land sellers to preserve sustainable needs.

Overall, the gap analysis revealed the nature of practice and governance as the main factors that impact achieving sustainable needs in real estate investments. While the nature of the practice of Sri Lankan real estate agents and investors are inadequately sustainable, the nature of governance implied deficiencies in the practice. In relation to sustainable real estate investment, Sri Lanka’s leading authorities’ scope is even discovered to be insufficient, as they are primarily concerned with land development and construction concerns expect defining proper assessment criteria to evaluate the degree of sustainability in real estate investments.

- ***Comparative approaches***

The real estate sector substantially impacts the environment, social relationships and economic development (Dobrovolskienė, N., et.,2021). Therefore, sustainable investment in real estate is expressively essential to address the nation’s environmental, social, and economic needs and challenges. Most countries have adopted sustainable measures in real estate to evaluate sustainable perspectives within the construction process. The first effort to initiate means of evaluating environmental effects in buildings was the Building Research Establishment Environmental Assessment Method (Abdelgaffar, M.A., 2012). In addition, the building performances are evaluated by several mechanisms such as Leadership in energy and environmental design (LEED), Green home evaluation Manual (GHEM), Sustainable project appraisal routine (SPeAR), Green building challenge (GBTTool), Comprehensive assessment system for building environmental efficiency (CASBEE), Building sustainability Index (BASIX), etc (Ding, G.K.C.,2008). The importance of evaluating sustainable means in real estate investment and land development has been recognised by various government and non-government organisations/institutions worldwide. They have created measures to evaluate the degree of sustainability in real estate investments. Global Real Estate Sustainability Benchmark (GRESB) is the leading organisation established in the Netherlands. The vision statement of GRESB indicated a clear focus on attaining sustainable values in real estate investment.

Hence, the organization aimed at examining real estate benchmarks in the forms of environmental, social, and governance means under the following categories.

- Real Estate

- Real Estate Development
- Infrastructure Funds
- Infrastructure Asset

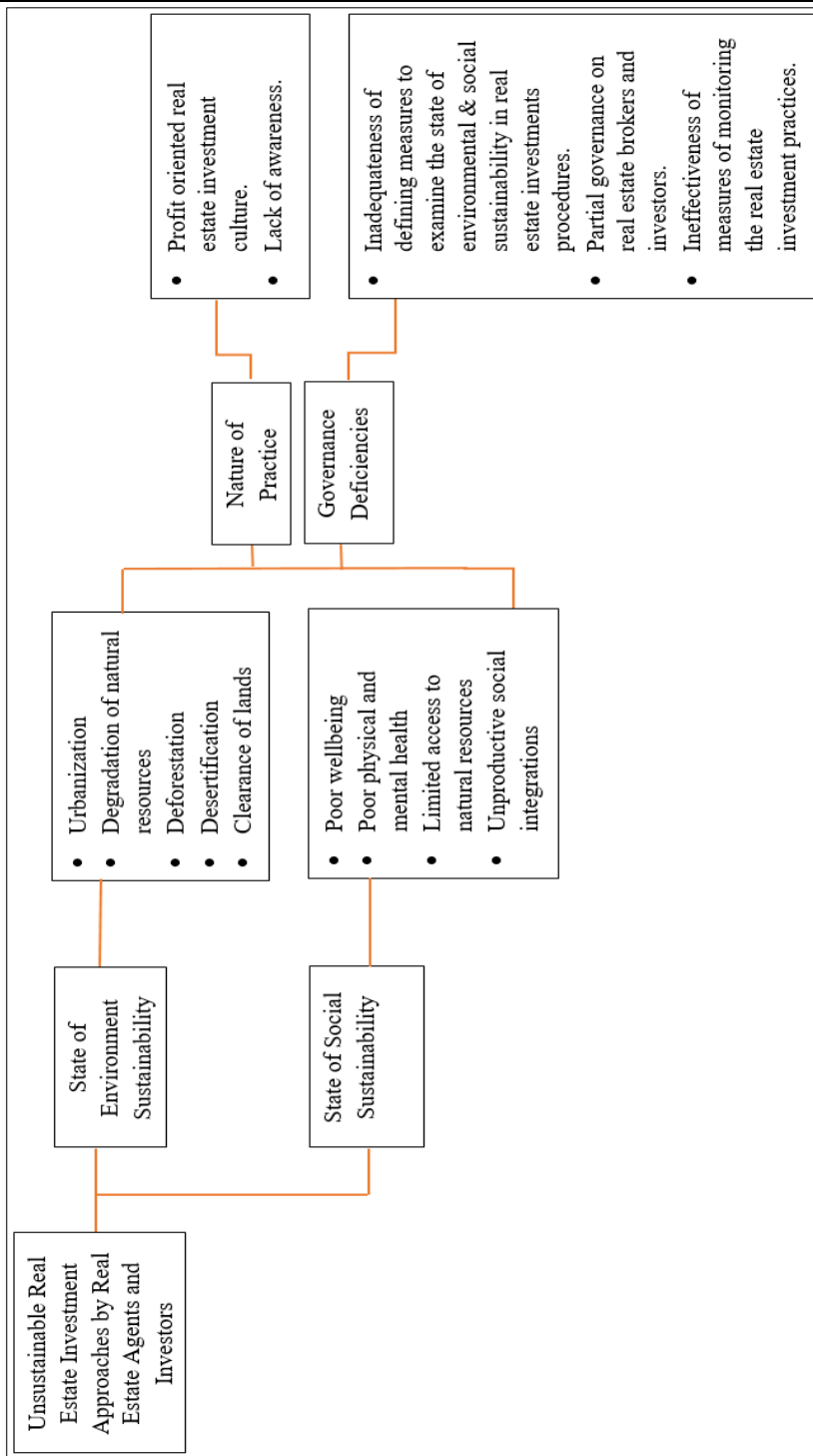


Figure 01: Cause and Effect Tree Diagram of the Study Analysis

GRESB is also accountable for administering the GRESB valuations, providing the benchmarks, encouraging the extensive implementation of the GRESB Standards and anticipating investor and other stakeholders. In addition, 'FTSE Russell' is an exemplary British private institution that has adopted a sustainable investment index for investment management. The established indexes analyze the environmental, social, and governance needs of real estate investors worldwide.

4.1 Significance Of the Study

The previous literature has covered a vast range of discoveries in relation to real estate investments and land developments. Most of the findings suggest attaining sustainable goals in the real estate sector. Thus, none has specified achieving sustainability in real estate investments by real estate agents or investors in the Sri Lankan context. Hence, the current study becomes significant in evaluating the degree of sustainability of real estate investments in Sri Lanka to add values to investor's purchase costs via sustainability.

5. CONCLUSION

The research examined the nature of the practice of Sri Lankan real estate investment in accomplishing sustainable needs. The study has revealed a clear gap between the nature of practice and implied laws in reference to the analysis. The Sri Lankan real estate investments are specifically found not environmentally sustainable due to the resultants such as urbanization, degradation of natural resources, and deforestation. The state of social sustainability is revealed completely inadequate as the practice or laws have not considered it in major. Although most of the acts were established to preserve sustainable goals, a minor number of policies have concerned the sustainability of real estate investments. The present study's findings show that Sri Lankan real estate brokers and investors practices are not sustainable enough. Although various authorities have established to accelerate sustainable perspectives, the absence of a specified interpretation on 'sustainable real estate investment practices' implies numerous deficiencies. Moreover, in assessing the scope, a partial adaptation of regulations in governing real estate brokers and investors is critical as an integration of sustainable concerns was not examined throughout their performance. More importantly, a massive deficiency of evidence is discovered in relation to social sustainability parameters in real estate investments within literature and Sri Lankan laws. Therefore, defining a baseline to address environmental and social sustainable needs in Sri Lankan real estate investments is relatively significant. Moreover, expansion of local governance on sustainable real estate practices, establishing mechanisms to evaluate and control the application of sustainable concerns and empowering social awareness on sustainable real estate practices is similarly important.

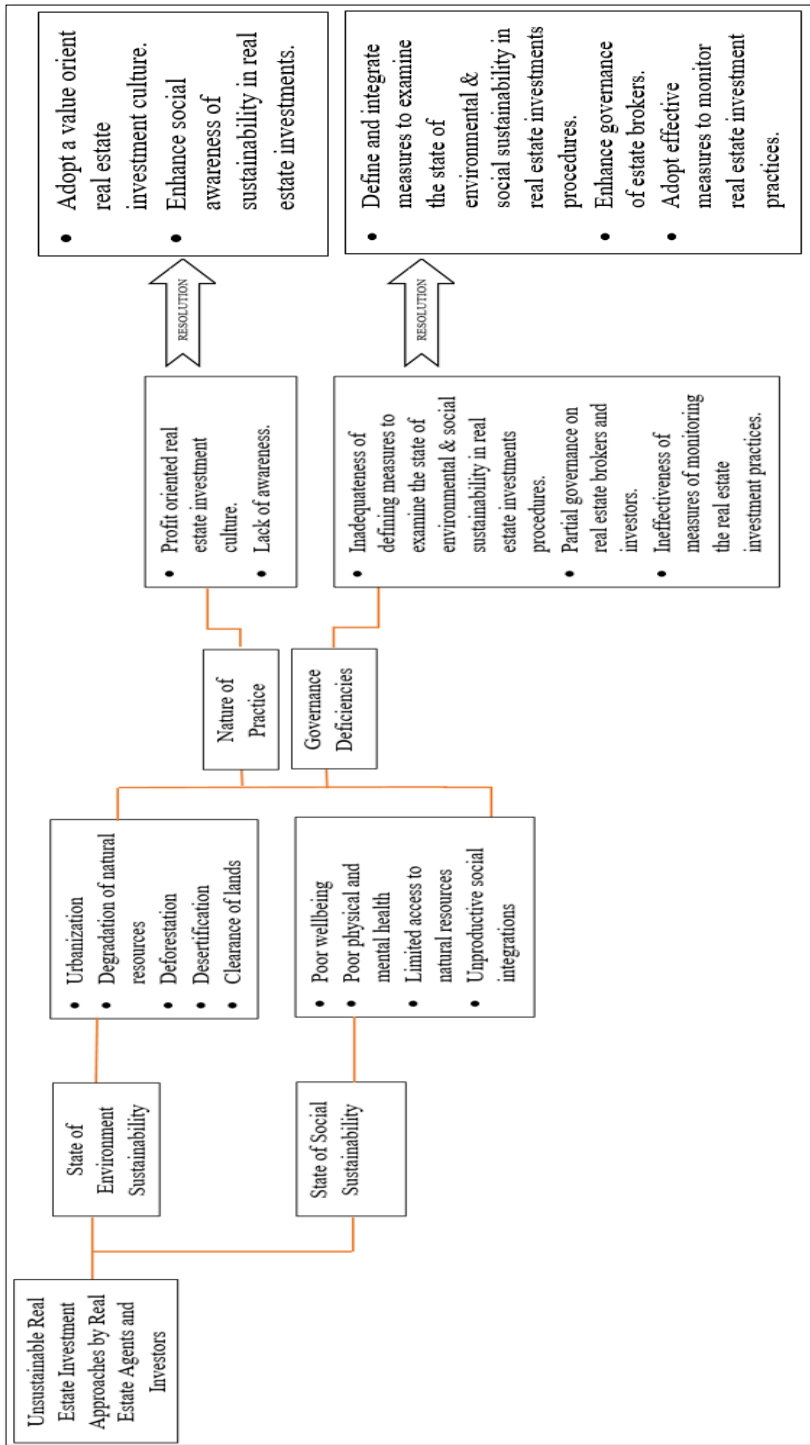


Figure 02: Cause and Effect Tree Diagram of the Study Findings

6. RECOMMENDATIONS

The study outcomes exposed that the applicability of environmental sustainability in real estate investments is comparatively low and concerns of social sustainability are inadequate in Sri Lanka due to the nature of real estate investment practices and governance deficiencies. As the practices were more profit-oriented, the present study suggests adopting a value-oriented culture containing sustainable standards. In overcoming the governance deficiencies, it is important to define and integrate measures to examine the state of environmental & social sustainability in real estate investments procedures. Establishing mechanisms such as issuing a license that considers sustainable needs is also substantial to manage the practices of real estate brokers and investors while adopting effective measures to monitor real estate investment practices.

7. LIMITATIONS AND FURTHER STUDY DIRECTIONS

The present study limits the assessment of environmental and social sustainable parameters. Hence, further studies can be undertaken to examine other sustainable measures such as economic and technological sustainability in real estate investments. As the current research has achieved its objectives only via secondary data, future studies can also relate primary data.

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