

An Evidence-Based Approach to Understanding Sustainable Urbanization in a Developing Country

By Anam Javeed¹, Muhammad Yar Khan², Mohamed Mahees Raheem³

ABSTRACT:

Urbanisation is occurring at an exceptional rate in developing countries. Urbanization has also become a recent trend in the globalized world. The resources and facilities available in urban areas are prompting rural people to leave their homes and move to cities. Although it is a positive approach for people to move for better lives, rapid urbanisation comes with challenges. Urbanisation is hitting the region of Asia, and Pakistan is also in the wave. This study aims to examine the different aspects that hinder sustainable urbanisation in Pakistan. The results show that poor housing quality and affordability, water and sanitation facilities, poor land management, economic inequity, and lack of participation from the residing communities all act as aspects that could impede the process of sustainable urbanisation in the area. Poor government policies were used as a moderator in this study, and the results reflect that the hindrance towards sustainable urbanisation gets even more intensified if the government policies are not efficient. This study provides analytical insight into the major challenges of urbanization faced by Pakistan because of the rising population and migration. This study provides recommendations to aid in the process of achieving sustainable urbanization, which can be used for policymaking. Studies in the Pakistani context are also an important addition to the sustainability literature.

Keywords: Sustainable Urbanization; Sanitation Facilities; Lack of Participation; Governmental Policies; Developing Countries Asia, Malaysia; Pakistan; SMEs; Sustainable Development; Sustainable Product; Sustainable Price; Sustainable Place; Sustainable Personnel; Sustainable Process

1. Introduction

The shift of population from rural areas to urban areas is termed urbanization ([Bostenaru Dan, 2020](#); [Williams, 2019](#)). The rural population has been shifting from rural areas to urban areas, which in turn increases the proportion of people living in cities. Population shift is the major phenomenon through which towns and cities are formulated. The towns and cities also get enlarged by the process of urban drift. Urbanization is an irrefutable fact in the current century. Urbanization has been considered an important issue in various countries. Although almost all countries face this issue, less developed countries face this trend at a higher rate ([Larsen et al., 2019](#)).

The [Bank \(2015\)](#) further declared that agencies associated with the management of urban lands and resources are also equipped with insufficient resources and instruments, which also brings out injustice in land acquisition. Insufficient staff in such agencies and regulatory bodies are unable to carry out sufficient documentation and record keeping for urbanization ([Karikari et al., 2006](#); [Kumar et al., 2018](#)).

¹Dr. Anam Javeed, Faculty of Society and Culture, Northumbria University, UK.

²Dr. Muhammad Yar Khan, Effat University, Jeddah Saudi Arabia

³Dr. Mohamed Mahees Raheem, Effat University, Jeddah Saudi Arabia.

According to a report by the United Nations Organization [UNO \(2001\)](#), by 2050, 3 billion of the world's population will live in urban areas. The increased growth of the urban population requires some early anticipation from policymakers; otherwise, it can yield certain disastrous effects for the environment, society, and economy. According to [Tingsanchali \(2012\)](#), a proactive approach to managing urbanization by the government, public agencies, and local communities is required.

The consequences of non-sustained urbanization are more far-reaching than those in developed nations. According to [Idowu \(2013\)](#) the prediction of the mobility of the population from rural to urban areas needs to be more accurate. The most effective manner to merge sustainability and urbanization is by defining the desirable state of an urban area and finding ways to achieve urban land through the notion of sustainability ([Roy, 2009](#)). The execution of sustainable urbanization practices places an increased emphasis on the thoughtful usage of land, transportation, economic development, and urban justice in combination with a strategic framework [Habitat \(2001\)](#). According to the United Nations Development Program, Pakistan has the highest rate of urbanization among South Asian Countries, with 36.4% of the population living in urban areas, and the number is still increasing. It has been predicted that by 2025, approximately 50% of the population will be urbanized. This raises serious concerns regarding sustainable urbanization.

1.1 Scope and Objectives

Sustainable urbanization has taken over sustainability debates and has become a national issue. The major focus of the concept lies in the fact that the current needs and wants of urban areas and individuals should be met without compromising the future of stakeholders. The basic aim of sustainable urbanization is to expand urban areas in a manner that balances economic, environmental, and social needs, which ensures the prosperity of present and future generations. Expanding the cities in sustainable way requires long term and integrated approach.

Objective 1: To understand that what factors drive urbanization drift.

Objective 2: To explore that to what extent government organizations are committed towards sustainable urbanization planning.

Objective 3: To suggest policy implications for strategy development and implementation. The sustainability development goals present the clear indication regarding the exponential role of sustainability practices in defining the future of cities by designing them in safe resilient and sustainable manner. Conducting study regarding the sustainable urbanization at the all targeted levels and capacities can provide the policymakers with strategic plans and frameworks. Sustainable urbanization can impact the decisions regarding the investment also which means that choosing best tools for the best support of local resources. Compliance with the urbanization planning in a sustainable manner will provide the opportunities for the better financial instrument development for longer investments. Walking on the path of sustainable urbanization can provide guidance to the government to direct their resources and funds in effective manner. Developing the sustainable future cities can assist organizations bring together collaborative partners to address the world's most urgent challenges that they might have little or no chance of addressing on their own. Companies that align their priorities with the sustainability can strengthen engagement of

customers, employees and other stakeholders, especially if they align everything behind a planetary purpose. Sustainable urbanizations offers a sense-check opportunity to reflect stakeholder expectations of your organization as well as future policy direction at the international, national and regional levels.

In continuation with the discussion and objectives, following research questions will be answered at the end of the study

RQ 1: Which factors promote urbanization drift in Pakistan?

RQ 2: What factors cause hinderance in the commitment of the government institutes towards sustainable urbanization?

RQ 3: What could be the possible strategies for sustainable urbanization?

1.2 Research Problem

Compliance with sustainable urbanizations is one of the solutions to the problems occurring in Pakistan. By complying with the sustainability, an agenda laid out by United Nations can direct the nation towards long-term economic prosperity, human and environmental development. However, talking on practical grounds, a poor score card on meeting the sustainable city planning has been observed. Sustainable urbanization entails of ambitious and complex goals requiring clearly mandated institutions and unflinching commitment to provide resources. Among all the countries in South Asia, Pakistan has the highest percentage of urbanised population which was approximately 36.4% according to the 2017 census. The urban population graph is expected to rise to 50% by 2025. The phenomena of urbanization are meticulously related with economic well-being specifically in developing countries. Urbanization can produce maximum share of GDP for the country and creates centres for innovation and entrepreneurship. Although the benefits of urbanisation cannot be denied, unplanned and unmanaged urbanisation later reveals environmental damage, degradation, and elevated levels of poverty and inequality. Pakistan is also facing those challenges caused by urbanization. The urbanization drift in Pakistan has majorly been unplanned and irregular. The big cities for instance Rawalpindi, Lahore, Karachi are becoming the joints for concentration of population. Due to decline in the number of small cities and towns, stress has majorly been exerted on mega cities. To achieve the purpose of developing sustainable cities in the country, policies must be devised in a manner that creates prospects for employment and well-being in towns and small cities. The commitment towards sustainable urbanization on government level is also limited however to deliver sector-based integrated targets and indicators, the government can expand its ambition. Government ambition must be measured against its ability to carry out policy and institutional reforms. The passive attitude of existing real estate giants towards sustainable urbanization is an important concern towards the successful fulfilment of the objective.

2. Literature Review

Developing a perspective of sustainability has taken the shape of one of the most recent debate ([Wang et al., 2020](#)). The sustainability goals have been clearly established by Sustainable Development Goals (SDG's) [Kapuria & Malik \(2020\)](#). The developing nations like Pakistan, India, Bangladesh are also trying to adhere with the SDG's however the slow progress s due to number of reasons for instance poor planning policies, unequal distribution of wealth, poor sanitation etc ([Rahman et al., 2016](#)). It has been reported by

[Dangles & Casas \(2019\)](#) as well as [Delgado et al., \(2019\)](#) urbanizing the cities in a sustainable manner necessitates a deep level of commitment on governmental level. Further, the effectiveness of government policies has further been emphasized by ([Garcia-Torres et al., 2019](#)). With the advent of sustainable urbanization novel research questions have started to arise for instance what factors drive urbanization drift ([Crosby et al., 2021](#); [Lyytimäki, 2019](#); [Rubenson, 2019](#); [Schroeder et al., 2019](#)). Sustainable urbanization encircles the economic, social and environmental perspectives ([Rush, 2019](#)).

2.1 Poor Housing Quality

Among many factors that ultimately lead towards disbalance in sustainable urbanization, poor housing quality is one of the most contributing factors which hinder the sustainable urbanization. It has been estimated through a survey by State Bank of Pakistan that urban housing is widely prevailing in the country. If this trend prevails in the country, there is a sheer chance of shortage of housing units in Pakistan by 2035. It is further emphasised by [Keall et al. \(2010\)](#) that the nuclear family system is also putting pressure on the supply of housing units. Since the urbanization drift is peaking and separate family system is taking height so the elevated pressure can hinder the idea of sustainable urbanization [Adabre et al. \(2020\)](#). The provision of decent housing facilities in the respective resident areas can help in levelling out the urbanization drift and also help in the planning and implementation of sustainability projects ([Surya et al., 2020](#)). Poor housing quality in rural and sub-rural areas motivates the residents to move towards urban areas which mainly hinder with the sustainable urbanization [Wojewódzka-Wiewiórska et al. \(2020\)](#). On the basis of above discussion, it can be hypothesized that:

H₁: Poor housing qualities hinder sustainable urbanization in Pakistan.

2.2 Water and Sanitation Facilities

Provision of clean water and adequate sanitation facilities is a fundamental human right however a great number of people around the globe are deprived of this necessity ([Arora & Mishra, 2019](#)). Provision of sanitation facilities is the necessary is an indicator of a sustainable society. The provision of water of sanitation facilities to all areas of a country can help in reducing the urbanization drift and promoting sustained urbanization. Furthermore, lack water and sanitation facilities has been reported as contributing factor towards hinderance in sustainable urbanization by ([Abubakar, 2017](#)). The water facilities in rural areas are far worse than urban areas which act as a contributing factor of urbanization drift. Consequently, the movement towards the urban areas create the disbalance which ultimately contributes towards the non-sustained urban living areas. It has further been emphasized by [Jena, \(2018\)](#) that sanitation for community is an important factor in community sustainability, as resources and facilities are major factors for sustainable urbanization. In Pakistan, the water and sanitation facilities are at very low quality and the urban areas are better off. This leads to haphazard expansion of cities without any planning. Hence it can be hypothesised that:

H₂: Poor water and sanitation facilities hinder sustainable urbanization in Pakistan.

2.3 Poor Land Management

Urbanization is expanding and dispersing in various parts of the country. As a matter of dispersed urbanization, sustainably treating urban areas has become problematic (Clay & Reardon, 2019). Utilizing the land in a proper and managed way can be one of the major step towards sustainable urbanization. The lack of proper regulation for land usage, absence of land codes and streamlined land record system can causes a lot of ups and downs in land management. This mismanagement causes inequality in the usage of land areas hence hindering the goal of sustainable urbanization. The larger cities of the country are disproportionately affected by the urbanization drift and increased scarcity of vital facilities (Barbier, 2019). For instance, in Karachi (most populated city of Pakistan), many unplanned and informal settlements are consuming a lot of land in an unscheduled manner which clashed with the goal of achieving sustainable urbanization. The government officials continue to neglect the unplanned urban communities hence resultantly such communities continue to thrive and flourish. Such residential densities continue to redefine the urban boundaries with limited focus on the sustainability and environmental conservation. Keeping in view the above discussion, it can be hypothesized that

H₃: Poor Land management hinder the sustainable urbanization in Pakistan

2.4 Economic Inequality

Equality is important in every aspect in the people's life. The equality should be given in terms of income, health, and happiness to the entire nation (van Niekerk, 2020). However, the current evidence state that economic equality accounts the happiness, health and mental well-being of the person (Ives *et al.*, 2020). As economic growth centres, the Southeast Asian cities feature high population pressure, unsustainable land use, environmental degradation, and large ecological footprints. It is difficult to manage environmental health and basic services for urban dwellers, and ensure optimum flow of ecosystem services in the context of rapid, unplanned, and haphazard urbanization. These challenges are particularly multifaceted in the developing countries of Southeast Asian region (Arfanuzzaman & Dahiya, 2019). In developing countries like Pakistan, a lot disbalance of income and facilities exists among urban and rural areas. The unequal distribution of wealth results in the transfer of money from poor to rich. The folks tend to move from rural areas to urban areas where they tend to settle down in unplanned densities hence making sustainable urbanization difficult.

Although this study establishes economic inequality as a statistically significant hindrance to sustainable urbanization, redistribution policies are not fully explored. A growing body of literature highlights that unequal wealth distribution fuels social and spatial instability in urban systems, exacerbating unplanned settlements and limiting access to basic services (Shah *et al.*, 2024). Addressing these disparities requires not only macroeconomic growth but also deliberate redistributive strategies, including progressive taxation, targeted subsidies, and equitable land-use reforms (Wahab *et al.*, 2024). By narrowing the income gap and extending affordable access to housing, healthcare, and education, redistribution can reduce migration pressures on major cities while fostering resilience in smaller towns and peri-urban areas. For Pakistan, the challenge lies in

reconciling ambitious economic reforms with the demographic realities of sustained rural-to-urban migration. Policy interventions must recognize that migrants are drawn to cities not only for economic opportunity but also for survival, given the inadequacy of rural livelihoods ([Khan, 2025a](#)). Therefore, redistributive frameworks should be paired with rural development initiatives that improve agricultural productivity, local employment, and service delivery. Strengthening secondary cities through investment in infrastructure and job creation can also absorb migrant flows more sustainably. In this way, Pakistan could pursue economic equity without undermining urban growth, laying the groundwork for inclusive and resilient urbanization.

Hence it is hypothesized in this study

H4: Economic Inequality hinder the sustainable urbanization in Pakistan

2.5 Lack of Participation

The policies being formed and implemented by the government serve as a major tool to achieve sustainable urbanization goals. A major challenge for achieving sustainability goals is to explain the complexity and necessity of sustained urbanization to the community. It is acknowledged that those living their lives in such housing and settlements suffer greater levels of spatial, economic and social exclusion from the benefits of urbanization that other segments of the urban population ([Jones & Fukawa, 2017](#)). Whenever the concerned people are being approached for planning the areas, resultantly the folks residing there tend to be uninterested in the government's initiative. The actual problem is neither understood nor analysed by the residing people. The lack of trust on the governmental policies is also a major contributing factor for this stubbornness ([Olukotun, 2008](#)). Few other studies have shown that poor government policies and economic inequity are the major factors which result in such kind of behavior ([Eshun & Tichaawa, 2020](#); [Lyons et al., 2001](#); [Zakus & Lysack, 1998](#)).

The identification of community participation as the most significant obstacle provides an important agenda for future research into participatory mechanisms that can enhance sustainable urbanization. Effective participation requires more than formal consultative forums; it depends on building trust between residents, local authorities, and service providers ([Komel et al., 2024](#)). Empirical studies in comparable developing countries suggest that inclusive planning processes where citizens are actively involved in agenda-setting, monitoring, and co-delivery of services—foster stronger legitimacy and compliance. Testing policy models that prioritize transparency, accountability, and co-management could therefore yield actionable pathways for overcoming mistrust and disengagement in Pakistan's urban governance structures. Future work could also benefit from systematic examination of grassroots urban initiatives in comparable contexts. In many low- and middle-income countries, community-driven projects have successfully mobilized residents for slum upgrading, waste management, and neighborhood planning, often compensating for weak state capacity. These cases demonstrate that local ownership and collective action can generate tangible improvements in urban living conditions while strengthening social cohesion. By studying such examples and identifying transferable lessons, Pakistan can adapt innovative participatory practices to its own urban realities,

creating frameworks that empower marginalized groups and expand the legitimacy of urban development policies ([Khan et al., 2024](#)). Based on the above discussion it is hypothesized in this study that

H₅: Lack of participation from residing communities hinder sustainable urbanization in Pakistan.

2.6. Insecurity of Land Tenure

Lands are one the social capital of the nation but unluckily the inadequate and spaces and slums in urban squares are a reason for reduced sustainable urbanization in the country. The development of urban areas cannot be denied but the need of sustainability can be underemphasized. FEG understood this important need in urban development as it desired the availability of more public spaces while duly considering the context of high-rise and mixed-use construction ([Abdul & Yu, 2020](#)). Every government plan to upgrade the well-planned settlements, but the residing people show very less concern in such kind of projects if the land tenure is not ensured. For success of such projects, the security regarding land tenure needs to be provided to the landowners before making the plan workable.

H₆: Insecure Land Tenures hinder sustainable urbanization in Pakistan.

2.7. Planning Policies

Growth of urban areas is the physical expansion of metropolitan areas because of the economic growth going on in such areas. Urbanization is an important transformation process ([UN-Habitat, 2004b](#)). Although urbanization is important for economic well-being of the nation, welfare, institutions but on the flip side the increased urbanization can also posit the problem for un-sustained urban areas ([Tan et al., 2016](#)). Government participation in sustainable urbanisation is necessary, and inefficient governmental policies are to be held accountable for the deficit in policy implementation ([de Jong, 2019](#)).

Urbanisation planning policies, both government and private, have limited focus and vision, resulting in unsustainable urban housing units. Considering the extent of the problems necessitated by rapid urban growth in Nigeria, there is a need for a radical approach to achieve desirable sustainability of the urban environment. This need centres on ensuring good and effective governance which seeks to employ sustainable development strategies entrenched in Agenda 21; to integrate all aspects of development socially, economically, culturally and environmentally in achieving distributional equity and providing adequate social services including health, education, housing as well as functional and livable environment among many others ([Jiboye, 2011](#)). According to [Jabeen et al. \(2017\)](#), the demand for housing units is increasing in the big cities of Pakistan due to the rural-urban migration process and socio-economic inequality. Malik et al. (2017) further reinforced that the governmental plans are not visionary, hence making false judgements which leads to poor policy making. For instance, in 1989-1993, a 5 year plan estimated that 4.7 million housing units will be constructed however the capacity of 1.35 million units existed (Hasan, 1996).

H7: Planning policies moderate the relationship between urbanization factors and hinderance in sustainable urbanization in Pakistan.

Based on the literature and news articles studied the following model has been derived for testing in Pakistani context.

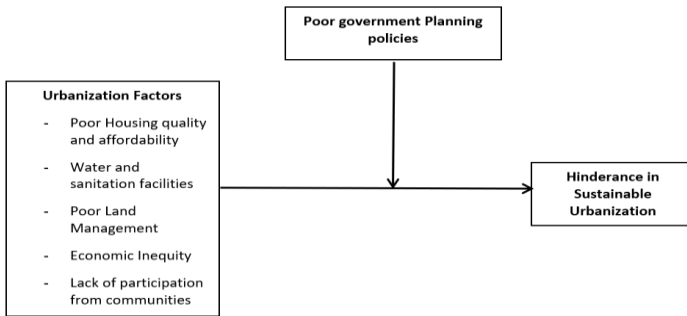


Figure 1: Proposed Framework

3. Methods

Pakistan is one of those countries which are still regarded as one of the developing nations. Even though the people of Pakistan are struggling with the basic need fulfilment, yet few organizations and people are showing their concerns for the environmental sustainability on the public forums.

3.1 Sample and Data Collection

Pakistan being a developing nation has number of challenges to face including unmanaged urbanization. Numerous factors contribute to the big urbanisation drift which have been highlighted by the public during the discussions. However, this study aims to investigate the most commonly believed factor which hinders the development of sustained urban areas, according to the public of Pakistan. The moderating effect of governmental policy and planning has also been tested in the study. The data has been collected from Federal Capital (Islamabad) and provincial capitals Punjab (Lahore), Sindh (Karachi), Balochistan (Quetta), Khyber PakhtunKhuwa (Peshawar) both by personal administration of questionnaires and G forms keeping in view the situation of COVID. The respondents included students, professionals, and people from every walk of life randomly. The data was analysed using using descriptive and analytical techniques. To serve the purpose SPSS and SMART PLS was used.

Table 1: Respondent Profile

Demography	Indicator	Frequency	Percentage
Gender	Male	193	40.4

	Female	285	59.6
Education	High school	206	43.1
	Bachelor	167	34.9
	Masters	71	24.5
	Doctorate	34	7.1
Age Group	18-25	160	33.5
	26-33	167	34.9
	34-41	117	24.5
	41-above	34	7.1

The questionnaires were distributed to 478 respondents. The information was collected based on gender, education, and age group. 40.4% of all the respondents were males whereas rest of them were females. Furthermore, 43.1% of the respondents were high school passed whereas 34.9% have completed their bachelor's degree. 24.5 % of the respondents are masters qualified however whereas only 7.1% of them were doctorate. Moving towards age group, 33.5% of the respondents belonged to the age group of 18-25 years. 34.9% of the respondents fell into the bracket of 26-33 years and 24.5% of them belonged to the age group of 34-41 years. Only 7.1% of the respondents were above the age group of 41 years. Table 1 shows the profile of the respondents. The descriptive statistics have been displayed in Table 2 shown below.

Table 2: Reliability Coefficient

Construct	N	Minimum	Maximum	Mean	Standard Deviation
Poor Housing Quality	478	1	5	4.103	0.5746
Water and Sanitation Facility	478	1	5	3.8316	0.8513
Poor Land Management	478	1	5	3.9979	0.6455
Economic Inequality	478	1	5	3.7417	0.6617
Lack of participation	478	1	5	3.975	0.6527
Government Policies	478	1	5	4.0827	0.6368

Hinderance sustainable urbanization	in	478	1	5	4.106	0.7077
Poor Housing Quality	Housing	478	1	5	4.103	0.5746

3.2 Reliability Test

According to [Hair et al. \(2010\)](#) reliability is the internal consistency of the items ascertained for the construct. To build the reliability of the constructs Cronbach’s Alpha is the measure for that ([Sekaran & Bougie, 2019](#)). The data of the study has also been tested for its reliability measures using Smart PLS. The figures depict that all of the values have a high reliability coefficient which presents that they are perfect for further analysis. Table 3 shows the reliability coefficients for the model.

Table 3: Reliability Test

	Cronbach's Alpha	Composite Reliability
EI	0.844	0.840
HSU	0.885	0.885
LOP	0.869	0.867
PGP	0.920	0.730
PHQ	0.844	0.840
PLM	0.748	0.763
WSF	0.810	0.801

3.3 Validity Test

Table 4 shows the ANOVA output which reflects that the degree to which the independent variables predict the criterion variable. The level of significance is less than 0.05 which reflects that overall, the regression model is statistically significant, and it predicts the outcome variable.

Table 4: HTMT

	EI	HSU	LOP	PGP	PHQ	PLM	WSF
EI							
HSU	0.643						
LOP	0.694	0.671					
PGP	0.168	0.171	0.192				

PHQ	0.538	0.487	0.458	0.136		
PLM	0.791	0.607	0.601	0.145	0.541	
WSF	0.676	0.591	0.633	0.163	0.505	0.714

(EI= Economic Inequity; LOP= Lack of community participation; PGP= Poor Government Policies; PHQ= Poor Housing Quality; PLM= Poor Land Management; WSF= Water and Sanitation Facilities)

The proposed framework has also been tested for model fit by using R and R-squared measures. The values shown in Table 5 exhibit that the model is fit for hypothesis testing of variables

Table 5: Model Fit

Model		Unstandardized Coefficient		Standardized Coefficient
		B	Std Error	Beta
Sustainable (SPer)	Personnel	0.143	0.052	0.188

4. Data Analysis

Hypothesis testing of the variables is further been tested using structural equation modelling (SEM). Partial least square (PLS) is employed for hypothesis testing because of many benefits for instance it does not require any assumptions of sample size, normality etc. SMART PLS is also free of any kind of limiting constraints which makes it a good option for analyzing the data. Furthermore, PLS (SEM) is the unification of path analysis and factor analysis which makes it usage wide in social sciences. The criteria for T value acceptance in being shown in the table 6 below.

Table 6: T value criteria Regression Output-China

T-value criteria	Results based on Chin's criteria
T-value less than 1.64	Rejected
From 1.65 to 1.95, with a p-value from 0.05 to 0.10	Accepted with weak evidence
From 1.96 to 2.58, with a p-value from 0.1 to 0.05	Accepted with a significant relationship
Above 2.58, with p-value of 01% and below	Accepted with strong significance

Path coefficients are the standardized values on the range of +1 to -1 (Hair *et al.*, 2010). The path coefficient values, which are nearer to +1 depict positive nexus however, the values closer to -1 represent a negative relationship. If the path values are insignificant

or opposite to the hypothesized relationship the hypothesis is supposed to be rejected. Bootstrapping is run in this research to get the t-values and standard error for each path coefficient.

Table 7: Direct Path Coefficient

	T Statistics	P Values
EI -> HSU	2.599	0.010
LOP -> HSU	5.809	0.000
PGP -> HSU	3.743	0.006
PHQ -> HSU	2.294	0.022
PLM -> HSU	2.552	0.011
WSF -> HSU	2.569	0.010

According to the criteria discussed in Table 7, all of the hypotheses have been accepted. Economic inequality has a significant impact on not achieving the sustainable urbanization in Pakistan. The most significant impact is casted on hinderance towards achieving sustainable urbanization by the lack of participation by communities. The participants who have been living in the communities which needs to be updated are reluctant to participate in the process of restructuring the living places. Poor government policies tend to hinder the achievement of sustainable urbanisation. Poor Housing quality does not significantly hinder the achievement of sustainable urbanisation. Moving on, poor land management also reflects very little significance for sustainable urbanisation. The other factor tested is water and sanitation facilities, and the results show that the significance of this factor in hindering the achievement of sustainable urbanisation is very low. The values are shown in Table 7.

4.1 Moderating Path Values

According to [Baron and Kenny \(1986\)](#), moderators interact with the independent variable to explain the impact of the dependent variable. Moderation is run to check whether the relationship between the independent and dependent variables fluctuates with the presence of a third variable ([Edwards & Lambert, 2007](#)). To generate the interaction effect, “the interaction latent construct” is modelled as an additional latent variable in PLS. To initialise the interaction latent construct, two approaches can be used: the product indicator approach and the two-stage approach ([Henseler & Fassott, 2010](#)). Poor government planning policies were employed as moderators in this study. Government policies, whether good or bad, can impact the attainment of sustainable urbanisation. Government policies can either magnify or demagnify the impact of a factor.

Table 8: Interaction Path Coefficients and Significance Level

Interaction Effect	T-value	P-value	Decision
EI×PGP	2.745	0.006	Accepted
LOP×PGP	3.744	0.001	Accepted
PHQ×PGP	2.796	0.005	Accepted
PLM×PGP	5.808	0.000	Accepted
WSF×PGP	3.655	0.002	Accepted

The results in Table 8 show that poor government policies have established themselves as moderators. The impact of the identified factors. The results indicate that a higher level of poor planning policies creates greater hindrance to achieving sustainable urbanisation. The impact of economic inequity is magnified by the hindrance in achieving sustainable urbanisation if governmental planning policies are poor. Similarly, the effect of the lack of participation from the living communities is also increased due to poor governmental planning policies. Furthermore, the direct impact of poor land management and water and sanitation facilities was relatively weak on the dependent variable; however, due to poor governmental planning policies, the hindrance to achieving sustainable urbanisation increases.

5. Discussion

The findings of this study after analysing the data are presented below. This study aims to analyse the factors in the opinion of the Pakistani public that are the most influential in hindering the achievement of the goal of sustainable urbanisation. The model was tested for direct and moderating effects. The construct of poor government planning policies (PGP) was employed as a moderator in the study, and the analysis showed that poor policies amplify the impact of all other factors. Six direct hypotheses were formulated and confirmed, and five moderating hypotheses were formulated and confirmed.

Economic Inequity is a construct which promotes the movement of the public from rural to urban areas. The results of the data analysis also confirm this proposition ($t=2.599$; $p=0.010$). These results are consistent with those of previous studies ([Diržytė et al., 2019](#); [Mayo et al., 2013](#)). Economic inequity as a factor which hinders sustainable urbanisation was further confirmed by [Du et al. \(2020\)](#). The hindering effect of economic inequality on sustainable urbanisation in Pakistan was confirmed by [Mayo et al. \(2013\)](#). The distribution of wealth and facilities in Pakistan is not fair which causes more people to move from rural or sub-rural areas to urban areas. The rapid movement makes urban places less sustainable and harder to apply the policies of planning.

While these findings strengthen existing literature by confirming the adverse role of inequity in Pakistan, broader comparative analysis remains limited. Urban systems across South Asia face remarkably similar dynamics, including rapid demographic expansion, inadequate infrastructure, and widening wealth disparities ([Khan, 2025b](#)). Connecting Pakistan's experience with urban studies from India, Bangladesh, Nepal, and

Sri Lanka would expand the theoretical and empirical relevance of these results. Such comparative work could also illuminate variations in policy responses, shedding light on why certain interventions succeed or fail in contexts that share structural and cultural affinities. In addition to expanding academic relevance, stronger regional collaboration could provide a practical foundation for addressing sustainability challenges ([Khan, 2025a](#)). South Asian states confront shared risks such as climate vulnerability, informal settlements, and resource scarcity, which transcend national borders. Collaborative platforms, whether through regional research networks, joint urban resilience initiatives, or cross-country policy dialogues could enhance both theoretical depth and policy innovation. By situating Pakistan's urban challenges within a broader South Asian framework, scholarship can not only advance comparative urban theory but also offer actionable insights for governments seeking coordinated, regionally grounded solutions to sustainable urbanization ([Nor & Raheem, 2025](#)).

The next variable is the lack of participation (LOP) from the residing communities which alters the accomplishment of sustainable urbanisation. The results from the data analysis prove that among all the stated factors in the model, lack of participation from the communities residing in the slums makes it hard to reorganise the residential areas ($t=5.809$; $p=0.000$). Similar results have been affirmed by [Li and de Jong \(2017\)](#) and [Ochoa et al. \(2018\)](#). The Pakistani people living in those areas which require sustainable resettlement refuse to participate in the process ([Israr & Islam, 2006](#)).

The results reveal that poor government planning policies (PGP) have an immense impact in the hindering the sustainable urbanization in Pakistan ($t=3.743$; $p=0.006$). The government policies is the core factor which can make the sustainable urbanisation practically happen. Government policies have been considered critical by various scholars for instance ([Delgado et al., 2019](#); [Liu et al., 2019](#)). The lack of achievement of sustainable urbanization in Pakistan is also majorly attributed towards government policies ([Haider & Badami, 2010](#)). Although the policies of Pakistani government exist but the implementation is lacking and sometimes the quality of the governmental policies matters a lot.

The other variable which has been analysed in the model under discussion is Poor housing quality (PHQ). The results reveal that poor housing quality is also a factor which hinders sustainable urbanization ($t=2.294$; $p=0.022$) not only in Pakistan but also in other parts of the world also. The housing quality in rural as well as urban areas of Pakistan is a hindrance in achievement of sustainability ([Malik & Wahid, 2014](#); [Siddiqui & Mehfooz, 2017](#)). Poor housing quality has been identified as a factor which can encounter with sustainable urbanization ([Kowaltowski et al., 2006](#)). The results show that poor housing facilities have a lesser impact on hindrance as compared to poor government policies, lack of community participation and economic inequity because housing can be acceptable if government has good planning and implementation policies.

Poor Land management (PLM) is the factor which causes impediment in sustainable urbanization ($t=2.552$; $p=0.011$). Urban spaces have been utilised in an inefficient manner and the places have not been planned properly which makes sustainable urbanization difficult. Organized and well-planned living areas use the resources which can last longer ([Malik & Wahid, 2014](#)). Growing population is one the main cause which not utilizing the land in a much manageable manner. ([Anjum et al., 2010](#); [Hussain & Irfan,](#)

2012). It has further been emphasized by [Abdul & Yu, \(2020\)](#) that increased population calls for more land and unmanaged land areas can result in an economic and social factors which could result in un-sustained urbanised slums.

Water and sanitation facilities also impart an impact on hindering the sustainable urbanisation ($t = 2.569$; $p = 0.010$). The concentration of water and sanitation facilities in urban areas motivate the individuals to relocate creating an intensity in one location rather than expanding the facilities. Pakistan is on number 6th in most populous countries in Asia and its on number 22 in world. Along with number of problems like industrialization, enormous population growth and poor water and sanitation facilities, hamper the achievement of sustainable urbanization in Pakistan ([Abdul & Yu, 2020](#)).

Referring to Table 6, it is apparent that all the identified factors have a hampering impact over achieving the sustainable urbanization goal. However, the public opinion prioritises some of the factors over others. The lack of participation (LOP) from the residing communities and poor government polices (PGP) turn out to be the major influencers in not achieving the sustainability goals. However, economic inequity (EI), poor housing quality (PHQ), poor land management (PLM), water and sanitation facilities (WSF) cast a milder impact on the dependent variable. The future of every country is undoubtedly racing towards urbanization as cities are becoming large mega-cities with every passing time. However, this bulk of people rushing towards cities for facilities would make the cities and towns smaller. Even-though large cities play a significant role in growth of the nation yet the vide is moving towards un-sustainable cities.

5.1 Moderating Paths

Poor governmental policies have been used as a moderating variable in the model to understand whether the governmental policies tend to augment the impact of independent variables. The results indicate that the effect of economic inequality (EI) increases if the governmental policies are not good enough, making it even harder to achieve the goal of sustainable urbanisation. Similarly, the impact of all other factors (lack of community participation (LOP), Poor Housing Quality (PHQ), Poor Land Management (PLM), and water and sanitation facilities (WSF) is magnified with the moderating variable (Poor Governmental Policies PGP). Policies and their implementation are part and parcel of every nation. However, if the policies have been poorly implemented without checks and balances, it might hamper the achievement of development goals. The same is true for the implementation of sustainable urbanisation. There are many factors which hinder the achievement of sustained cities, but if the governmental policies are in action, the goal can be accomplished ([Haider & Badami, 2010](#); [Jabeen et al., 2017](#)).

6. Conclusion and Practical Implications

Pakistan is a country facing immense urbanisation challenges. Various factors which have been highlighted in the study which hinder the completion of sustainable urbanisation have been highlighted in this study. To make existing cities sustainable, it is necessary to develop urban resilience to avoid further urbanisation disasters. Increasing population, ineffective government policies, inefficient local institutions, and insufficient

water and sanitation are common problems in almost all rural and urban areas of Pakistan. The problems are ongoing as the framework of governmental planning and policy implementation for sustainable urban development has not been cross-matched properly to cater to the present and future challenges. Unplanned and disorganised housing arrangements on urban fringes and near central cities add to poor urban planning. This study is an important contribution that would provide the information related to the sustainable urbanization and the factors which impair the achievement of environment friendly urbanization. The study further provides data regarding the rating of public opinion which could further be used by making policies and future strategies and country planning policies regarding urbanization problems for masses in the country. Urbanization drift in the developing countries is posing a major threat to planned housing development. While the conclusion rightly emphasizes demographic pressures and governance deficits, a deeper concern lies in the weakness of institutional accountability. Policy frameworks often articulate ambitious sustainability agendas, yet the absence of transparent monitoring and enforcement mechanisms undermines their impact. Without institutional checks and clear lines of responsibility, urban development programs risk becoming symbolic rather than substantive. Future pathways for sustainable urbanization in Pakistan must therefore prioritize institutional reforms that embed accountability through independent oversight bodies, performance-based evaluations, and mechanisms for public scrutiny. Strengthening institutional credibility is indispensable to ensuring that sustainability commitments translate into measurable progress. Equally critical is the integration of urban resilience strategies into long-term national and local planning frameworks. Sustainable urbanization cannot be achieved through fragmented or short-term interventions, particularly in contexts marked by resource scarcity and rapid urban growth. Governments must allocate sufficient resources, establish cross-sectoral coordination platforms, and engage diverse stakeholders—including local communities, private actors, and civil society in the co-creation of urban policies. Embedding resilience into development agendas not only mitigates the risks of environmental and socio-economic shocks but also fosters a culture of adaptability and shared responsibility. In this way, sustainable urbanization can shift from aspiration to practice, securing more inclusive and durable urban futures.

The movement towards the urban areas in Pakistan is complemented in the hope for better living facilities. However, on the flip side, the reality states that as the folks continue to live in the urban areas, their life starts to get isolated from the planned and gated housing societies. The dream of living in better society with amenities gets unfulfilled when cities seem to be highly un-governed settlements. Sometimes the government seems to forcefully evict the residents from the slums however this step only makes the situation worse. In order to avoid unpleasant events, the government needs to keep in view of the affected communities and win their confidence in the process. Few initial steps could be taken in order to make a better sustainable society.

6.1 Provision of Adequate Housing to Affectees

Following the rest of the world, proper planning councils should be established in order to pay keen attention towards increased un-sustained society. Few noticeable and

satisfactory housing alternatives for the affected residents has been established by renowned international organizations such as United Nations Development Program (UNDP), Department for International Development (DID) and the Asian Coalition for Human Rights (ACHR).

6.2 Raising the Living Standard of Squatters

The upgradation of the squatter resident areas by enhancing their physical, social and economic living standard by provision of basic facilities and services. There few organizations already working in this domain to help in the upgradation process. For instance Orangi Pilot Project Research and Training Institute has done amazing efforts in this regard. They have worked for the upgradation of 1.2 million houses in Orangi Karachi. Such efforts if taken on governmental level can cast a huge impact in formation of sustainable urbanization. Another initiative was taken Punjab government in Lahore by forming Walled City Lahore Authority which has worked for creating historical walled city which will not only separate slums from well-planned settlements but also attract international tourism. If such initiatives will be taken in every province at district and provincial level, then the goal of sustainable urbanization can somehow be met.

6.3 Reasonably Priced Housing Facilities

Pakistan is the country which is the urbanization drift is on the peak making the urban areas difficult to be sustained. As the people who newly move towards the cities tend to look for affordable housing hence there are few options for such houses in planned settlements. In order to make the urbanization process sustainable, the affordable housing facilities with basic facilities if provided on governmental level can help in the discouraging the urban slums. The technique could be to dedicate a percentage of public housing schemes to low-income people of the society.

6.4 Land Sharing

The concept of land sharing stated government leases the land from landowners and slum dwellers to protect the residents. Thailand has adopted this strategy to overcome the problem of urbanisation. The concept of land sharing can be adopted by the federal and provincial governments of Pakistan, specifically in cities where there is still less population or people compared to bigger cities. By leasing the land, the care of newly arriving people could be taken on a governmental level in a much better and planned manner.

7. Limitations and Future Recommendations

This alarming estimate underscores the centrality of demographic projections in shaping strategies for sustainable development. While the article highlights the severe risks of neglecting such surges, including potential social, economic, and ecological collapse the

need for systematic cross-national comparisons remains insufficiently addressed in the literature. Such comparative insights would help situate Pakistan's experience within broader regional and global trajectories of urbanization.

A further limitation lies in the study's reliance on quantitative survey methods alone. Such an approach risks overlooking the nuanced local narratives that underpin urban experiences. Incorporating mixed methods could enrich validity by capturing diverse voices—particularly those of marginalized rural migrants and vulnerable urban slum dwellers—whose perspectives are central to understanding the dynamics of sustainable urbanization.

Future research should move beyond an exclusive reliance on quantitative survey methods by incorporating mixed method designs that capture the lived realities of urbanization more holistically. While surveys provide generalizable insights, they often fail to account for the nuanced narratives that shape urban transformations. Integrating qualitative approaches such as ethnographic fieldwork, in-depth interviews, and participatory mapping would allow scholars to access the perspectives of marginalized rural migrants and vulnerable urban slum dwellers who are frequently absent from large-scale datasets. Such methodological diversification would not only strengthen the validity and contextual sensitivity of findings but also offer policymakers a more grounded understanding of the social dynamics underpinning sustainable urbanization.

References

- Abdul, L., & Yu, T.-f. (2020). Resilient urbanisation: A systematic review of urban discourse in Pakistan. *Urban Science*, 4(4), 76.
- Ab Hamid, M., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. Paper presented at the Journal of Physics: Conference Series
- Abubakar, I. R. (2017). Access to sanitation facilities among Nigerian households: determinants and sustainability implications. *Sustainability*, 9(4), 547.
- Adabre, M. A., Chan, A. P., Darko, A., Osei-Kyei, R., Abidoye, R., & Adjei-Kumi, T. (2020). Critical barriers to sustainability attainment in affordable housing: International construction professionals' perspective. *Journal of Cleaner Production*, 253, 119995.
- Anjum, S. A., Wang, L.-c., Xue, L., Saleem, M. F., Wang, G.-x., & Zou, C.-m. (2010). Desertification in Pakistan: causes, impacts and management. *J. Food Agric. Environ*, 8, 1203-1208.
- Arfanuzzaman, M., & Dahiya, B. (2019). Sustainable urbanization in Southeast Asia and beyond: Challenges of population growth, land use change, and environmental health. *Growth and Change*, 50(2), 725-744.
- Arora, N. K., & Mishra, I. (2019). United Nations Sustainable Development Goals 2030 and environmental sustainability: race against time: Springer.
- Barbier, E. B. (2019). Ecological Sustainability, Intergenerational Resource Transfer and Economic Development *The Palgrave Handbook of Development Economics* (pp. 627-655): Springer.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bostenaru Dan, M. (2020). Building the Future on Lessons of Historic Reinforced Concrete. *Sustainability*, 12(15), 5925.
- Clay, D. C., & Reardon, T. (2019). Population and Sustainability: Understanding Population, Environment and Development Linkages *Sustainability in Agricultural and Rural Development* (pp. 117-136): Routledge.
- Crosby, T., Astone, J., & Raimond, R. (2021). Investing in the True Value of Sustainable Food Systems *True Cost Accounting for Food* (pp. 221-231): Routledge.
- Dangles, O., & Casas, J. (2019). Ecosystem services provided by insects for achieving sustainable development goals. *Ecosystem services*, 35, 109-115.

- Delgado, C., Venkatesh, M., Branco, M. C., & Silva, T. (2019). Ethics, responsibility and sustainability orientation among economics and management masters' students. *International Journal of Sustainability in Higher Education*.
- de Jong, M. (2019). From eco-civilization to city branding: A neo-marxist perspective of sustainable urbanization in China. *Sustainability*, 11(20), 5608.
- Diržytė, A., Rakauskienė, O. G., & Servetkienė, V. (2019). Evaluation of resilience impact on socio-economic inequality.
- Du, M., Zhao, M., & Fu, Y. (2020). Revisiting urban sustainability from access to jobs: Assessment of economic gain versus loss of social equity. *Environmental Impact Assessment Review*, 85, 106456.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychological methods*, 12(1), 1.
- Eshun, G., & Tichaawa, T. (2020). Community Participation. *Risk Management and Ecotourism Sustainability Issues in Ghana. GeoJournal of Tourism and Geosites*, 28(1), 313-331.
- Garcia-Torres, S., Albareda, L., Rey-Garcia, M., & Seuring, S. (2019). Traceability for sustainability—literature review and conceptual framework. *Supply Chain Management: An International Journal*.
- Habitat, U. (2001).
- Haider, M., & Badami, M. G. (2010). Urbanization and local governance challenges in Pakistan. *Environment and urbanization ASLA*, 1(1), 81-96.
- Hair, J. F., Celsi, M., Ortinau, D. J., & Bush, R. P. (2010). *Essentials of marketing research* (Vol. 2): McGraw-Hill/Irwin New York, NY.
- Hussain, Z., & Irfan, M. (2012). Sustainable land management to combat desertification in Pakistan. *Journal of Arid Land Studies*, 22, 127-129.
- Idowu, O. O. (2013). Challenges of urbanization and urban growth in Nigeria. *American Journal of Sustainable Cities and Society*, 2(1), 79-94.
- Israr, S. M., & Islam, A. (2006). Good governance and sustainability: a case study from Pakistan. *The International journal of health planning and management*, 21(4), 313-325.
- Ives, C. D., Freeth, R., & Fischer, J. (2020). Inside-out sustainability: The neglect of inner worlds. *Ambio*, 49(1), 208-217.
- Jabeen, N., Farwa, U., & Jadoon, M. (2017). Urbanization in Pakistan: a governance perspective. *Journal of the Research Society of Pakistan*, 54(1), 127-136.
- Jena, A. K. (2018). Effects of Community Sanitation Program on the Awareness of Environmental Sustainability in Assam, India. *International quarterly of community health education*, 39(1), 51-61.
- Jiboye, A. D. (2011). Sustainable urbanization: Issues and challenges for effective urban governance in Nigeria. *Journal of sustainable Development*, 4(6), 211.
- Jones, P. (2017). Formalizing the informal: Understanding the position of informal settlements and slums in sustainable urbanization policies and strategies in Bandung, Indonesia. *Sustainability*, 9(8), 1436.
- Jones, R. S., & Fukawa, K. (2017). Ensuring fiscal sustainability in Japan in the context of a shrinking and ageing population.
- Kapurja, C., & Malik, S. (2020). Sustainable Urbanization and Economic Growth in Developing Countries: A Panel Data Study. *IUP Journal of Applied Economics*, 19(3), 26-44.
- Karikari, A., Asante, K. A., & Biney, C. A. (2006). Water quality characteristics at the estuary of Korle Lagoon in Ghana. *West African Journal of Applied Ecology*, 10(1).
- Keall, M., Baker, M. G., Howden-Chapman, P., Cunningham, M., & Ormandy, D. (2010). Assessing housing quality and its impact on health, safety and sustainability. *Journal of Epidemiology & Community Health*, 64(9), 765-771.
- Khan, A., Khan, M. Y., & Ahmad, M. (2024). Macroeconomics factor, institutional quality and export performance: Empirical evidence from Pakistan. *International Social Science Journal*, 74(253), 831-850.
- Khan, M. Y. (2025a). Advancing Sustainable Development through SME Engagement: An Empirical Approach. *European Journal of Sustainable Development*, 14(3), 821-821.
- Khan, M. Y. (2025b). Sustainable Corporate Governance and Reporting Quality: Evidence from Developing Economy. *European Journal of Sustainable Development*, 14(4), 939-939.
- Komel, F., Khan, M. J., & Khan, M. Y. (2024). Deviation from the target capital structure and acquisition choices: Evidence from Pakistan. *Journal of Business and Management Research*, 3(1), 163-173.

- Kowaltowski, D. C., da Silva, V. G., Pina, S. A., Labaki, L. C., Ruschel, R. C., & de Carvalho Moreira, D. (2006). Quality of life and sustainability issues as seen by the population of low-income housing in the region of Campinas, Brazil. *Habitat international*, 30(4), 1100-1114.
- Kumar, P., Masago, Y., Mishra, B. K., & Fukushi, K. (2018). Evaluating future stress due to combined effect of climate change and rapid urbanization for Pasig-Marikina River, Manila. *Groundwater for Sustainable Development*, 6, 227-234.
- Larsen, L., Yeshitela, K., Mulatu, T., Seifu, S., & Desta, H. (2019). The impact of rapid urbanization and public housing development on urban form and density in Addis Ababa, Ethiopia. *Land*, 8(4), 66.
- Li, H., & de Jong, M. (2017). Citizen participation in China's eco-city development. Will 'new-type urbanization' generate a breakthrough in realizing it? *Journal of cleaner production*, 162, 1085-1094.
- Liu, Z., Zhang, J., & Golubchikov, O. (2019). Edge-urbanization: land policy, development zones, and urban expansion in Tianjin. *Sustainability*, 11(9), 2538.
- Lyons, M., Smuts, C., & Stephens, A. (2001). Participation, empowerment and sustainability:(How) do the links work? *Urban studies*, 38(8), 1233-1251.
- Lyytimäki, J. (2019). Seeking SDG indicators. *Nature Sustainability*, 2(8), 646-646.
- Malik, N., Asmi, F., Ali, M., & Rahman, M. M. (2017). Major factors leading rapid urbanization in China and Pakistan: A comparative study. *Journal of Social Science Studies*, 5(1), 148.
- Mayo, S., Mirza, A. I., Ahmad, J., Aziz, A., Rahman, A., & Sharif, M. (2013). Envisioning Human Settlements in the Information Age and the Underlying Opportunities and Threats for Sustainable Urbanization. *Pakistan Journal of Science*, 65(3), 365.
- Nor, M. I., & Raheem, M. M. (2025). Poor governance and weak social cohesion in Somalia's Climate-stressed settings: the mediating effects of economic inefficiencies and limited human development. *Cogent Economics & Finance*, 13(1), 2475140.
- Ochoa, J. J., Tan, Y., Qian, Q. K., Shen, L., & Moreno, E. L. (2018). Learning from best practices in sustainable urbanization. *Habitat international*, 78, 83-95.
- Olukotun, G. A. (2008). Achieving project sustainability through community participation. *Journal of Social Sciences*, 17(1), 21-29.
- Rahman, M., Islam, A. M., & Banerjee, P. K. (2016). Public versus private investment in economic growth of Bangladesh: an econometric analysis. *International Journal of Trade and Global Markets*, 9(3), 228-248.
- Roy, M. (2009). Planning for sustainable urbanisation in fast growing cities: Mitigation and adaptation issues addressed in Dhaka, Bangladesh. *Habitat International*, 33(3), 276-286.
- Rubenson, K. (2019). Assessing the status of lifelong learning: Issues with composite indexes and surveys on participation. *International Review of Education*, 65(2), 295-317.
- Rush, E. (2019). Wicked problems: the challenge of food safety versus food security—working towards the SDG goals? *European journal of clinical nutrition*, 73(8), 1091-1094.
- Schroeder, P., Anggraeni, K., & Weber, U. (2019). The relevance of circular economy practices to the sustainable development goals. *Journal of Industrial Ecology*, 23(1), 77-95.
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill building approach*: John Wiley & Sons.
- Shah, S. S. A., Saeed, M. A., & Khan, M. Y. (2024). How do emotional intelligence lead to project success in the IT industry? The mediated moderation of perceived organizational support and transformational leadership. *International Journal of Business and Management Sciences*, 5(4), 216-232.
- Siddiqui, S., & Mehfooz, B. (2017). Influence of Housing Quality on Public Health in Lahore, Pakistan: Influence of Housing Quality on Public Health. *Proceedings of the Pakistan Academy of Sciences: B. Life and Environmental Sciences*, 54(3), 237-257.
- Surya, B., Salch, H., & Abubakar, H. (2020). Sustainability of slum-based settlement management community socio-economic empowerment (study on slum settlements in Panakkukang District, Makassar City). *J. Eng. Appl. Sci*, 15, 141-152.
- Tan, Y., Xu, H., & Zhang, X. (2016). Sustainable urbanization in China: A comprehensive literature review. *Cities*, 55, 82-93.
- Tingsanchali, T. (2012). Urban flood disaster management. *Procedia engineering*, 32, 25-37.
- UNO. (2001).
- Van Niekerk, A. J. (2020). Inclusive economic sustainability: SDGs and global inequality. *Sustainability*, 12(13), 5427.

- Wang, X., Yuen, K. F., Wong, Y. D., & Li, K. X. (2020). How can the maritime industry meet Sustainable Development Goals? An analysis of sustainability reports from the social entrepreneurship perspective. *Transportation Research Part D: Transport and Environment*, *78*, 102173.
- Wahab, F., Khan, M. J., Khan, M. Y., & Mushtaq, R. (2024). The impact of climate change on agricultural productivity and agricultural loan recovery; evidence from a developing economy. *Environment, Development and Sustainability*, *26*(10), 24777-24790.
- Williams, J. (2019). Circular cities: Challenges to implementing looping actions. *Sustainability*, *11*(2), 423.
- Wojewódzka-Wiewiórska, A., Kłoczko-Gajewska, A., & Sulewski, P. (2020). Between the social and economic dimensions of sustainability in rural areas—in search of farmers' quality of life. *Sustainability*, *12*(1), 148.
- Zakus, J. D. L., & Lysack, C. L. (1998). Revisiting community participation. *Health policy and planning*, *13*(1), 1-12.