International Journal of Business, Law, and Education
E-ISSN : 2747-134X
Publisher: IJBLE Scientific Publications Community Inc.
Volume 5, Number 1, 2024
https://ijble.com/index.php/journal/index

Green Development in Indonesia: Socioeconomic Impacts, Environmental Effects, and the Role of Social Entrepreneurship

Iwan Harsono
Department of Economics, Faculty of Economics and Business, Mataram University, Indonesia
iharsono@unram.ac.id

ABSTRACT
The socioeconomic and environmental ramifications of green development in Indonesia are investigated in this study, which also investigates the perspectives of urban residents. The data of 243 participants were analyzed utilizing Structural Equation Modeling (SEM-PLS 4) in a quantitative fashion. The variables comprised perceptions of urban residents, environmental impacts, contributions of social entrepreneurs, and socioeconomic implications. The research findings indicated that green development was regarded favorably, as evidenced by elevated levels of consciousness, perceived significance, and anticipations. Social entrepreneurship has been identified as a substantial mediator in the connection between environmental impacts, socioeconomic ramifications, and perceptions. The implications of the findings extend to policy formulation and urban planning, while also providing significant contributions to the body of literature concerning social entrepreneurship and urban development.

Keywords:
Urban, Green Area Development, Socioeconomic, Environmental, Indonesia

INTRODUCTION

Adverse environmental effects have resulted from Indonesia's rapid urbanization, including climate change and the loss of green space in urban areas (Wirayuda et al., 2023). Loss of vegetation and urban development contribute to the Urban Heat Island (UHI) effect, which raises the temperature of urban areas relative to that of rural regions (Bawole & Sutanto, 2023). The presence of verdant open space is a significant factor in reducing the adverse impacts of UHI (Zakiah, n.d.). Nevertheless, it should be noted that while the correlation between UHI intensity and green space is not statistically significant in every region, this suggests that additional variables do indeed influence land surface temperature (Suhartini & Jones, 2023). Furthermore, training requirements and the absence of stringent regulations and market technology are obstacles to the implementation of green building concepts in residential structures (Suwarlan et al., 2022). The informal settlements commonly referred to as kampongs have become occupied with self-help and self-help housing due to the planning system's failure to adequately provide affordable housing. In Indonesia, land scarcity and population expansion have contributed to urban encroachment, which has resulted in altered land use, environmental deterioration, and high costs.

An increasing focus is being placed on the establishment and upkeep of green spaces as an awareness of the significance of sustainable urban development grows. These verdant spaces contribute to the well-being of urban communities and the preservation of the environment. A variety of ecosystem services are provided by green open spaces, including carbon sequestration, water management, air purification, and biodiversity conservation (Sunita et al., 2023). Furthermore, green

spaces foster community cohesion, mental health, and physical activity, which are all social and recreational benefits (Keh et al., 2023). Urban green spaces additionally serve as a protective barrier against the adverse consequences of urbanization by reducing stormwater discharge and mitigating the heat island effect (Leite et al., n.d.). Green spaces are vital for fostering health, well-being, and social interaction (Latasa & Laurenz, 2023). Furthermore, green spaces contribute to the enhancement of environmental and climatological conditions, thereby promoting social well-being and urban microclimates (Addas, 2023). The establishment of compact urban green areas can facilitate the dual objectives of greening and urban densification, thereby enhancing neighborhood connectivity and quality of life. Urban green spaces are crucial to the development of smart cities in order to improve the health and quality of life of their inhabitants, and their presence is also believed to enhance economic opportunities and security.

It is imperative to comprehend the perspectives of urban residents regarding the development of green space in order to formulate effective urban planning and policy. The intricate interplay between green space development and urban residents is influenced by a variety of factors, including socioeconomic, environmental, and community-oriented considerations (Riristuningsia & Harsono, 2017). Researchers can acquire valuable knowledge about the preferences and requirements of urban dwellers (Sahnoune et al., 2021) through an examination of the socio-economic ramifications, environmental effects, and the potential contribution of social entrepreneurship to innovative development. This information can assist policymakers and urban planners in developing green spaces that satisfy the requirements of the public and enhance the city's well-being as a whole (Vogler et al., n.d.). Furthermore, comprehending the advantages of green infrastructure in alleviating urban heat islands can facilitate the development of efficacious approaches to climate regulation and enhance urban quality of life (Angelo, 2021; Rosa & Li, 2023). Urban planners can guarantee that green development is in accordance with the objectives of inclusivity, sustainability, and community involvement by taking into account the aforementioned factors (Krarup, 2022).

Through an examination of the prospective role of social entrepreneurship in green space development, environmental impacts, and socioeconomic implications, this research endeavors to offer a comprehensive understanding of the subject matter (Harsono et al., 2023). The critical nature of this research is emphasized by the unparalleled tempo of urbanization in Indonesia, which has precipitated a swift deterioration of green spaces within urban regions. Due to the unprecedented rate of urbanization in Indonesia, which has resulted in a precipitous decline in green spaces in urban areas, it is crucial that this research is predicated on an understanding of how residents interact with and perceive these spaces. To prevent the exacerbation of urban challenges and to ensure that development initiatives are in line with the requirements of the populace, this knowledge is vital. The pressing nature of this investigation is emphasized by the requirement to tackle environmental deterioration and the possible socio-economic repercussions encountered by urban populations. Through an investigation of variables including intentions to purchase green homes, pro-environmental behavior, and the condition of marginalized communities, this research offers valuable perspectives on how to foster inclusive and sustainable urban environments (Bawole & Sutanto, 2023; Kibas et al., 2023; Nuryadin et al., 2023; Pangaribuan et al., 2023; Zakiah, n.d.).

The scarcity of green open spaces in Indonesia as a result of rapid urbanization has presented difficulties for urban dwellers. A preponderance of concrete structures over natural areas has detrimental effects on the quality of life and gives rise to apprehensions regarding permanent sustainability. The formulation of policies that meet the requirements and perceptions of urban communities is hampered, however, by the dearth of exhaustive research in this area (Zakiah, n.d.). The pace of green building implementation in Indonesia has been hindered by several factors, including challenges in procuring green materials, limited awareness regarding the significance of green buildings, supplementary expenses, and insufficient governmental backing (Susanto & Sujana, 2023). Furthermore, numerous policies and regulations mandate the provision of green open space; however, law enforcement requires comprehensive and integrated efforts (Pangaribuan et al., 2023). In general, further investigation and policy interventions are required to effectively tackle the obstacles posed by Indonesia's swift urbanization and scarcity of verdant open space (Dahlan et al., 2021). Notwithstanding the increasing significance of green development as a means to alleviate the complexities of urbanization, knowledge voids exist regarding the perceptions of urban dwellers regarding these endeavors, the perceived socioeconomic ramifications they entail, and the possible contribution of social entrepreneurship. By conducting quantitative analysis to inform more inclusive and sustainable urban planning and development in Indonesia, this study aims to fill this void.

Literature Review

a. Grand Theory

Holistic Urban Ecosystem Theory places significant emphasis on the interconnectedness that exists between green space initiatives and urban development. The significance of incorporating the perspectives and requirements of local inhabitants, socio-economic ramifications, social enterprise, and environmental effects into a comprehensive framework is acknowledged (CHERCHYK & KHUMAROVA, 2023; Razak, 2023; Rosa & Li, 2023). It emphasizes the contribution of urban communities to the formation and maintenance of green initiatives, as well as the necessity of community-based and inclusive approaches (Flores et al., 1998). The socioeconomic consequences of urban ecosystems are crucial to their overall health, as favorable results contribute to the welfare of the community and ensure the ecosystems' long-term viability (Hou et al., 2022). Social entrepreneurship facilitates sustainable development by providing inventive and human-centered resolutions. It is imperative to acknowledge the environmental consequences associated with the development of green space in order to preserve ecological equilibrium, mitigate climate-related issues, foster resilient urban environments, and conserve biodiversity. By adhering to these fundamental principles, the development of green space can be approached in a comprehensive manner, thereby fostering the long-term sustainability of urban ecosystems and the welfare of urban inhabitants.

b. Urbanization and Green Area Development

The phenomenon of accelerated urbanization in Indonesia has resulted in heightened demands on urban infrastructure and a decline in the availability of green open spaces (Bawole & Sutanto, 2023; Junaedi et al., 2023). Consequences of this nature include the emergence of climate change and the Urban Heat Island effect (Wirayuda et al., 2023). It is imperative to comprehend the intricacies of urbanization dynamics in order to effectively tackle the obstacles that arise during the process of

green space development in Indonesia (Choi, 2022; Suwarlan et al., 2022). Through an examination of social transformations in rural communities and urban expansion parameters in coastal and agricultural cities, scholars have discerned pivotal factors, such as land limitations and population expansion, that contribute to urban expansion. There is ongoing endeavor to enhance the standard of living in underprivileged communities and augment the accessibility of green spaces within urban environments. Developing strategies for sustainable land use and management in Indonesian cities may be facilitated by the results of this research.

Enhancing the quality of urban life and promoting environmental sustainability require green spaces, including urban parks and gardens. Residents can enjoy a variety of advantages from these green spaces, including purification of the air and water, preservation of biodiversity, and recreational opportunities. A positive correlation between the presence of green spaces and the well-being of urban communities has been consistently demonstrated in research (Backman et al., 2023; Bille et al., 2023; Perdigones et al., 2023; Willis & Gupta, 2023). Research has demonstrated that the presence of urban green spaces can mitigate the negative impacts of high temperatures, pollution, and inundation, while also enhancing both mental and physical well-being (Devos, 2023). Furthermore, these domains make a valuable contribution to the education of the general public regarding ecological subjects and the promotion of healthy lifestyles. Prioritizing the incorporation of green spaces into urban environments is critical for the development of sustainable cities.

c. Perceptions of Urban Communities

The way in which urban residents view the development of green space is affected by a number of variables, such as socioeconomic standing, level of education, and cultural heritage. These perceptions influence the overall level of participation, satisfaction, and support for green initiatives, according to research (Zhang & Lin, 2022; Zhuang et al., 2022). The endorsement of social housing initiatives is contingent upon factors including homeownership, the presence of children under the age of 18, and neighborhood satisfaction (Chen et al., 2021). Moreover, residents of high-development-intensity buildings are more receptive to social housing (Jennings et al., 2019). A lack of equitable access to urban green spaces, frequently correlated with socioeconomic status and race/ethnicity, can exacerbate health disparities and restrict utilization of ecosystem services (Dempsey et al., 2011). In the context of urban environments, social sustainability encompasses both equitable access and the long-term viability of the community. Collectively, these perceptions and factors have a significant impact on the satisfaction, support, and involvement of the community in green initiatives within urban environments.

Involving urban communities in green area-related planning and decision-making processes can enhance the success of such initiatives and foster a sense of ownership, according to research (Angelidou & Psaltoglou, 2017; Gearin et al., 2023; Willis & Gupta, 2023). Community participation in these processes is influenced by various factors, one of which is the imperative to confront societal challenges and devise inventive resolutions (Gilbert, 2014). Moreover, community participation may be impeded by the perception that green infrastructure is a project devised by external parties for their own benefit, with minimal direct advantages (Nguyen & Leichenko, 2022). It is crucial to incorporate the perspectives of stakeholders, including communities with vulnerable populations, into the planning process in order to promote sustainable and inclusive development. It is imperative to comprehend the adverse

consequences, including urbanization, that may ensue as a consequence of green infrastructure strategy implementation. Community participation can be enhanced and climate justice objectives can be realized through the promotion of grassroots mobilizations, the strengthening of community-led planning, and the empowerment of local voices.

d. Socio-economic Implications of Green Area Development

There are numerous socioeconomic benefits associated with the development of green space, including the establishment of jobs, the enhancement of property values, and the stimulation of the local economy (Bille et al., 2023; Sutono et al., 2023). It has also been demonstrated that access to green spaces improves community well-being, social cohesion, and mental health (Willis & Gupta, 2023; Zalejska-Jonsson et al., 2023). The connection to nature that green spaces afford may have positive effects on one's mental health (Janeczko et al., 2023). Furthermore, green spaces facilitate community gatherings, fostering social interaction, a sense of belonging, and active engagement (Nasrabadi et al., 2023). Green space development has the potential to positively impact social sustainability through its ability to enhance community well-being, promote social cohesion, and alleviate mental health issues.

e. Social Entrepreneurship in Green Initiatives

Social entrepreneurship has become a significant catalyst for promoting sustainable development, particularly with regard to environmentally friendly initiatives. Social entrepreneurship aims to foster community empowerment, environmental preservation, and the development of innovative solutions (Ilyas et al., 2023). Nevertheless, social entrepreneurship encounters obstacles including limitations in funding, regulatory impediments, and concerns regarding scalability (Khan et al., 2023). Notwithstanding these obstacles, green initiatives do present prospects for social entrepreneurship, such as the ability to collaborate, network, and prioritize impact measurement (Benavides et al., 2023). Comprehending these obstacles and prospects is of the utmost importance in order to optimize the effects of social entrepreneurship in environmentally sustainable endeavors and advance comprehensive and community-oriented approaches (Bataineh et al., 2023; Benavides et al., 2023). Social entrepreneurship can propel sustainable development in environmentally friendly regions by effectively addressing challenges related to scalability, regulatory compliance, and financial limitations.

In the context of green development, the emergence of social entrepreneurship has had a substantial effect on shaping perceptions, driving socioeconomic implications, and influencing environmental impacts (Hübel et al., 2023; Khan et al., 2023; Oni & Fiseha, 2022; Shan & Tian, 2022; Trabskaia et al., 2023). Social entrepreneurship has the potential to effect positive societal change by means of its innovative business models. Gender influences the perspectives of individuals regarding a variety of facets of life, such as future expectations, quality of life, and attitudes toward societal and economic structures. Social entrepreneurs are instrumental in addressing socioeconomic issues such as inequality, unemployment, and destitution. The entrepreneurial ecosystem contributes to the resolution of global issues and provides opportunities for social entrepreneurship. Social entrepreneurs' orientation toward social entrepreneurship is positively influenced by their perception of awareness education; prosocial motivation mediates this relationship. Gaining insight into these interconnections and variations in perception can aid in the

formulation of socially inclusive and adaptable approaches to sustainable local progress.

f. Environmental Impacts of Green Area Development

The development of green spaces yields favorable environmental outcomes, such as the sequestration of carbon, the mitigation of urban heat islands, and the conservation of biodiversity (Backman et al., 2023; Perdigones et al., 2023; Willis & Gupta, 2023; Zalejska-Jonsson et al., 2023). Nevertheless, improper management, land use conflicts, and invasive species may present obstacles (Pelčák & Korytárová, 2022). In order to surmount these obstacles, it is critical to comprehend the environmental intricacies linked to the development of natural space and execute suitable mitigation measures. This necessitates the quantification of the distinct socioeconomic effects produced by various components of green spaces. Furthermore, integrating the financial advantages and consequences of green spaces into evaluations of economic efficacy can yield a holistic comprehension of their worth. By evaluating the positive and negative effects of green space development, we can underscore the significance of effective administration and underscore the potential environmental advantages it may offer.

g. Research Gaps

Although the current body of literature offers valuable insights into the distinct constituents of the Holistic Urban Ecosystem, substantial research voids exist regarding the synthesis and quantitative investigation of these interrelated elements (Lovie, 2020). An examination of the existing body of literature reveals a dearth of comprehensive research that amalgamates the perspectives of urban dwellers, the socio-economic ramifications, the contribution of social entrepreneurship, and the ecological consequences within a unified framework (Atchadé et al., 2023). A limited number of studies have employed quantitative methodologies to thoroughly investigate the interrelated aspects of green space development, including the perceptions of urban residents, socio-economic consequences, contributions of social entrepreneurship, and environmental impacts (Gillefalk et al., 2023). Prior research has failed to establish a cohesive theoretical framework that incorporates these dimensions in a systematic manner (Rizani et al., 2023; Shukla et al., 2023). In order to attain a thorough comprehension of holistic urban ecosystems, it is imperative to employ theoretical frameworks that account for the intricate interconnections among socioeconomic variables, environmental dynamics, urban population, and social entrepreneurship (Taneja et al., 2022). A theoretical framework that takes into account the intricate interconnections among urban populations, socioeconomic variables, social entrepreneurship, and environmental dynamics in Indonesia is necessary for a thorough comprehension of holistic urban ecosystems. The conceptual framework and hypotheses pertaining to this subject are delineated in Figure (Lovie, 2020).

METHOD

The present study employed a quantitative research design in order to investigate the perspectives of urban residents regarding the development of green space, its socio-economic ramifications, contributions to social entrepreneurship, and environmental effects. The present study employed Partial Least Squares (PLS-SEM), a form of Structural Equation Modeling (SEM), to examine the associations among latent constructs. This study's population consists of urban dwellers from diverse regions in Indonesia, selected using purposive sampling to include individuals who

possess a heightened awareness of green area development and directly experience its effects. In this research, both offline and online survey methodologies were utilized. Consent procedures were adhered to in order to conduct this survey in accordance with ethical standards. Enumerators assisted the author in the offline distribution of questionnaires in key provinces of Indonesia, including West Java, Central Java, and DKI Jakarta. In provinces where offline questionnaires were not distributed, online surveys were administered with the assistance of Google and subsequently disseminated across popular social media platforms in Indonesia, including WhatsApp, Instagram, Facebook, and others. This procedure lasted from August 28, 2023 to September 29, 2023, and 243 samples were ultimately discovered.

In consideration of the model's complexity and the requirement for dependable estimates, the recommended guidelines for PLS-SEM put forth by Hair (2019) were employed to ascertain the sample size of 243 respondents. In order to achieve representation of diverse geographic, socio-economic, and demographic segments, stratified random sampling was implemented. The basis for stratification was socioeconomic class, urbanization level, and region. Groups were selected at random within each stratum, and respondents were selected at random from these groups.

To assist research participants, a structured questionnaire was created utilizing a Likert-15 scale that has been validated in the literature. The questionnaire will include sections on urban residents' perceptions with five indicators of Level of Awareness, Positive Attitude, Perception of Accessibility, Participation in Green Initiatives and Expectations related to Green Area Development from the literature (Backman et al., 2023; Klopfer & Pfeiffer, 2023), socio-economic implications measured with five indicators of Increased Local Employment, Increased Property Value, Local Economic Activity, Social Welfare, and Positive Economic Contribution (Fleischer et al., 2023; Willis & Gupta, 2023), social entrepreneurship contribution measured with six underlying indicators of Sustainable Innovation, Community Participation, Innovative Solutions to Challenges, Contribution to Sustainable Employment, Positive Impact on Community Wellbeing and Contribution to Social Inclusion (Ilyas et al., 2023; Moghaddam et al., 2023; Mondal, 2023), and environmental impact is measured by seven underlying indicators such as Improved Air Quality, Biodiversity Preservation, Reduced Climate Change Impacts, Stormwater Management and Flood Reduction, Improved Soil Quality, Positive Influence on Mental Health and Reduced Carbon Footprint (Devos, 2023; Wadsö & Håkansson, 2023; Zalejska-Jonsson et al., 2023). Figure 1 ilustration of conceptual and hypothesis research.

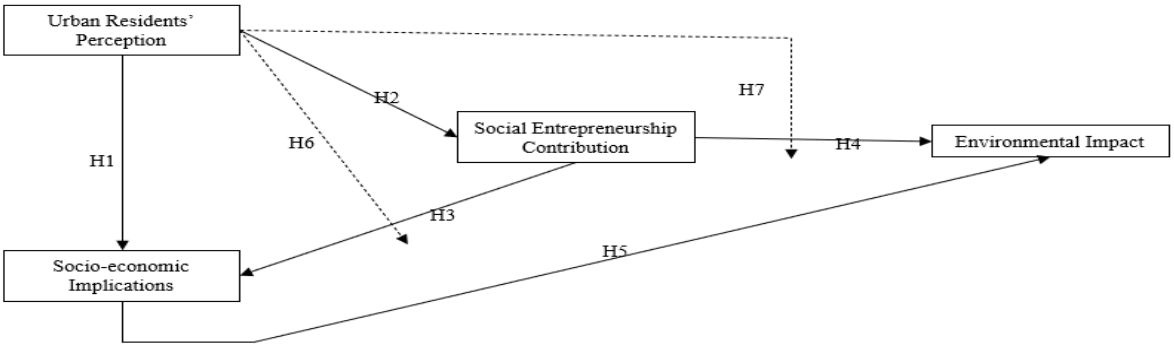

Figure 1. Conceptual and Hypothesis

Prior to disseminating the questionnaire, the author engaged in discussions with three professors from three universities in Indonesia whom the author deemed knowledgeable about the subject matter of this research and who held positions in reputable indexed research databases (e.g., Scopus, Sinta, and others). This dialogue led to two revisions of the questionnaire, and a small sample was pre-tested to ensure its clarity, relevance, and reliability.

Data Analysis

The research data were analyzed utilizing PLS-SEM, a method that integrates structural equation modeling and partial least squares (Sarstedt et al., 2017). The PLS-SEM analysis was performed utilizing version 4 of the SMARTPLS program (Sarstedt et al., 2021). The results of this investigation were substantiated by employing the Confirmatory Factor Analysis (CFA) technique (Hair et al., 2019). By employing a robust theoretical framework and having undergone validation in prior research, this approach guarantees the robustness of the model design and latent variable indicators utilized in the present study.

External and internal model evaluations are a crucial element of the PLS-SEM method's two-stage analysis procedure. Assembled of the outer model, a variety of statistical analyses were implemented to evaluate the validity and coherence of the constructs utilized in the development of the survey instrument indicators. The acquired data underwent a thorough process of inspection and verification by domain experts. In order to augment the assessment of the study's reliability and validity, feedback forms were examined. In addition to discriminant and convergent validity, the research investigated the average variance extracted (AVE), heterotrait-to-monotrait ratio (HTMT), and variance inflation factor (VIF). Cronbach alpha and composite reliability were also utilized to evaluate the dependability of the data. The instruments utilized in this investigation exhibited a level of reliability that fell within acceptable limits. A level of reliability of 0.7 has been documented in the literature (Hair et al., 2019). The present study demonstrates that the reliability value of every item surpasses the predetermined threshold value.

In order to ascertain the precision of the conceptual model in approximating the variance of the independent variables, an internal or structural evaluation is performed. To accomplish this, four measurement analyses were implemented. The evaluation of the combined impact of exogenous and endogenous factors is conducted through the utilization of the R-square (R2) value, which represents the coefficient of determination. The bootstrap method was utilized to ascertain the statistical significance of the direct and indirect path coefficients for a subsample of 5,000 individuals. A value below 0.1 in this evaluation signifies a relationship between latent variables that is statistically significant. The significance level is assessed using the t-statistic, which is alternatively known as the p-value. The effectiveness of the overall measurement and structural model was assessed through the utilization of Goodness of Fit analysis. In this investigation, the robustness of the SRMR, NFI, and Chi-Square ratio values was assessed.

RESULTS AND DISCUSSION

a. Sample Demographics

In order to enhance the statistical power and dependability of the analysis, 243 participants were chosen as the sample size for this study, as suggested by (Hair et al., 2019), which suggests multiplying the number of indicators by a factor of 5 to 10. Considering the comprehensive set of 23 indicators utilized in this study, the determination was reached to multiply the sum by 10, thereby yielding a minimum sample size of 230. We hereby certify that this value satisfies the requirements specified in the publication by (Hair et al., 2019). In quantitative research, the determination of this value was conducted in accordance with established procedures to guarantee sufficient population representation and statistical significance. At the outset, 250 questionnaires were disseminated; nevertheless, seven participants declined to offer cooperative responses, whereas the remaining 243 participants diligently completed each query.

A heterogeneous sample of 243 urban residents hailing from various regions of Indonesia participated in the investigation. 20% of the respondents were between the ages of 18 and 25, 35% were between the ages of 26 and 35, 25% were between the ages of 36 and 45, 15% were between the ages of 46 and 55, and 5% were between the ages of 56 and 65. With regard to the gender composition of the respondents, 45% identified as male and 55% as female. The income distribution reveals that 15% of the participants possess an income below Less than $20,000, between $20,000 and $40,000, 25%, between $40,001 and $60,000, 20%, and between $60,001 and $80,000, 10%. 10% of the population possessed an education level of high school or lower, 20% were college graduates, 40% held a bachelor's degree, 20% were master's degree holders, and 10% held a doctoral degree. According to the occupational distribution, 50% of the population is employed in the service sector, 15% is unemployed, and 5% has other employment.

b. Analysis of Confinmantory Factors

In order to assess the reliability and validity of this research, a range of statistical measures and feedback formats were utilized. In order to evaluate convergent and discriminant validity, the average variance extracted (AVE), heterotrait-to-monotrait ratio (HTMT), and variance inflation factor (VIF) were calculated. Composite reliability and Cronbach's alpha were employed to assess the reliability of the data. The instruments utilized in this research exhibited satisfactory levels of reliability, as each item surpassed the predetermined threshold value (Hair et al., 2019).

Table 1. Validity and Reliability Test

Variabel	Items	Code	Loading Factor	Outer VIF
Urban Residents' Perception (URP)	Cronbach's Alpha = 0.836, Composite Reliability = 0.886, AVE = 0.684.	URP		
	1. I am aware of the development of green areas in my urban area.	URP.1	0.771	2.291
	2. In my view the importance of green space development in an urban context.	URP.2	0.864	1.982
	3. I feel that green areas in my area are easily accessible.	URP.3	0.863	2.625
	4. I participate in activities or initiatives that support the development of green areas in my community.	URP.4	0.768	2.126

Variabel	Items	Code	Loading Factor	Outer VIF
	5. I have certain expectations regarding the development of green areas in my urban area.	URP.5	0.859	2.015
Socio-Eonomic Implications (SEI)	Cronbach's Alpha = 0.824, Composite Reliability = 0.808, AVE = 0.653.	SEI		
	1. I believe that the development of green areas in urban areas contributes to increased employment.	SEI.1	0.810	2.794
	2. I see an increase in property values around green areas in my area.	SEI.2	0.780	1.689
	3. I see an increase in local economic activity as a result of green space development.	SEI.3	0.835	2.434
	4. I am of the view that green space development has a positive impact on social welfare in my community.	SEI.4	0.849	1.860
	5. I believe that green space development can make a positive economic contribution to local residents.	SEI.5	0.945	2.102
Social Entrepreneurship Contribution (SEC)	Cronbach's Alpha = 0.918, Composite Reliability = 0.943, AVE = 0.730.	SEC		
	1. I believe that social entrepreneurship initiatives contribute to the development of green spaces in urban areas.	SEC.1	0.844	2.047
	2. The role of social entrepreneurship in bringing innovation to improve the quality of green spaces in my community.	SEC.2	0.754	1.798
	3. I see that social entrepreneurship helps to encourage active community participation in green area management.	SEC.3	0.838	2.392
	4. The success of social entrepreneurship efforts in creating innovative solutions to challenges related to green spaces in urban areas.	SEC.4	0.850	2.461
	5. I believe that social entrepreneurship can play a key role in creating sustainable jobs through green space development projects.	SEC.5	0.745	1.850
	6. The role of social entrepreneurship in improving community welfare through sustainable projects in green areas.	SEC.6	0.822	2.374
Environmental Impact (ENI)	Cronbach's Alpha = 0.897, Composite Reliability = 0.920, AVE = 0.634.	ENI		
	1. I believe that the development of green areas in urban areas has a positive impact on air quality.	ENI.1	0.815	2.786
	2. The contribution of green space development to biodiversity conservation.	ENI.2	0.765	2.551
	3. I see that the development of green areas can help reduce the impact of climate change in my community.	ENI.3	0.852	1.657
	4. The role of green areas in improving stormwater management and reducing flood risk.	ENI.4	0.750	2.626
	5. I believe that the presence of green areas can improve soil quality around urban areas.	ENI.5	0.771	2.638
	6. The positive influence of green spaces on the mental health and well-being of urban residents.	ENI.6	0.841	1.854
	7. I see that the development of green spaces can help reduce the carbon footprint of urban areas.	ENI.7	0.724	1.000

Source : Results processing data (2024)

The research's validity and reliability were evaluated through a variety of statistical techniques and feedback forms. The heterotrait-to-monotrait ratio (HTMT), variance inflation factor (VIF), and average variance extracted (AVE) were used to assess both convergent and discriminant validity (Hair et al., 2019). Composite reliability and Cronbach's alpha were used to evaluate the data's reliability. Every item on the research instruments exceeded the predefined threshold value, indicating satisfactory levels of reliability. This study assessed the problem of multicollinearity among the chosen variables and employed the internal VIF value to address it. The study's conclusions supported the presence of multicollinearity by showing that none of the variables showed statistically significant multicollinearity. Significant correlations were also discovered in the study between the perceptions of urban residents, the socioeconomic ramifications, the contribution of social entrepreneurship, and the environmental impact; these associations are sufficiently described by the internal VIF values in Table 2.

Table 2. Internal VIF

Variable	Environmental Impact	Social Entrepreneurship Contribution	Socio-economic Implications
Urban Residents' Perception	2.134		1.854
Socio-economic Implications	1.362		
Social Entrepreneurship Contribution	1.983	1.000	2.431
Urban Resident's Perception x Social Entrepreneurship Contribution	2.189		1.033

Source: Results processing data (2024)

Sufficient convergent validity is demonstrated by the model put out in this study. Table 2 displays the internal VIF values. The most used test to assess the data's discriminant validity is the HTMT ratio. When there is little connection between the indicators of distinct variables, the reader may conclude that all of the indicators are measuring the same thing, a phenomenon known as discriminant validity. Table 3 displays the results pertaining to HMTH.

Table 3. Discriminant Validty

	ENI	SEC	SEI	URP
ENI	0.453			
SEC	0.323	0.432		
SEI	0.421	0.455	0.583	
URP	0.232	0.353	0.253	0.521

Source : Results processing data (2024)

c. Model Fit

The relationships among urban residents' perceptions, socio-economic implications, contributions to social entrepreneurship, and environmental impacts were analyzed using structural equation models. The model match index indicates the degree to which the proposed model corresponds to the observed data. A chi-square test is utilized to evaluate the discrepancy between the expected and observed covariance matrices; a p value that is not statistically significant suggests a satisfactory fit. Values near 1 on the comparative fit index signify a decent fit between the null model and the hypothesized model in terms of fit. The evaluation of the forecast error per degree of freedom is conducted using the root mean square error; values falling below 0.08 signify a satisfactory fit. The standardized root mean square residual is

calculated as the mean of the standardized residuals; values falling below 0.08 are indicative of a satisfactory fit.

The R^2 value of 0.528 signifies that the model accounts for 52.8% of the variance in Socio-Economic Implications. The Socio-Economic Implications possess predictive validity, as evidenced by their Q^2 value of 0.402. In a similar vein, the model accounts for 48.2% of the variance in Social Entrepreneurship Contribution, as indicated by the R^2 value of 0.482. The model's predictive capability is evaluated by the Q^2 value of 0.362. Furthermore, the model demonstrates predictive validity for Environmental Impact, as evidenced by the Q^2 value of 0.439 and the R^2 value of 0.563, which collectively account for 56.3% of the variance in Environmental Impact.

d. Bootstrapping Technique

Bootstrapping is a technique employed in the inner model analysis procedure to verify hypotheses (Hair et al., 2019). In order to evaluate the effectiveness of the structural model while preserving the integrity of the data, 5,000 subsamples were utilized (Hair et al., 2019). The exploratory study employed a significance level that fluctuated from 5% to 10%, a value that is universally acknowledged as a critical threshold for pertinence in the realm of economic research.

Table 4. Bootsrtapping Test

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-statistic	p-Values
URP → SEI	0.505	0.508	0.079	6.436	0.000
URP → SEC	0.882	0.886	0.028	31.779	0.000
SEC → SEI	0.489	0.485	0.081	6.008	0.000
SEC → ENI	0.696	0.718	0.087	8.010	0.000
SEI → ENI	0.429	0.432	0.093	4.210	0.003
URP → SEC → SEI	0.702	0.705	0.089	7.832	0.000
URP → SEC → ENI	0.685	0.694	0.088	7.998	0.000

Source: Results processing data (2024)

There are noteworthy correlations between the variables in the suggested structural model, according to the findings of a hypothesis test that used T-statistics and p-values. The first hypothesis was validated with a p-value of 0.000 and a highly significant T-statistic of 6.436, indicating a correlation between the perceptions of urban dwellers and the socio-economic consequences. Similar to the first hypothesis, a highly significant T-statistic of 31.779 and a p-value of 0.000 confirmed the second hypothesis, which examined the association between urban inhabitants' perceptions and donations to social entrepreneurship. With a T-statistic of 6.008 and a p-value of 0.000, the third hypothesis—which holds that social entrepreneurship contributions have a considerable impact on socio-economic implications—was supported. The fourth hypothesis, which examined the influence of social entrepreneurship on environmental outcomes, was found to be supported by a p-value of 0.000 and a highly significant T-statistic of 8.010. With a T-statistic of 4.210 and a p-value of 0.003, the fifth hypothesis—which holds that socioeconomic implications have a considerable impact on environmental outcomes—was validated. A highly significant T-statistic of 7.832 and a p-value of 0.000 significantly supported the sixth hypothesis, which suggested a sequential relationship from urban residents' perceptions to social entrepreneurship contributions and then to socio-economic ramifications. Lastly, a T-statistic of 7.998 and a p-value of 0.000 support the seventh hypothesis, which

proposes a sequential relationship between urban inhabitants' perspectives, social entrepreneurship contributions, and environmental repercussions.

Discussion

The findings of this research provide robust evidence for the notion that social entrepreneurship functions as a mediator between perceptions of urban communities, socioeconomic consequences, and environmental impacts. This study demonstrates that social entrepreneurship in Indonesia serves as a significant catalyst for environmental impact, converting favorable perceptions into concrete socio-economic advantages and environmentally sustainable practices. The scope of social entrepreneurship and its contribution to sustainable development are investigated in this study. It investigates the entrepreneurial ecosystem's adaptation to social enterprises and the important actors in the social enterprise ecosystem. Furthermore, the research reveals the primary benefits and obstacles associated with social entrepreneurship as it pertains to renewable energy. The research also emphasizes the significance of social entrepreneurship as a well-rounded strategy for enhancing the quality of life over an extended period of time, driven by ethical considerations of fairness and social justice. In accordance with the findings of (Bataineh et al., 2023; Junjie et al., 2022; Premadasa et al., 2023; Trabskaia et al., 2023), this study contributes to the body of knowledge by outlining the research agenda, structure, and characteristics of entrepreneurial ecosystems and social entrepreneurship.

The aforementioned results emphasize the criticality of incorporating social entrepreneurship into the development policies for urban areas in Indonesia. By incorporating social entrepreneurship initiatives, the efficacy of green development strategies can be enhanced by considering both environmental and socioeconomic factors. The findings of this research demonstrate that community participation is critical to the success of ecological initiatives. Social entrepreneurship promotes engagement in the community by cultivating a feeling of proprietorship and cooperation. Social entrepreneurship ought to be implemented by policy makers and urban planners in order to fortify community ties and improve the long-term viability of green development initiatives. Urban communities' varied expectations and perceptions underscore the necessity for targeted interventions in the realm of green development. It is imperative that social entrepreneurship endeavors be customized to address particular community requirements, promote inclusiveness, and optimize favorable socio-economic and environmental outcomes. The convergence of favorable evaluations regarding the enduring viability of green development and the acknowledgment of social entrepreneurship's contribution signifies a potentially auspicious trajectory towards urban sustainability. Supportive policies and initiatives for social entrepreneurship have the potential to generate enduring positive effects in socio-economic and environmental contexts.

Consistent with prior research, this study presents recent empirical findings that support the notion that incorporating social entrepreneurship initiatives into urban development policies in Indonesia can enhance the efficacy of environmentally and socioeconomically sustainable development strategies. (Agolla et al., 2019). Involvement of the community is critical to the success of environmentally friendly initiatives; social entrepreneurship fosters a sense of ownership and collaboration among community members (Hussein & Hapsari, 2023). Social entrepreneurship ought to be implemented by policy makers and urban planners in order to fortify community ties and improve the long-term viability of green development initiatives

(Handayani et al., 2023). In order to mitigate the varied perceptions and expectations that urban communities have with regard to green spaces, targeted interventions are required (Azid, 2023). It is imperative that social entrepreneurship endeavors be customized to address the unique requirements of particular communities, thereby promoting inclusiveness and optimizing favorable socio-economic and environmental outcomes (Ilyas et al., 2023).

a. Contribution to the Literature

This study makes multiple contributions to the extant body of literature concerning social entrepreneurship, green spaces, and urban development. This study presents empirical findings that examine the mediating function of social entrepreneurship in the connection between the perceptions of urban residents, the socio-economic consequences, and the environmental effects. The research provides an extensive comprehension of the manner in which social entrepreneurship functions as a catalyst, establishing a connection between favorable perceptions and concrete results. The research offers distinct perspectives from Indonesia, considering the region's particular cultural, economic, and environmental circumstances. Through the utilization of integrated analysis, one can attain a more profound comprehension of the interrelated elements that influence urban environments. The study presents a framework that incorporates social and environmental aspects when assessing urban development endeavors. The study offers policymakers and urban planners practical insights and actionable recommendations regarding the integration of social entrepreneurship, the customization of community engagement strategies, the development of long-term sustainability plans, and the promotion of collaboration. The results of this study hold significance for comparable investigations conducted in Southeast Asia and other developing nations.

b. Limitations and Recommendations for Future Research

Although this research offers valuable insights, certain limitations must be acknowledged. The survey's cross-sectional design imposes constraints on the ability to establish causation. A longitudinal design could be implemented in future studies to monitor the enduring effects of social entrepreneurship on urban development. Further, the scope of this research was limited to a particular region in Indonesia, so the implications of the findings may not be generalizable. Additional investigation conducted in various geographic settings could potentially yield a more all-encompassing comprehension of the correlation being examined.

CONCLUSION

This study examines the intricate intricacies of green space development within an urban setting, with a specific emphasis on the perspectives of local inhabitants and the subsequent socio-economic and environmental consequences. Social entrepreneurship mediates the relationship between inhabitants' perceptions, socioeconomic implications, and environmental outcomes, according to the findings of the study. Favorable attitudes and anticipations from inhabitants of the municipality signify a favorable setting for endeavors related to sustainable urban development. These findings can be utilized by policy makers and urban planners to facilitate the integration of social entrepreneurship into green development strategies, thereby promoting collaboration and community engagement. This research makes a scholarly contribution by presenting unique perspectives from Indonesia and presenting actionable suggestions for policymakers. Gaining insight into the interplay between

residents' perceptions and the impact of social entrepreneurship is vital in the ongoing development of urban areas, as it directly influences the sustainability and vitality of cities.

Reference

Addas, A. (2023). The importance of urban green spaces in the development of smart cities. *Frontiers in Environmental Science*, *11*, 1206372.

Agolla, J. E., Monametsi, G. L., & Phera, P. (2019). Antecedents of entrepreneurial intentions amongst business students in a tertiary institution. *Asia Pacific Journal of Innovation and Entrepreneurship*, *13*(2), 138–152.

Angelidou, M., & Psaltoglou, A. (2017). An empirical investigation of social innovation initiatives for sustainable urban development. *Sustainable Cities and Society*, *33*, 113–125.

Angelo, H. (2021). *How green became good: Urbanized nature and the making of cities and citizens*. University of Chicago Press.

Atchadé, A. J., Kanda, M., Folega, F., Atela, J., Dourma, M., Wala, K., & Akpagana, K. (2023). Urban Ecosystem Services and Determinants of Stakeholders' Perception for Sustainable Cities Planning in Cotonou (Benin). *Sustainability*, *15*(12), 9424.

Azid, R. M. (2023). Peran Mediasi Efikasi Diri Pada Pengaruh Ekosistem Kewirausahaan Terhadap Niat Berwirausaha Kalangan Santri Banyuwangi. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, *4*(4), 1317–1324.

Backman, L., Karvinen, E., Nevalainen, O., Järvi, L., & Kulmala, L. (2023). *Impact of drought on urban trees–a modelling study*. Copernicus Meetings.

Bataineh, M. J., Marcuello Servós, C., & Sánchez-Sellero, P. (2023). *Toward sustainability: the role of social entrepreneurship in creating social-economic value in renewable energy social enterprises*.

Bawole, P., & Sutanto, H. (2023). Marginalized community effort to improve environmental quality of poor settlement along riverbank. *Jurnal Teknosains*, *12*(2), 111–122.

Benavides, A. D., Alvarez, K. Q., & de la Garza López, I. L. (2023). Social Entrepreneurship in a Pandemic: Challenges and Opportunities. *South Florida Journal of Development*, *4*(3), 1066–1076.

Bille, R. A., Jensen, K. E., & Buitenwerf, R. (2023). Global patterns in urban green space are strongly linked to human development and population density. *Urban Forestry & Urban Greening*, 127980.

Chen, K., Peng, C.-W., & Lee, M.-H. (2021). Determinants of the Public's Attitude Towards Social Housing Construction Under High Home Ownership Rate. *International Real Estate Review*, *24*(1).

CHERCHYK, L. M., & KHUMAROVA, N. I. (2023). GREEN INFRASTRUCTURE MANAGEMENT OF URBAN ECOSYSTEMS. *Economic Innovations*, *25*(1 (86)), 142–151.

Choi, E. Y. (2022). Colonial Legacies in Indonesia's Urbanization and Urban Housing: Past, Present, and Future. *Mahabbah: Journal of Religion & Education*, *3*(2).

Dahlan, M. Z., Faisal, B., Chaeriyah, S., Hutriani, I. W., & Amelia, M. (2021). Review of Urban Greening Policy in Indonesia: A Case Study in Jakarta Province. *International Journal on Livable Space*, *6*(1), 21–28.

Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of

sustainable development: Defining urban social sustainability. *Sustainable Development*, *19*(5), 289–300.

Devos, P. (2023). The Bird Dawn Chorus Strength of an Urban Soundscape and Its Potential to Assess Urban Green Spaces. *Sustainability*, *15*(8), 7002.

Fleischer, D., Turner, J. R., Heitmann, I., Bucknum, B., Bhatnagar, A., & Yeager, R. (2023). Typological distinction of remotely sensed metrics of neighborhood vegetation for environmental health intervention design. *MedRxiv*, 2003–2023.

Flores, A., Pickett, S. T. A., Zipperer, W. C., Pouyat, R. V, & Pirani, R. (1998). Adopting a modern ecological view of the metropolitan landscape: the case of a greenspace system for the New York City region. *Landscape and Urban Planning*, *39*(4), 295–308.

Gearin, E., Dunson, K., & Hampton, M. (2023). Greened out: mitigating the impacts of eco-gentrification through community dialogue. *Architecture_MPS*, *25*(1), 1–14.

Gilbert, L. (2014). Social Justice and the" Green" City. *Urbe. Revista Brasileira de Gestão Urbana*, *6*, 158–169.

Gillefalk, M., Neumann, F., Bücker, M., & Özgen-Xian, I. (2023). *Darwinian approaches for the Urban Critical Zone—A case study in the city of Braunschweig, Lower Saxony, Germany*. Copernicus Meetings.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/https://doi.org/10.1108/EBR-11-2018-0203

Handayani, H., Kurniasari, F., & Lestari, E. D. (2023). Analysis of Interest in Becoming Social Entrepreneurs Among the Millennials and Z Generation Using the Theory of Planned Behavior and Outcome Expectation: A Multigroup Analysis Approach. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, *8*(5), 130.

Harsono, I., Ro, I., & Salmah, E. (2023). The Influence of Economic Sustainability , Environmental Initiatives , and Farmers ' Quality of Life on the Development of Social Entrepreneurship in the Agricultural Sector in West Java. *West Science Business and Management*, *1*(05), 431–440.

Hou, Y.-Y., Liu, K.-S., Lin, J.-H., Lin, M.-H., & Tin, L.-Y. (2022). Evaluation of Critical Factors in Urban Matrix Environment from the Perspective of Ecological Design. *2022 International Conference on Fuzzy Theory and Its Applications (IFUZZY)*, 1–4.

Hübel, Ștefania-R., Stan, M.-I., & Tasențe, T. (2023). Assessing the Role of Gender in Shaping Perceptions of Socio-Economic Issues in the Context of Sustainable Local Development: A Study on Respondents' Influence. *Technium Sustainability*, *3*, 76–90.

Hussein, A. S., & Hapsari, R. (2023). Business Model Canvas Training for High School Students in Malang Raya. *Journal of Interdisciplinary Socio-Economic and Community Study*, *3*(1), 30–36.

Ilyas, M. S. D., Humaira, A., & Adha, N. (2023). *An Identity Capital Model Perspective for Social Entrepreneurship Education*.

Janeczko, E., Czyżyk, K., Korcz, N., Woźnicka, M., & Bielinis, E. (2023). The Psychological Effects and Benefits of Using Green Spaces in the City: A Field Experiment with Young Polish Adults. *Forests*, *14*(3), 497.

Jennings, V., Browning, M. H. E. M., Rigolon, A., Jennings, V., Browning, M. H. E. M., & Rigolon, A. (2019). Urban green space at the nexus of environmental justice

and health equity. *Urban Green Spaces: Public Health and Sustainability in the United States*, 47–69.

Junaedi, J., Dikrurohman, D., & Abdullah, A. (2023). Analysis of Social Change in Rural Communities Due to the Influence of Urbanization and Globalization in Indonesia. *Edunity: Social and Educational Studies*, *2*(3), 431–441.

Junjie, W., Yawei, Z., & Qiao Qiao, D. (2022). Path and boundary of the influence of social entrepreneurial opportunity identification on the growth of commercial startups. *Frontiers in Environmental Science*, *10*, 1027093.

Keh, A. W.-K., Hew, W. W.-L., Yeo, S. F., & Tan, C. L. (2023). The Linkages Between Urban Green Spaces and Residents' Wellbeing: A Conceptual Framework. *International Journal of Business and Technology Management*, *5*(1), 424–430.

Khan, M. A. I., Syed, A. J., & Azharuddin, S. (2023). Social Entrepreneurship: Driving Change and Creating Positive Societal Impact. *Social Entrepreneurship: Driving Change and Creating Positive Societal Impact*.

Kibas, I. E., Surya, B., Jufriadi, J., & Anggraini, N. (2023). Studi Pengembangan Permukiman Berbasis Green City di Kecamatan Betoambari, Kota Baubau. *Journal of Urban Planning Studies*, *3*(2), 205–216.

Klopfer, F., & Pfeiffer, A. (2023). Determining spatial disparities and similarities regarding heat exposure, green provision, and social structure of urban areas-A study on the city district level in the Ruhr area, Germany. *Heliyon*, *9*(6).

Krarup, T. (2022). The politics of the urban green: Class, morality and attachments to place. *The Sociological Review*, *70*(6), 1119–1140.

Latasa, I., & Laurenz, A. (2023). *The Residual Spaces of Developmental Urbanism as Opportunity for Green Cities and Improvement of Human Wellbeing. Land 2023, 12, 764*.

Leite, N. G., Mota, V. L., & de Oliveira Sanches, F. (n.d.). *The importance of green areas and public spaces for the urban climate and human well-being*.

Lovie, J. (2020). *Toward a Sustainable Future: An Exploratory Approach to the Dynamics of Europe's Urban Morphology and Sustainability*.

Moghaddam, K., Weber, T., & Maleki, A. (2023). Decision to Start a New Venture: A Cross-national Study of Social Benefit Systems and Fear of Failure. In *Decision-Making in International Entrepreneurship: Unveiling Cognitive Implications Towards Entrepreneurial Internationalisation* (pp. 49–63). Emerald Publishing Limited.

Mondal, S. (2023). The Nexus Between Green Entrepreneurship and Sustainable Development: An Econometric Study. *Global Business Review*, 09721509231157009.

Nasrabadi, M. T., Morassafar, S., Pourzakarya, M., & Dunning, R. (2023). Investigating the impacts of green spaces planning on social sustainability improvement in Tehran, Iran: a SWOT-AHP analysis. *Local Environment*, *28*(5), 681–697.

Nguyen, K. H., & Leichenko, R. (2022). Operationalizing Urban Climate Justice: A Case Study of Sunset Park, Brooklyn, New York City. *Journal of Extreme Events*, 2241004.

Nuryadin, A., Subagiyo, L., Sulaeman, N. F., Dinurrohmah, S., & Rahmawati, P. S. (2023). Investigation of students' pro-environmental behavior around Indonesia's new capital city. *Int J Eval & Res Educ ISSN*, *2252*(8822), 8822.

Oni, O., & Fiseha, G. G. (2022). 2 The Concept and Evolution of Social

Entrepreneurship: An International and South African Perspective. *The Future of Entrepreneurship in Africa: Challenges and Opportunities Post-Pandemic*, 61.

Pangaribuan, E., Yuniaristanto, Y., & Zakaria, R. (2023). Development of Green Housing Willingness to Pay Conceptual Model on Jabodetabek Community. *Jurnal Teknik Industri*, *25*(1).

Pelčák, S., & Korytárová, J. (2022). SOCIO-ECONOMIC IMPACTS OF GREENERY AREAS IN URBAN DEVELOPMENT. *International Multidisciplinary Scientific GeoConference: SGEM*, *22*(6.2), 615–622.

Perdigones, A., Mazarrón, F. R., & García, J. L. (2023). Green Areas to Introduce Sustainability and Social Responsibility: Training on Agenda 2030. In *Considerations on Education for Economic, Social, and Environmental Sustainability* (pp. 156–175). IGI Global.

Premadasa, M., Siyambalapitiya, J., Jayawardhana, K., & Fernando, I. (2023). Conceptualizing the Role of Social Entrepreneurial Orientation in the Triple Bottom Line in the Social Enterprise Context: Developing Country Perspective. *Sustainability*, *15*(11), 8759.

Razak, D. A. (2023). Epilogue: Sustainability,'Sejahtera'and the South East Asian Continuum. In *Eco-Urbanism and the South East Asian City: Climate, Urban-Architectural Form and Heritage* (pp. 395–405). Springer.

Riristuningsia, D., & Harsono, I. (2017). Public participation in rural developmentplanning. *Jurnal Ekonomi Dan Studi Pembangunan*, *9*(1), 57–65.

Rizani, A., Norrahman, R. A., Harsono, I., Yahya, A. S., & Syifa, D. M. (2023). Efek Inflasi terhadap Daya Beli Masyarakat pada Tinjauan Ekonomi Makro. *Journal Of International Multidisciplinary Research*, *1*(2), 344–358. https://journal.banjaresepacific.com/index.php/jimr

Rosa, D. La, & Li, J. (2023). High-Resolution Greening Scenarios for Urban Climate Regulation Based on Physical and Socio-Economical Factors. *Sustainability*, *15*(9), 1–21.

Sahnoune, S., Benhassine, N., Bourbia, F., & Hadbaoui, H. (2021). Quantifying the effect of green-roof and urban green infrastructure ratio on urban heat island mitigation-semi-arid climate. *Journal of Fundamental and Applied Sciences*, *13*(1), 199–224.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Treating unobserved heterogeneity in PLS-SEM: A multi-method approach. *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*, 197–217.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587–632). Springer.

Shan, T., & Tian, X. (2022). The effects of mindfulness upbringing perception on social entrepreneurship orientation: A moderated mediation model of prosocial motivation and perceived pressure from external stakeholders. *Frontiers in Psychology*, *13*, 968484.

Shukla, N., Das, A., & Mazumder, T. (2023). *Assessment of urban form resilience: A review of literature in the context of the Global South*.

Suhartini, N., & Jones, P. (2023). Urbanization and the Development of the Kampung in Indonesia. In *Beyond the Informal: Understanding Self-Organized Kampungs in Indonesia* (pp. 57–77). Springer.

Sunita, Kumar, D., Shahnawaz, & Shekhar, S. (2023). Evaluating urban green and

blue spaces with space-based multi-sensor datasets for sustainable development. *Computational Urban Science*, *3*(1), 12.

Susanto, J. W., & Sujana, C. M. (2023). Barrier of Green Building Implementation in Construction Projects in Indonesia. *IOP Conference Series: Earth and Environmental Science*, *1169*(1), 12018.

Sutono, S., Harsono, I., Nasruddin, N., & Judijanto, L. (2023). The Influence of Regulatory Policy, Technology Infrastructure, and Human Resource Quality on Economic Growth in Surabaya City. *West Science Journal Economic and Entrepreneurship*, *1*(11), 351–360. https://doi.org/10.58812/wsjee.v1i11.352

Suwarlan, S. A., Lai, L. Y., & Said, I. (2022). A REVIEW OF AGRICULTURAL AND COASTAL CITIES IN INDONESIA IN FINDING URBAN SPRAWL PRIORITY PARAMETERS. *Modul*, *22*(2), 91–99.

Taneja, S., Jaggi, P., Jewandah, S., & Ozen, E. (2022). Role of Social Inclusion in Sustainable Urban Developments: An Analyse by PRISMA Technique. *International Journal of Design & Nature and Ecodynamics*, *17*(6), 937–942.

Trabskaia, I., Gorgadze, A., Raudsaar, M., & Myyryläinen, H. (2023). A Bibliometric Analysis of Social Entrepreneurship and Entrepreneurial Ecosystems. *Administrative Sciences*, *13*(3), 75.

Vogler, R., Hennig, S., & Albrecht, F. (n.d.). Urban Green for Child-and Youth-Friendly Cities. *GI_Forum 2023, 11*, 118–139.

Wadsö, K., & Håkansson, C. (2023). Perceptions of and interactions with green neighbourhood environment–A qualitative study. *Scandinavian Journal of Occupational Therapy*, 1–9.

Willis, K., & Gupta, A. (2023). Place-Keeping in the Park: Testing a Living Lab Approach to Facilitate Nature Connectedness in Urban Greenspaces. *Sustainability*, *15*(13), 9930.

Wirayuda, I. K. A. K., Widayani, P., & Sekaranom, A. B. (2023). Urban Green Space Analysis and its Effect on the Surface Urban Heat Island Phenomenon in Denpasar City, Bali. *Forest and Society*, *7*(1), 150–168.

Zakiah, A. (n.d.). Green Building Implementation Challenge for Housing from Developer Perspective in Indonesia. *ARSITEKTURA*, *21*(1), 39–50.

Zalejska-Jonsson, A., Wilkinson, S., Wahlund, R., & Cunningham, R. (2023). Green spaces in housing development–buyers' preferences. *IOP Conference Series: Earth and Environmental Science*, *1176*(1), 12035.

Zhang, Z., & Lin, S. (2022). Analysis of the effectiveness and countermeasures of high-quality economic development in the pearl river delta city cluster. *American Journal of Industrial and Business Management*, *12*(5), 984–994.

Zhuang, X., Li, X., & Xu, Y. (2022). How Can Resource-Exhausted Cities Get Out of "The Valley of Death"? An Evaluation Index System and Obstacle Degree Analysis of Green Sustainable Development. *International Journal of Environmental Research and Public Health*, *19*(24), 16976.