



Policy Perspectives on the Role of Higher Education Institutions in Achieving Sustainable Cities and Communities Goals

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Abstract. Pursuing Sustainable Cities and Communities goals represents a crucial objective for urban development, necessitating the active involvement and support of diverse stakeholders, notably higher education institutions. These institutions possess the capacity to bridge academic knowledge with practical urban challenges through their education, research, and community service programs, positioning them as key players in fostering sustainable urban development. However, their potential impact on the cities and communities they are embedded has not been fully realized, largely due to structural challenges that hinder their effectiveness. This article critically examines the roles and challenges faced by higher education institutions in promoting sustainable city and community goals, and it proposes policy measures aimed at enhancing their capacity to contribute more effectively to these goals.

Keywords: Policy Adjustment, Higher Education Institutions, Sustainable Cities and Communities goals

1 Introduction

The Sustainable Cities and Communities Goals in the Sustainable Development Goals (SDGs) provide an important vision for urban development actors to manage rapid urbanization. Cities are centres of economic activity and innovation but face significant problems, such as social inequality. There are various views on achieving sustainable cities and communities based on how conceptualization and operationalization can be carried out [1]. However, the vision of a sustainable city and community is a balanced integration of environmental, economic, and social aspects. The United Nations announced at least ten targets for this 11th SDG goals. Two of them are related to access to decent housing and the participation of city residents in urban planning and management.

Regarding access to decent settlements, there are still many city residents living in slums and informal settlements. Common definitions classify a slum household is

defined as a group of individuals living under the same roof lacking one or more of the following conditions: Access to improved water, Access to improved sanitation, Sufficient-living area, Durability of housing, Security of tenure. As for informal settlements, they are determined by three main criteria: 1) Residents have no security of tenure to the land, with modalities ranging from squatting to informal rental housing, 2) Environments typically lack, or disconnect from, formal basic services and city infrastructure, and 3) Housing may not be compliant with current planning and building regulations, often located in geographically and environmentally hazardous areas, and may not have a city permit. Although in practice, the two terms are sometimes used interchangeably. In the world, about 1.1 billion people currently live in slums or slum-like conditions in urban areas, and it is expected that there will be another 2 billion in the next 30 years [2]. Eighty-five per cent of slum dwellers are concentrated in countries in three regions: about 359 million in Central and South Asia, 230 million in Sub-Saharan Africa, and 306 million in East and Southeast Asia [3].

Regarding community participation in planning and management issues, the target to be achieved is to increase the awareness of urban residents, especially marginalized groups, in the planning and management of the city where they live. The planning and management of this city are related to the political and technical processes that concern the development and use of land, roads, water, sanitation, energy, and public spaces, including how the city's finances are allocated to various urban management sectors.

However, achieving sustainable cities and community goals faces several challenges for a country with a large population like Indonesia. Indonesian cities such as Jakarta, Surabaya, and Bandung experience severe overcrowding, leading to inadequate housing and a lack of affordable housing and forcing many people to live with poor living conditions. Most of the urban population in Indonesia lives in settlements called urban kampungs. These settlements are often referred to as a type of informal settlement. Migrants target urban kampungs because of their flexibility in accepting those who often lack means.

As a settlement built independently by individual residents, urban kampungs have various features in terms of basic infrastructure and the socio-economic of its dwellers. Some urban kampungs are decent, with good basic infrastructure. However, others face significant problems related to basic infrastructure. Some of them are overpopulated, have inadequate access to clean water, and have poor sanitation. Its roads are often narrow and poorly maintained, hindering accessibility and emergency services. Inadequate drainage systems cause frequent floods, especially in the rainy season. Their waste management system is often inadequate, thus contributing to environmental and health problems. In fact, sanitation is a human right, which shows that a person has dignity and deserves to be respected as a human being [4].

From a political perspective, urban kampung dwellers often face weak participation in urban development due to socio-economic marginalization, limited access to information, and inadequate platforms to get involved. Many are typically low-income individuals working in the informal sector, with little time or resources for public participation. This condition hinders their involvement in the planning process. In addition, they often lack access to important information about their rights and

opportunities to participate and face political and social exclusion from decision-making processes dominated by more powerful stakeholders.

While the goal of sustainable cities and communities has complex challenges, it does not mean it cannot be achieved. Realizing this goal requires various actors' support and roles [5], [6]. Starting from international institutions, the central government, local governments, communities and educational institutions. Higher education institutions, in particular, play a transformative role in driving sustainable urban and societal development [7], [8]. The potential role of higher education institutions has been discussed and documented in many academic and policy documents [9]. Higher education institutions carry out three main missions: teaching programs, research and community involvement.

Ideally, Higher education institutions will directly impact the communities around which they are located. As a centre of education and research, they are expected to create solutions to practical problems in mainstreaming sustainable urban development and the surrounding communities. Many universities in Indonesia have adopted the SDGs agenda and are trying to implement this expected role. Unfortunately, their role and impact are still far from expectations for various reasons, most of which are systemic and require policy changes. This article analyzes the role and challenges of higher education institutions in mainstreaming the goals of sustainable cities and communities, as well as the policies that can be taken to make the expected role more effective.

2 Method

This article is prepared using a systematic literature review method with meta-analysis. Meta-analysis is a technique used in research to synthesize findings from various studies regarding a specific topic or question by providing a summary of the evidence. This is a valuable approach that helps combine different findings to draw stronger conclusions. The meta-analysis is based on the principles of systematic review, which involves the search for comprehensive, unbiased, relevant studies, followed by the application of rigorous inclusion and analysis criteria [10]. The data collection process begins with a literature exploration of publicly open scientific databases on the internet. Researchers use specific search terms using several keywords, such as university functions, SDGs, sustainable cities and communities, while taking into account the research year limit. Inclusion and exclusion criteria are predetermined to filter research based on factors such as research design, sample characteristics, and outcomes [11]. This step is important to minimize selection bias and increase the validity of the findings. Researchers assess the quality of each study using predetermined criteria to ensure that only studies that are methodologically reasonable are included in the analysis. The final results of the meta-analysis provide a comprehensive overview of the evidence base, offering valuable insights for theoretical development and practical applications.

3 Results and Discussion

The potential role of higher education institutions has been widely discussed and documented. In Indonesia, many universities have adopted the topic of sustainable development goals (SDGs) in discussions, seminars, and policy. Unfortunately, their significant impact, especially on the city and community in which they are located, is still in question. They discuss many complex global issues related to SDGs but ignore the real daily problems faced by the communities where they are located. There is a disconnect between the university and the surrounding community, which leads to a lack of awareness or understanding of local issues.

In fact, focusing on solving city and local community problems allows universities to have a faster and more tangible impact on their stakeholders. When universities concentrate on the specific needs of their local environment, they can design solutions that directly address the unique challenges facing the city and the local communities. This localized focus allows for the implementation of context-specific and more effective strategies, as they take into account the socio-economic, cultural, and environmental factors specific to the region. Research has shown that location-based approaches in urban planning and development provide more sustainable and successful outcomes because they are rooted in the reality of the local context [12]. By addressing urgent needs in the surrounding environment, universities can build stronger and more resilient communities, which in turn contribute to the overall well-being of the region.

In addition, a focus on local issues will increase the university's potential to foster meaningful partnerships with local governments, NGOs, and community organizations. This collaboration is critical to the successful implementation of SDGs issues, as it combines the higher education institutions' resources and expertise with practical knowledge and a network of local stakeholders. Research shows that local involvement by universities increases the relevance and application of academic research and strengthens public trust and support for the institution [13]. Conversely, efforts to solve SDGs problems on a national or global scale often result in more general approaches that may not be applicable to specific local contexts, reducing their potential impact. By prioritizing local issues, universities can create scholarship models that directly benefit the local community and contribute valuable insights to broader urban challenges.

Therefore, to increase the role of higher education institutions in mainstreaming sustainable urban and community development, universities must adjust the policy direction in teaching, research, and community service programs to maximize their impact on the city and local communities in which they are located. This shift is important because, traditionally, university policies have often prioritized global rankings, publication output, and theoretical research over practical, community-centred outcomes.

3.1 Teaching Programs for Sustainable Cities and Communities

There are strong arguments that aligning university teaching programs with local needs can play an important role in fostering social, economic, and environmental

development in their communities. This perspective emphasizes the importance of place-based education and experiential learning, which can empower students to engage directly with local challenges and contribute to city development [14] and local communities. However, critics also warn that an overemphasis on local issues could limit the university's academic and global goals, potentially narrowing the scope of education and research.

A shifting teaching policy direction can potentially increase student engagement through community-based learning experiences. By integrating issues with local contexts into the curriculum, universities can provide opportunities for students to apply theoretical knowledge to real-world problems. This deepens their understanding and fosters a sense of civic responsibility [15]. For example, students in environmental science programs may work on projects that address waste management issues in urban kampungs. Students in civic education or political science programs may work on projects that address public participation issues in urban kampung dwellers. This direct approach not only benefits students but also provides direct and practical solutions to local community problems, creating a symbiotic relationship between the higher education institutions and the local communities. In addition, the integration of local cultural and social issues into the teaching program at the university can contribute to the preservation and promotion of local heritage. By incorporating local history, culture, and social dynamics into the curriculum, universities can foster a deeper understanding and appreciation of society among students. This not only strengthens community bonds but also ensures that future leaders are more sensitive to unique challenges and opportunities in their local context [16].

By addressing local social issues, such as inequality, housing disparities, or health disparities, in their teaching programs, universities can empower their students to be advocates for change in their communities [17]. This approach is in line with the concept of "engaged university", which views higher education institutions as active participants in social and economic development in the surrounding region. However, critics argue that this could put undue pressure on universities to solve complex social problems that may require broader policy interventions beyond the scope of educational programs.

Currently, the need for policy adjustments in the direction of teaching programs by Indonesian universities has received a solid basis due to the emergence of the new government program called Kampus Merdeka. The Kampus Merdeka program gives students the right to take courses outside the study program for one semester and do activities outside the university for two semesters. Universities are free to provide Independent Campus activities that suit the needs and interests of their students. Types of activities available in the Kampus Merdeka program, namely Certified Internships, Independent Studies, Teaching Campuses, Indonesian International Student Mobility Awards (IISMA), Independent Student Exchange, Village Building, Humanitarian Projects, Research or Research, and Entrepreneurship.

Thus, the universities must build a new cooperation framework with the local stakeholders to synergize their programs. Universities that successfully integrate local concerns into their teaching programs can be a model of how higher education can be

globally relevant and have a local impact. This dual focus can enhance the university's reputation as a leader in innovative and community-engaged education, attracting students and faculty who are committed to making a difference both locally and globally.

3.2 Research programs for Sustainable Cities and Communities

There are strong arguments that aligning the university's research agenda with local needs can result in practical solutions to driving local economic, social, and environmental development. This perspective underscores the idea that universities, as the main intellectual resources within their communities, have a responsibility to contribute directly to the well-being and growth of their local environment [18]. By prioritizing research that addresses local challenges, universities can produce results that are relevant and beneficial to the surrounding community.

One of the strongest arguments for changing the direction of research policy is the potential of universities to encourage local innovation and economic growth. When research is oriented toward local industry, universities can serve as a catalyst for technological advancement and business development. For example, universities that collaborate with local businesses on applied research projects can help develop new products, processes, or services that increase the competitiveness of local industries [19]. This collaboration not only stimulates the local economy but also creates opportunities for students and researchers to engage in practical and impactful work that delivers tangible results for society.

In addition to the economic benefits, reorienting research on local issues can help address social challenges in society. The university has extensive resources and expertise that can be leveraged to address local issues such as health, education, and environmental issues. For example, research on waste management can answer local sustainability challenges and can result in more effective urban waste management planning strategies. Similarly, research on community participation that focuses on the need for urban planning information can lead to increasing their participation in urban development.

By involving local stakeholders in the research process, universities can build stronger relationships with the community, increasing trust and collaboration. Participatory research methods, in which community members actively contribute to the research process, can empower local populations and ensure that the research is more aligned with their needs and perspectives [20]. This approach not only increases the relevance and impact of research but also strengthens the social fabric of society.

Despite these benefits, critics warn that an overly localized focus could limit the wider application of research findings and potentially reduce the global impact of universities' research portfolios. Some also argue that the resources and time required for a participatory approach can be a burden for academic researchers and may limit the scope of their work. Critics argue that focusing research too narrowly on local issues could weaken the university's competitiveness globally. In an increasingly globalized world, universities are often judged on their contribution to knowledge on a global scale, as reflected in international rankings and citations. Critics worry that the shift

towards local research will reduce efforts to conduct cutting-edge and globally relevant research that attracts international attention and funding [21]. These tensions highlight the challenge of balancing local relevance with global excellence in research.

3.3. Community Service Programs on Sustainable Cities and Communities

Every year, the university creates many programs for community service. As is the case with teaching and research programs, community service program policies also need to be adjusted to address the real problems of the city and local community. By aligning community service programs with local needs, universities can play a critical role in addressing socio-economic challenges, fostering social cohesion, and fostering sustainable development within their communities. This perspective emphasizes the idea that universities, as anchor institutions, have a unique capacity and responsibility to support the growth and well-being of their local environment [22]. One of the main arguments for changing the direction of community engagement programs is the potential to directly address pressing local issues through the university's resources and expertise. When universities prioritize local involvement, they can effectively channel their academic, financial, and human resources to solve community-specific problems, such as poverty, health disparities, waste management, and increasing citizens' participation in development. Research shows that universities that engage deeply with local communities can act as catalysts for positive social change, driving economic development and improving the quality of life of local residents [23].

Universities have the potential to address systemic disparities by working closely with local marginalized communities to develop and implement programs that empower communities and encourage social inclusion. This can include initiatives focused on education, health, housing, and economic development, all of which are tailored to the specific needs of the local population [13]. This community engagement can help universities fulfil their mission of serving the public interest, particularly in meeting the needs of underserved communities.

However, critics argue that too narrow a focus on local issues could limit the university's ability to engage in a broader social justice movement that requires a global perspective. Beyond the critics, engagement with local communities can enhance the university's reputation as a socially responsible institution, which can attract students, faculty, and funding. In addition, a strong local presence can lead to partnerships with local governments, businesses, and NGOs, thus bringing universities closer to the community [24]. These partnerships can create opportunities for students to gain real-world experience and for faculty to conduct applied research that has immediate relevance.

4 Conclusion

The role of universities in Indonesia in encouraging the achievement of sustainable city and community goals that have a direct impact on the local stakeholders can be carried out through three main missions: teaching, research, and community service programs.

In reality, the role cannot be performed optimally due to structural constraints. Policies adjustments are needed from both the government and higher education institutions themselves to break those constraints. In terms of teaching programs, policy changes from traditional models to independent learning models by integrating local challenges into their curricula can make a meaningful contribution to the development of the city and local communities while preparing their students to face global challenges in an intelligent and contextually sensitive way. In terms of research, there are clear benefits to focusing research on local challenges, such as driving urban economic development, addressing social issues, and fostering community engagement. At the same time, universities should also consider how to maintain their position in the global world and contribute to broader scientific and academic discourse. In community service programs, review policies to develop strategies that allow them to make a local impact and connect globally, thus fulfilling their dual role as anchors of global communities and institutions.

This article offers some policy recommendations for higher education institutions to improve their teaching programs so they can embrace innovative teaching approaches that promote contextual problem-solving, active learning, and critical thinking. For example, integrating project-based learning and real-world case studies into the curriculum can improve the practicality and impact of SDGs issues. Regarding research programs, key measures include promoting cross-disciplinary collaboration to address complex urban and SDGs issues holistically, enhancing partnerships between academia and local community, the city governments, and industries to ensure research results in practical solutions, and securing specialized funding and support for research initiatives focused on the SDGs. In community service programs, universities need to establish ongoing partnerships with local stakeholders to increase the relevance and impact of their SDGs initiatives. Governments and higher education institutions should establish clear policies and allocate dedicated resources for community services, provide incentives for faculty and student involvement in community-based research, and create platforms for ongoing dialogue with community members.

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