

STRATEGIC URBAN DEVELOPMENT FRAMEWORK FOR SUSTAINABILITY ASSESSMENT TO COMBAT SOCIAL EXCLUSION IN SOUTHEAST ASIA

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Abstract

Urbanization in Southeast Asia presents both opportunities and challenges, particularly concerning social exclusion among marginalized populations in rapidly growing cities. Addressing these challenges requires a strategic framework that promotes sustainability while enhancing operational efficiency and cost management. This study proposes a Strategic Urban Development Sustainability Assessment Model (UD-SAM) to conceptualize solutions for mitigating social exclusion, emphasizing the role of accounting in evaluating economic, social, and environmental impacts. The research adopts a comprehensive approach, drawing on Full Cost Accounting (FCA) principles to internalize externalities and provide a holistic view of sustainability indicators. These indicators, including resource utilization, environmental costs, and social welfare considerations, are synthesized through an analysis of existing models and best practices, forming a theoretical foundation for the UD-SAM framework. The study utilizes a pentahelix perspective to suggest how collaboration between government bodies, private sectors, non-profits, academia, and communities can enhance decision-making processes. The proposed framework highlights how integrating FCA can reveal hidden social and environmental costs within urban development projects. Although conceptual, this model offers insights into more equitable resource allocation and sustainable economic growth by simulating potential impacts across the urban development lifecycle, from planning to operation. By fostering interdisciplinary collaboration, UD-SAM aligns with the conference's objective of bridging disciplines to create innovative solutions for global urban challenges. This research contributes to strategic management practices by underscoring the critical role of accounting in sustainable urban development, offering a scalable, theoretical model to address social exclusion and inspire future leaders committed to building inclusive, resilient cities.

Keywords: Full costing accounting, Social exclusion, Social welfare, Urbanization, Sustainability assessment model

INTRODUCTION

High levels of urbanization in Southeast Asia triggered economic growth that was not accompanied by adequate social infrastructure support, leading to socio-cultural segregation and many social gaps where certain social groups are excluded in urban communities due to lack of access to social services (Koyano, S., 1996; Padawangi, R., 2017; Pelly, U., 2023). Urbanization processes are often triggered not only by the search for jobs, but also by shifts in government policies and economic development. This results in social disparities, with the rich and poor living in separate areas, and access to basic services such as education and health being unequal (Goodman, D. S. G., 2013). With increasing urbanization rates, the region is faced with the challenge of creating cities that are not only economic engines, but also inclusive, equitable, and environmentally sustainable living spaces. Urban development planning must go beyond conventional approaches by adopting more visionary and integrated strategies to address the needs of society in this era of globalization.

In the context of the above discussion, the issue of social exclusion is a crucial issue that is often overlooked in the discourse of urban development. Keppi Sukesi *et al.* (2023) state that the

practice of social exclusion is the discrimination of individuals or groups in economic, political, and social activities that occur in society. Marginalized groups, such as low-income communities or those directly affected by development projects, often lose access to basic facilities, public spaces and economic opportunities. This situation not only creates social inequality, but also creates hidden costs for development, both in the form of social conflict and worsening environmental degradation. This is triggered by the inability of the poor to access development resources due to government policies that are not inclusive (Indra, 2007). Therefore, this research is here to answer these challenges by offering a Strategic Urban Development Sustainability Assessment Model (UD-SAM) framework that is specifically designed to integrate economic, social, and environmental sustainability in urban development. This is because sustainable urban development is not only information-based but in its application needs to use a holistic approach Fadhil, M. K., & Susanto, T. D. (2022). This research also seeks to bridge the gap between practical needs in the field and sustainability theory through the Full Cost Accounting (FCA) approach. With FCA, social and environmental externalities that have been overlooked can be internalized in the decision-making process. In addition, the use of a pentahelix perspective to accommodate the diverse interests of stakeholders government, private sector, community, academia, and LSM is able to create solutions that are collaborative and relevant to the local context.

Along with rapid growth caused by a new scale of urbanization, Southeast Asian cities face a variety of social, economic and environmental challenges. Transportation issues are often top of mind due to lack of public accessibility and insufficient spatial capabilities, which further leads to congestion. This has significant economic cost implications and substantial social burdens. The region's massive urbanization has created both great opportunities and complex challenges, especially in ensuring social inclusiveness and operational sustainability amidst rapid urban growth. Quoted from the opinions of Koyano, S. (2023), Harahap, F. R. (2013), and Hidayat, M. (2020) urbanization is able to drive economic growth by increasing population income accompanied by increasing social problems due to population density such as inadequate housing and worsening congestion. This urban development not only involves significant resource consumption, but also presents various social problems, such as marginalization of certain populations, unequal access to public facilities, and environmental degradation. These issues emphasize the need for a holistic approach in urban development planning that is able to integrate social, economic and environmental dimensions in a balanced manner. On the other hand, the sustainability paradigm in urban management continues to evolve, especially with the emergence of sustainability assessment frameworks such as the Urban Development Sustainability Assessment Model (UD-SAM) developed by Xing *et al.* (2009). This model has shown significant potential in internalizing economic, social and environmental externalities into an urban development accounting framework. However, existing models still tend to be generic and have not been fully adapted to the contextual needs of a region as diverse in culture, social dynamics, and economic conditions as Southeast Asia.

This research direction aims to develop a model that can be used as a strategic and scalable decision-making tool. By targeting the Southeast Asian region as a case study, the proposed framework is not only expected to make a significant contribution to the academic literature, but it will also have a direct impact on the implementation of integrated urban development policies in Asia, with an emphasis on social responsibility and inclusiveness, thus making a meaningful contribution to urban development (FES., 2017). The end result of this research is expected to support the realization of inclusive, sustainable, and operationally efficient cities, as well as serve as a reference for future leaders in creating better urban environments. In addition, this research also

aims to develop a Strategic Urban Development Sustainability Assessment Model (UD-SAM) framework that not only adopts sustainability principles, but also specifically addresses social inclusion challenges that are often overlooked in urban development. This approach is strengthened by the application of a pentahelix perspective involving the government, private sector, community, academia, and non-governmental organizations (NGOs) in an effort to create collaborative solutions that are locally relevant. According to Huda, S., Wardaya, W., & Anitasari, D. (2022), achieving sustainable development requires the active role of each individual, which is crucial in addressing social inequalities arising from urbanization. Furthermore, this research uses the principles of Full Cost Accounting (FCA) to provide a holistic view of the costs and benefits of the urban development life cycle, thus providing a transparent and data-driven decision support tool.

Through the development of this model, innovative solutions are expected to address the challenges of urbanization in Southeast Asia, particularly in improving operational efficiency, ensuring a more equitable allocation of resources, and reducing the social impacts of social exclusion. As such, this research offers not only theoretical contributions, but also potential practical applications in supporting the development of inclusive, sustainable and resilient cities.

LITERATURE REVIEW

The Strategic Urban Development Sustainability Assessment Model (UD-SAM) is a framework that utilizes information technology to collect data with analysis to enable continuous monitoring of indicators that can provide feedback for improvement (Gan et al., 2017). The Strategic Urban Development Sustainability Assessment Model (UD-SAM) framework is designed to integrate economic, social, and environmental sustainability in urban development to address social inequalities caused by urbanization practices. Mohamed et al. (2020) explained that the UD-SAM implementation process involves the government, community and private sector to ensure that all perspectives and needs can be accommodated into development planning.

This approach is called pentahelix or an approach that involves five key stakeholders such as government, academia, industry, community and media to achieve common goals (Soemaryani, S., 2016). Reported from the journal Justian Pilar. (2023) in the title Pentahelix Concept in Realizing Sustainable Development, emphasizes the role of five pentahelix stakeholders, among others; a) Government The government as a policy maker that regulates and controls sustainable control; b) Academia acts as an information provider through research that produces knowledge and innovation; c) Industry adopts environmentally friendly technology in sustainable production practices through collaboration with academics; d) The community as a party that has the power to influence public policy in raising awareness of sustainable public issues with active participation and; e) Media that acts as a party that conveys information about sustainable social practices accurately, relevant and accountable.

The use of the Full Cost Accounting (FCA) principle emphasizes entities to record and report all direct and indirect costs that have an impact on the social environment of society (Fibri, M., Aden, A., & Anisa., 2021). Based on quotes from Ikhsan, M. (2008) and Lako, A. (2018) in their explanation, Full Cost Accounting (FCA) sustainability accounting plays a role in integrating environmental cost elements which include recognition measurement and reporting of financial, social and environmental information into accounting practices. This principle assists entities in identifying and reporting costs associated with activities carried out so as to support transparency and accountability that help maximize costs in overcoming social inequality. In line with the research of Xing et al. (2009)

in the title “A Framework Model for Assessing Sustainability Impacts of Urban Development” assumes Full Cost Accounting (FCA) that the calculation of externality factors can facilitate the public in receiving information about the options considered to realize sustainable development.

RESEARCH METHOD

The research method used uses a holistic approach to qualitative methods. According to Sugiyono (2009), qualitative research is a method based on the philosophy of post positivism which is used to investigate natural object conditions without involving experiments. The holistic approach used in this research is a method that seeks to provide guidance on various issues that arise in social groups in a more detailed and contextual way. This method emphasizes the importance of understanding the social context when conducting analysis (Goodman, N., 1986). The data analysis technique used is to integrate the project life cycle, which consists of planning, design, construction, operation, and demolition phases. Data analysis in the planning phase plays an important role in formulating a more practical plan by taking into account various external and internal factors that can impact the project (Kerzner, 2017). The design analysis phase should include an assessment of the various alternatives to determine the best option based on predetermined criteria (Schwalbe, 2015). During the construction phase, data analysis is utilized to monitor the progress and quality of the work. Data obtained in real-time from the project site can be analyzed to ensure that the project is progressing as planned. Turner (2014) states that the use of analytical tools such as dashboards can assist project managers in detecting problems early and taking the necessary corrective measures. After the construction phase is complete, the operations phase begins with the management and maintenance of the system or product that has been built. According to PMI (2021), the collection of data relating to operations allows organizations to conduct data-driven analysis aimed at improving operational efficiency and effectiveness. The final phase is demolition, where data analysis is used to evaluate the environmental impact as well as the effectiveness of the demolition process. The data collected provides insights into best practices that can be applied to future projects. (Gray and Larson, 2020).

RESULTS AND DISCUSSION

The design analysis phase should include an assessment of the various alternatives to determine the best option based on predetermined criteria (Schwalbe, 2015). During the construction phase, data analysis is utilized to monitor the progress and quality of the work. Data obtained in real-time from the project site can be analyzed to ensure that the project is progressing as planned. Turner (2014) states that the use of analytical tools such as dashboards can assist project managers in detecting problems early and taking the necessary corrective measures. After the construction phase is complete, the operations phase begins with the management and maintenance of the system or product that has been built. According to PMI (2021), the collection of data relating to operations allows organizations to conduct data-driven analysis aimed at improving operational efficiency and effectiveness. The final phase is demolition, where data analysis is used to evaluate the environmental impact as well as the effectiveness of the demolition process. The data collected provides insights into best practices that can be applied to future projects. (Gray and Larson, 2020)

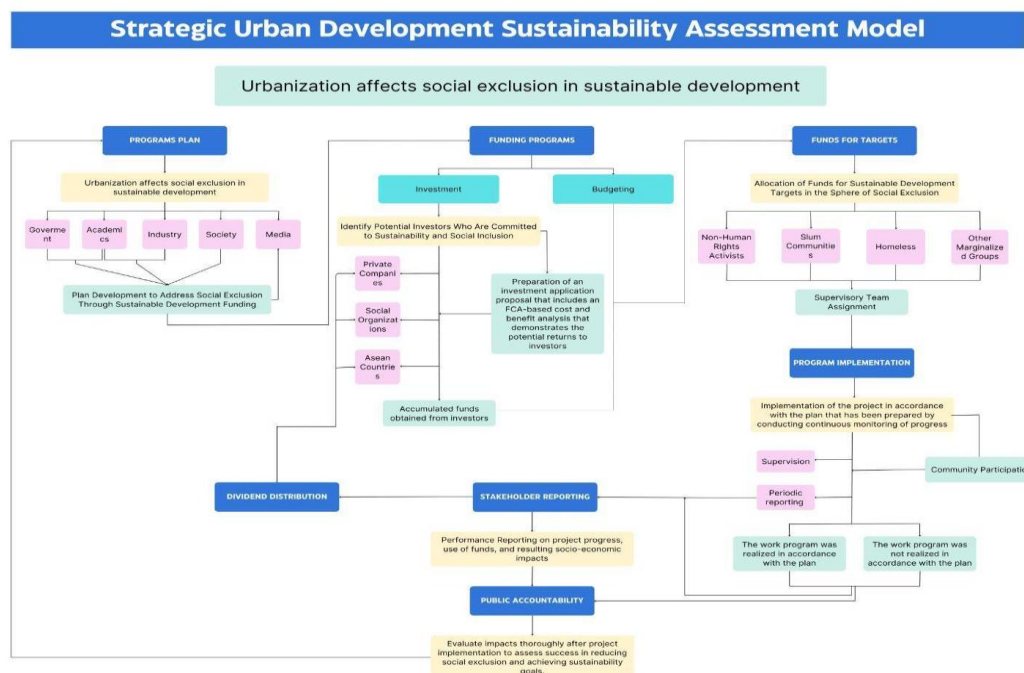


Figure 1. Strategic urban development sustainability assessment model cycle

In the planning process, a problem identification process is carried out, in this case social exclusion due to urbanization that occurs in countries in Southeast Asia. Through the pentahelix approach by including the roles of government, academia, industry, society and the media into a unity that becomes the main basis for the implementation of the program. The government is the main pillar in making and setting policies that regulate urbanization and social welfare. In practice, the government considers policies made through research by academics so that they can get an overview of the actual reality. Research results are in the form of journals, articles, books, news and all forms of information delivery on other research results. The results of the research are also a reference or basis for industry decision making for its participation in reducing social exclusion. Industry participation is not only in the form of investment but also as a promotional medium in voicing social welfare through product advertisements and conferences. On the other hand, the role of the community is very important in the implementation of the program to reduce social exclusion. In its implementation, the community acts as the main driver of the program by actively participating in reaching and empowering marginalized groups. In this case, the community in question is the non-marginalized community living around the marginalized community. These four participants are the main factors that will result in the development of the plans that have been prepared in addressing the previously identified problems. In an effort to be transparent regarding the plans that have been made, the role of the media as a means of conveying information to the general public.

The next stage is Funding Programs, which is the process of collecting funds for funding the activities to be carried out. Funding can be obtained from budgets and investments. The budget is a performance estimate that contains expenditures and revenues presented in monetary measures that must be achieved in a certain period by including previous data as a form of performance control (Halim, A., Syafri, M., & Rahman, A., 2016). In the context of this research, the budget is obtained from stakeholders who act as the main managers. Investment is obtained from the private sector, social organizations and ASEAN countries contributing to efforts to reduce social exclusion through

capital deposits. Simamora, H. (2010) defines investment as assets that are used as wealth growth through the distribution of investment returns. Through the process of submitting investment request proposals to parties targeted for investment. The investment proceeds will become additional funds for the budget in its allocation to the programs to be carried out.

Funds for Targets is a stage where the mapping of the planned program is carried out to distribute funds or allocate funds that will be used in the program implementation process. In an effort to reduce social exclusion, funds are the main support for the program to be carried out. The funds allocated are in accordance with the cost budget plan that has been made after going through an analysis process to optimize funding and prevent misuse of funds. The distribution of funds is the most sensitive part because it is directly related to the use of money, so supervision is needed. The selection of supervisors is one way to prevent misuse of funds as well as supervisors in the program implementation process.

After the work program has funds as capital in its implementation, the implementation of activities is carried out in accordance with the initial planning. The main program implemented is the empowerment of marginalized groups to reduce social exclusion as shown in the following figure.

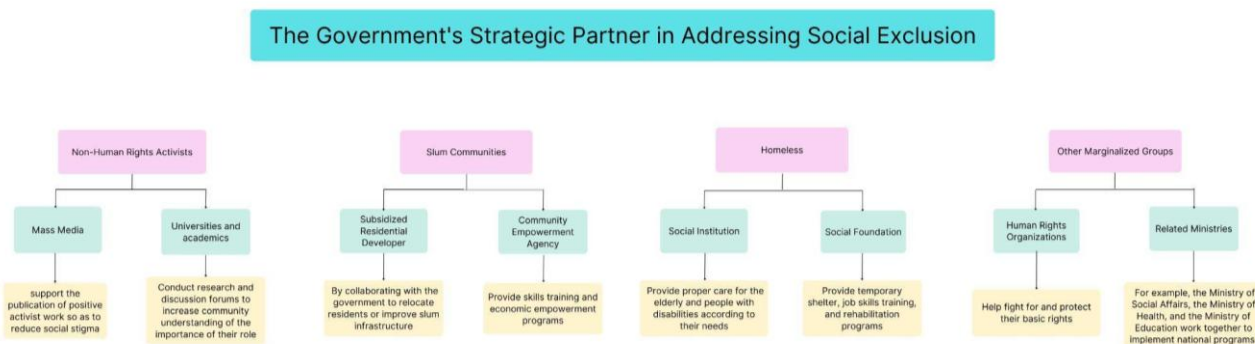


Figure 2. The Government's strategic partner in addressing social exclusion

In doing so, the government identifies parties that can work together to address various forms of social exclusion. Social exclusion refers to a condition when a person or group is denied access to the rights and resources available to people like them (Sen, A., 2000). To overcome this, the government needs to cooperate with various parties that have different roles and functions. The first group is Non-Human Rights Activists, which consists of two main components, namely the Mass Media, which plays a role in supporting the positive works of activists aimed at reducing the social stigma of society against them. Meanwhile, Universities or academics can help through research and discussion forums aimed at increasing public understanding of the importance of activists in creating social justice. The second group is Slums, which focuses on improving the quality of life in slum neighborhoods. In this case, Subsidized Housing Developers work together with the government to relocate slum residents or by improving the infrastructure in the area. In addition, the Community Empowerment Agency also provides skills training and economic empowerment programs that are useful for improving the standard of living of people in slum areas. The third group is homeless people who require the participation of social institutions and social foundations. Social institutions are responsible for providing care services according to the needs of the elderly and people with disabilities. On the other hand, social foundations provide facilities such as temporary housing, job training and rehabilitation programs that aim to help homeless people become independent again. The fourth group is Other Marginalized Groups which includes Human Rights

organizations and relevant ministries. Human Rights organizations can help protect and fight for the basic rights of marginalized groups. Meanwhile, relevant ministries such as the Ministry of Social Affairs, Ministry of Health, and Ministry of Education work together to implement appropriate national programs. With this collaboration, the government can address the issue of social exclusion by ensuring that all people have equal access to growth and development. In addition, the implementation process requires supervision and the contribution of non-marginalized communities as a means of support that has an important role in determining the success of the program. Because in reality society is a unified group from minority to majority so that people will better understand the true conditions in other communities.

The success or failure of the implemented program will be an accountability for stakeholders and the public. Periodic reports to stakeholders provide information in the stakeholder decision-making process and as material for evaluating implementation in the next period. Reports to stakeholders are not only limited to periodic reports but also in the form of performance reports that show transparency over the implementation of the program whether it is in accordance with the initial planning or not. This is very important because the fulfillment of stakeholder needs tends to be directly proportional to the results of the performance carried out. If the program is well implemented or in this study the program is able to contribute to reducing social exclusion, stakeholders will also benefit in the form of their goal needs when deciding to participate in contributing. However, if the implemented program does not contribute or even fails in its implementation, stakeholders will also lose in meeting their goal needs. Reporting to these stakeholders before the distribution of dividends is carried out. This dividend distribution is carried out for investors according to their portion (Kimmel, P. D., Weygandt, J. J., & Kieso, D. E., 2011). This means that the dividends distributed are in accordance with the percentage of investment provided by investors in this program. Reporting to stakeholders must also be done before public accountability is finally carried out, with reporting to stakeholders there are considerations of what can be reported to the general public. With public accountability, it is hoped that non-marginalized communities can contribute to efforts to reduce social exclusion. So that the potential for empowering marginalized communities will be easier and more efficient and become evaluation material for implementation in the following period.

The Urban Development Strategy Sustainability Assessment Model (UD-SAM) cycle can be an important component in efforts to empower marginalized groups in this case related to social exclusion. The community will have a better standard of living and the poverty rate can be further reduced, crime will be reduced and social exclusion will continue to decrease.

CONCLUSION

The Programs Plan is the first step where the problem of social exclusion is identified. In this context, a pentahelix approach is applied to ensure active participation of all stakeholders in program planning and implementation. The government plays a policy-setting role, while academia provides the necessary data and analysis to support decision-making. The industry sector contributes through investment and social welfare promotion, while the community serves as the program implementer on the ground. Next, the Funding Programs stage involves the collection of funds from budgets and investments. Budgets are prepared based on previous performance estimates and are directed to support planned programs. Investments from the private sector and social organizations are also recognized as a significant source of funding. At the Funds for Targets stage, funds are allocated efficiently in accordance with the established cost budget plan. Close supervision is necessary to

prevent potential misuse of funds during program implementation. The Programs Plan is the first step where the problem of social exclusion is identified. In this context, a pentahelix approach is applied to ensure active participation of all stakeholders in program planning and implementation. The government plays a policy-setting role, while academia provides the necessary data and analysis to support decision-making. The industry sector contributes through investment and social welfare promotion, while the community serves as the program implementer on the ground. Next, the Funding Programs stage involves the collection of funds from budgets and investments. Budgets are prepared based on previous performance estimates and are directed to support planned programs. Investments from the private sector and social organizations are also recognized as a significant source of funding. At the Funds for Targets stage, funds are allocated efficiently in accordance with the established cost budget plan. Close supervision is necessary to prevent potential misuse of funds during program implementation.

This research focuses on the development and testing of the Cycle Strategy Urban Development Sustainability Assessment Model (UD-SAM), which serves as a framework for the implementation of programs aimed at reducing social exclusion due to urbanization. The model covers various stages, from planning to public accountability, with an emphasis on collaboration between various stakeholders, including government, academia, industry, communities, and media. The use of the UD-SAM framework provides a clear structure for program implementation. The UD-SAM cycle has proven to be an effective tool in empowering marginalized communities and reducing social exclusion. With a pentahelix approach involving all relevant parties and the application of the Full Cost Accounting (FCA) system, this model can help create more inclusive and sustainable solutions in the context of urbanization in Southeast Asia. It is expected that the successful implementation of this program will improve people's living standards and reduce poverty, so that the negative impacts of urbanization can be significantly minimized.

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REFERENCES

- Enny, S. (2017). *Respons atas fenomena urbanisasi dalam perspektif kebijakan publik*. DPR RI
- Goodman, D. S. G. (2013). *Urbanization and Social Change in Indonesia*. Routledge
- Goodman, N. (1986). *The structure of appearances*. Indianapolis: Hackett Publishing Company
- FES. (2017). Kota Sosial: Aspirasi Transformasi Perkotaan di Asia. Retrieved from <https://library.fes.de/pdf-files/bueros/indonesien/15170.pdf>
- Fadhil, M. K., & Susanto, T. D. (2022). Success Factors for Smart City in Urban Design Models. *Indonesian Journal of Communication Studies*, 7(2), 199-214.
- Fibri, M., Aden, A., & Anisa. (2021). Modul akuntansi keberlanjutan. Universitas Mulawarman.

- Gan, L., Zhang, X., & Li, Y. (2017). Weighting and Aggregation Methods in Sustainability Assessment: A Review of the Literature. *Sustainability*, 9(2), 1-21.
- Gray, C. F., & Larson, E. W. (2020). *Project Management: The Managerial Process* (7th ed.). McGraw-Hill Education
- Halim, A., Syafri, M., & Rahman, A. (2016). Penganggaran dalam organisasi. Jakarta: Salemba Empat.
- Huda, S., Wardaya, W., & Anitasari, D. (2022). Implementasi strategi pentahelix dalam pengembangan kawasan wisata Senggigi di Lombok Barat. *Jurnal Ilmu Sosial dan Humaniora*, 2(1), 11-20.
- Ikhsan, M. (2008). Akuntansi Keberlanjutan: Integrasi Biaya Lingkungan dalam Praktik Akuntansi.
- Indra. (2007). Kemiskinan dan pengucilan sosial: Sebuah analisis struktural. Kompas Online.
- Justian Pilar. (2023). Konsep Penta-Helix dalam Mewujudkan Pembangunan Berkelanjutan. Kumparan
- Keppi Sukei et al. (2023). Pengertian dan Ciri-Ciri Eksklusi Sosial dalam Masyarakat. Kumparan. Diambil dari <https://kumparan.com/sejarah-dan-sosial/pengertian-dan-ciri-ciri-eksklusi-sosial-dalam-masyarakat-21dnrrLB0rh>.
- Kerzner, H. (2017). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (12th ed.). Wiley
- Kimmel, P. D., Weygandt, J. J., & Kieso, D. E. (2011). Financial Accounting. Hoboken, NJ: Wiley.
- Koyano, S. (1996). *Pengkajian tentang Urbanisasi di Asia Tenggara*. UGM Press.
- Lako, A. (2018). Akuntansi Keberlanjutan: Teori dan Praktik.
- Mohamed, A., Akinluyi, F., & Adedokun, A. (2020). Good Urban Governance as a Sustainable Development Approach: A Review of Literature and Practice in Nigeria. *Urban Studies Research*, 2020.
- Padawangi, R. (2017). Kota Sosial: Aspirasi Transformasi Perkotaan di Asia. Dalam makalah diskusi di Konferensi Social City
- Pelly, U. (2023). Urbanisasi: Definisi, Sejarah, dan Dampaknya. Kompaspedia
- PMI. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (7th ed.). Project Management Institute
- Schwalbe, K. (2015). *Information Technology Project Management* (7th ed.). Cengage Learning
- Sen, A. (2000). *Development as freedom*. Oxford University Press
- Simamora, H. (2010). Manajemen Keuangan. Yogyakarta: UPP AMP YKPN.
- Soetomo. (2012). *Urbanisasi dan dinamika sosial di Indonesia*. Yogyakarta: Pustaka Pelajar
- Sugiyono. (2009). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta
- Turner, J. R. (2014). *Gower Handbook of Project Management* (4th ed.). Gower Publishing Limited
- Xing, Y., Horner, R. M. W., El-Haram, M. A., & Bebbington, J. (2009). A framework model for assessing sustainability impacts of urban development. *Accounting Forum*, 33(3), 209-224.