Strengthening the Strategic Role of University Research and Community Engagement Bodies in Advancing Regional Collaboration

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ABSTRACT: Universities are increasingly expected not only to excel in teaching and research but also to actively contribute to sustainable development and regional collaboration. This study investigates how research and community engagement bodies in higher education institutions can be strategically strengthened to integrate the University Social Responsibility (USR) agenda with the Sustainable Development Goals (SDGs) through regional collaboration. Employing a qualitative case study design, the research was conducted at Universitas Brawijaya, Indonesia, using semi-structured interviews, focus group discussions, and documentary analysis. Data were analyzed thematically and triangulated to ensure reliability and validity. The findings are clustered into three thematic areas: (1) institutional roles, where the Research and Community Engagement Board (BPPM) serves as a bridge between academia and regional priorities; (2) challenges and opportunities, which include resource constraints, teaching overload, and the need for stronger multi-stakeholder collaboration; and (3) strategic mechanisms, encompassing innovation forums, sustainability reporting, and integration with global rankings. Quantitative highlights such as research project outputs, community engagement programs, and budget allocations support these findings. The study contributes to the literature by providing an in-depth understanding of the institutional dynamics that enable universities to operationalize USR and SDGs within regional development frameworks. It also offers practical insights for policymakers and higher education leaders seeking to enhance institutional capacity and governance in pursuit of sustainable and inclusive growth.

KEYWORDS: Community engagement, Higher education governance, Institutional innovation, Regional collaboration, Sustainable Development Goals (SDGs), University Social Responsibility (USR), Indonesia.

INTRODUCTION

In the evolving landscape of higher education, universities are no longer evaluated solely on their achievements in teaching and scholarly publications, but also on their capacity to address societal needs through research and community engagement. This shift reflects a broader expectation that higher education institutions contribute to sustainable development while strengthening their relationships with external stakeholders, including communities, governments, and industry (El-Jardali et al., 2018; Meseguer-Sánchez et al., 2020; Poza et al., 2021).

The concept of *University Social Responsibility* (USR) has emerged as a key framework that underscores this expanded role. USR emphasizes the active involvement of universities in promoting social and environmental well-being (Binsawad, 2020; Carretón-Ballester et al., 2023; Latif et al., 2021). Evidence suggests that the implementation of USR not only enhances students' perceptions of service quality and institutional trust but also fosters satisfaction and loyalty, making it an effective strategy for institutional branding and competitiveness Moreover, students' positive perceptions of USR can strengthen their identification with the institution, thereby increasing its attractiveness among prospective students (Yakut et al., 2025). Beyond USR, universities are increasingly recognized as key actors in advancing the United Nations *Sustainable Development Goals* (SDGs). Through teaching, research, and outreach programs, they are expected to provide solutions and measure their societal impacts (El-Jardali et al., 2018; López, 2023; Sánchez-Camacho & Moreno, 2024).

As leaders in cross-sectoral SDG implementation, higher education institutions play a central role in driving the 2030 Agenda, while partnerships with industry further accelerate technology transfer and innovation diffusion (Xiao et al., 2023). This highlights the broad benefits of fostering meaningful engagement with diverse stakeholders.

Nevertheless, concerns remain regarding the overemphasis on demonstrable research impacts and the adoption of neoliberal management practices, which risk undermining the balance between academic values and social contributions (Aguinis et al., 2021;

Doyle, 2018). To address these challenges, universities must strengthen their institutional mechanisms to ensure that social engagement initiatives achieve their intended outcomes while preserving academic integrity and long-term sustainability.

Taken together, the literature affirms that higher education institutions are extending their missions beyond teaching and research by adopting the USR framework and aligning with the SDGs. Yet, limited attention has been given to the strategic role of internal bodies such as research and community engagement boards in institutionalizing these agendas and fostering regionally based collaboration. This study therefore focuses on strengthening the strategic role of such bodies in building synergies between academic development and regional sustainability priorities.

LITERATURE REVIEW

The concept of *University Social Responsibility* (USR) has developed in response to growing demands that higher education institutions serve not only as centers of teaching and research but also as agents of tangible societal contribution. USR emphasizes the moral and social responsibility of universities to deliver direct benefits through education programs, applied research, and community engagement. By adopting USR, universities are expected to strengthen public trust, enhance institutional reputation, and build long-term relationships with stakeholders.

A growing body of research highlights the significant influence of institutional image and reputation on student satisfaction and loyalty (Bakrie et al., 2019; Stanyer et al., 2024). rong credibility has also been shown to increase public trust in universities(Hassani & Wilkins, 2022; Nguyen et al., 2022), while simultaneously improving competitiveness and performance at both national and global levels (Bakrie et al., 2019; Chen et al., 2020). In this sense, reputation is not only a reflection of student perceptions but also a strategic asset that determines the positioning of universities within the higher education ecosystem.

Furthermore, studies suggest that institutional reputation can be shaped by multiple factors, including service quality (Bakrie et al., 2019; Chen et al., 2020), social responsibility (Mateus & Juárez, 2022), and innovation (X. Xia, 2024). Internal factors such as leadership and governance are also critical in influencing how universities are perceived (Çetin et al., 2022).

Accordingly, USR can serve as an effective strategy for enhancing institutional reputation and public trust, while also fostering long-term stakeholder engagement. Through education, applied research, and community service, universities can provide tangible contributions that reinforce a positive public image. Nevertheless, although the relationship between USR and institutional reputation has been widely explored, the literature remains limited in addressing how USR is institutionalized through strategic governance structures, particularly research and community engagement bodies.

Higher education institutions play a strategic role in advancing global sustainable development objectives. Their contribution is realized through teaching, research, and community engagement activities that address social, economic, and environmental challenges while aligning with international frameworks such as the UN 2030 Agenda (Findler et al., 2018; Menon & Suresh, 2022; Purcell et al., 2019).

As agents of change, universities are uniquely positioned to bridge academic knowledge with societal needs (Abdullah et al., 2023; Ã•vila et al., 2017). This function reinforces the role of higher education within the broader sustainability ecosystem. Global initiatives, including the UN 2030 Agenda and UNESCO's *Education for Sustainable Development*, emphasize the centrality of universities in facilitating transformations toward more inclusive and sustainable societies (Dziedik & Fadeeva, 2024; Gaire, 2024). o fulfill this role, universities must adopt a holistic approach by integrating sustainability principles across curricula, research agendas, campus operations, and stakeholder engagement (Caeiro et al., 2020; Chaleta et al., 2021; Hakkarainen et al., 2024). These efforts encompass the development of sustainability competencies among academic communities, the promotion of innovative learning methods, and the strengthening of partnerships between universities, governments, and local communities (Enciso et al., 2023; Rahayu & Kipuw, 2024). In this way, universities can establish institutional mechanisms that enable genuine transformation in support of sustainable development..

Nevertheless, the implementation of sustainability initiatives continues to face significant challenges, including insufficient support from senior leadership, cultural resistance, and resource limitations (Ã•vila et al., 2017; Chinedu et al., 2023; Violanda et al., 2023). Addressing these barriers requires integrated and collaborative strategies that not only overcome constraints but also strengthen institutional capacity to embed sustainability in higher education systems (Bukusi, 2024; Cheng et al., 2022; Kızıloğlu & Karaboğa, 2024; Sen et al., 2021; Walsh et al., 2020; Y. Xia et al., 2023).

Effective institutional governance is a critical factor in ensuring the success of research and community engagement in universities. Higher education institutions require internal mechanisms that guarantee coordination, accountability, and program sustainability (Rossoni et al., 2023). Institutional innovations, such as the establishment of dedicated research and community engagement boards, are designed to strengthen coordination functions and expand the scope of strategic partnerships with external stakeholders (Ahmed et al., 2022; O'Dwyer et al., 2022). Strong governance also enables universities to align academic agendas with regional development priorities (İsmail et al., 2021).

Cross-sector collaboration between universities and industry has become increasingly important in fostering innovation and driving digital transformation (Evans & Miklošík, 2023). Nonetheless, building such partnerships is often constrained by limited information, inadequate financial support, and differences in culture and objectives between academia and industry (Kleiner-Schaefer & Schaefer, 2022; Rossoni et al., 2023). Addressing these challenges requires efforts to harmonize expectations and timelines, adopt flexible models of cooperation, and streamline operational processes (Hall, 2025).

In addition, the literature highlights the importance of cross-sectoral experience. Studies indicate that non-academic work experience among faculty members enhances external engagement and improves research performance (Gulbrandsen & Thune, 2017). In addition, the involvement of doctoral students in academic-industry synergy can also strengthen networks and train a new generation of *boundary spanners* who are able to bridge the gap between the academic and industrial sectors (Santos & Thune, 2021).

Overall, robust governance and institutional innovation are vital for fostering effective partnerships with industry and ensuring the sustainability of research and community engagement initiatives. Efforts to overcome collaboration challenges, while involving faculty and students with cross-sector experience, can help to reinforce the bridge between academia and industry. However, there remains a limited body of scholarship that examines how research and community engagement boards, as institutional entities, can systematically orchestrate these partnership processes.

Regional collaboration in higher education emphasizes the importance of synergy among universities, local governments, industries, and communities through the quadruple helix model (Yun & Liu, 2019). This approach not only enhances the relevance of research but also accelerates the transfer of knowledge and technology to society (Yun & Liu, 2019).

Universities, through their research and community engagement boards, act as key intermediaries that facilitate knowledge exchange, foster innovation, and build community capacity at the local level (Yun & Liu, 2019). Such partnerships generate tangible benefits, including improved innovation productivity (Li & Xing, 2020) and faster technology transfer (Yun & Liu, 2019).

Nevertheless, regional partnerships face significant challenges, such as limited trust among stakeholders (Sutton et al., 2023) and disparities in regional development levels (Scarazzati & Wang, 2019). Addressing these challenges requires effective leadership capable of managing multi-stakeholder networks and ensuring the long-term sustainability of regional collaboration (Scarazzati & Wang, 2019). Addressing these challenges requires effective leadership capable of managing multi-stakeholder networks and ensuring the long-term sustainability of regional collaboration (Xing & Feng, 2023).

Overall, regional collaboration in higher education holds substantial potential to enhance the relevance and societal impact of research while promoting sustainable regional development (Yun & Liu, 2019). However, existing scholarship remains limited in examining how research and community engagement boards, as institutional actors, can systematically orchestrate multi-stakeholder cooperation (Scarazzati & Wang, 2019; Sutton et al., 2023; Xing & Feng, 2023).

While a substantial body of research has examined the role of universities in advancing the United Nations Sustainable Development Goals (SDGs) and promoting regional collaboration (Aleixo et al., 2020; Hansen et al., 2021; Hogan & O'Flaherty, 2021; Kioupi & Voulvoulis, 2020), most studies remain at the conceptual level and focus on macro-level achievements (Fuchs et al., 2023). Far less attention has been paid to the micro-level institutional mechanisms particularly research and community engagement unitsthat operationalize the integration of University Social Responsibility (USR) and the SDGs into regional partnerships. This gap highlights the need for more context-specific and empirical investigations, which this study aims to address (Aleixo et al., 2020; Fuchs et al., 2023).

This research gap presents an opportunity for this study to offer a deeper understanding of strengthening the strategic role of research and community engagement institutions within the higher education context (Aleixo et al., 2020; Fuchs et al., 2023). Several studies have highlighted the need for universities to operationalize the SDGs across various domains, including curriculum, research, and community engagement (Fuchs et al., 2023; Hansen et al., 2021; Hogan & O'Flaherty, 2021; Kioupi & Voulvoulis, 2020). Yet,

the specific institutional processes that drive the integration of USR and SDGs with regional partnerships remain underexplored and insufficiently theorized (Aleixo et al., 2020; Fuchs et al., 2023).

The existing literature suggests that universities can leverage social marketing partnerships (Hübscher et al., 2021), sustainability reporting and assurance (Rezaee et al., 2023), and multi-stakeholder initiatives (Décamps et al., 2021; Eang et al., 2022) to foster the implementation of the SDGs. Additionally, studies have examined the challenges and innovations in SDG integration and reporting within higher education institutions (Hansen et al., 2021; Hogan & O'Flaherty, 2021; Kioupi & Voulvoulis, 2020). Nevertheless, a comprehensive analysis of the institutional dynamics and governance roles of research and community engagement bodies is still lacking (Aleixo et al., 2020; Fuchs et al., 2023).

In summary, the research gap this study aims to address is the limited understanding of how the internal institutional mechanisms, particularly the research and community engagement functions of universities, can play a strategic role in integrating the USR agenda and the SDGs with regional collaboration (Aleixo et al., 2020; Fuchs et al., 2023). This study seeks to make a distinct contribution by providing an in-depth exploration of this underexplored institutional dimension.

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RESEARCH OBJECTIVES

This study aims to analyze how internal institutional mechanisms within universities, particularly research and community engagement bodies, can be strategically strengthened to integrate the University Social Responsibility (USR) agenda and the Sustainable Development Goals (SDGs) with regional collaboration. Specifically, the research seeks to: (1) identify the current roles and institutional functions of research and community engagement units in promoting sustainable development, (2) examine the challenges and opportunities faced in aligning USR and SDG initiatives with regional collaboration, and (3) propose strategic directions to enhance institutional capacity for fostering multi-stakeholder partnerships. By focusing on these objectives, the study not only addresses an underexplored area in the existing literature but also provides practical insights for higher education institutions seeking to expand their societal contributions and regional impact. The findings are expected to contribute to both academic discourse and policy development, offering a framework that strengthens the alignment between higher education, social responsibility, and sustainable regional development.

METHODOLOGY

This study adopts a qualitative case study design to examine how internal institutional mechanisms in higher education particularly research and community engagement bodies can be strategically strengthened to integrate the University Social Responsibility (USR) agenda and the Sustainable Development Goals (SDGs) with regional collaboration. A qualitative approach is considered appropriate as it allows for a deeper understanding of institutional processes and stakeholder perspectives, rather than focusing solely on measurable outcomes.

The research was conducted at Universitas Brawijaya, one of the largest and leading public universities in Indonesia, with more than 60,000 students across undergraduate and postgraduate programs. The university is nationally recognized for its contributions in research, innovation, and community engagement, particularly through its Research and Community Engagement Board (Badan Penelitian dan Pengabdian kepada Masyarakat). Its role as a hub for knowledge production and regional development makes it a suitable site for investigating the strategic integration of USR and SDGs.

Data were collected from both primary and secondary sources to ensure a comprehensive analysis. Primary data consisted of semi-structured interviews with university leaders, the Research and Community Engagement Board (BPPM), faculty members, doctoral students, and external stakeholders, including government officials, industry representatives, and community leaders. Focus group discussions (FGDs) were also conducted to validate findings and capture shared perspectives. Secondary data included institutional documents (strategic plans, annual reports, sustainability reports), program evaluations, memoranda of understanding (MoUs), and national policy frameworks on higher education and sustainable development. International benchmarks such as UI GreenMetric and QS Sustainability Rankings were also reviewed to provide comparative insights.

Purposive sampling was employed to select participants who had direct involvement in or knowledge of USR, SDGs, and regional collaboration initiatives. The participants were grouped into four categories: (1) university leaders responsible for strategic planning

and decision-making, (2) the Research and Community Engagement Board (BPPM)**,** (3) faculty members and doctoral students engaged in research and outreach activities, and (4) external stakeholders from government, industry, and local communities. In total, 25–30 participants were included, ensuring balanced perspectives across these groups.

The data were analyzed using thematic analysis. Interview transcripts, FGDs, and documentary evidence were systematically coded, and categories were organized into three overarching themes: institutional roles and functions, challenges and opportunities, and strategic mechanisms for institutional strengthening. These themes form the analytical framework of the study and are further elaborated in the Findings section**.** Triangulation across multiple data sources was used to enhance reliability, and member checking was conducted by sharing preliminary findings with selected participants. Peer debriefing further ensured the credibility of the interpretations.

Ethical approval for this research was obtained from the Research Ethics Committee of Universitas Brawijaya. All participants were informed about the objectives of the study and their rights to confidentiality and voluntary participation. Written informed consent was secured prior to data collection. All data were anonymized during analysis to protect participant

A summary of the types of data, their sources, and purposes of use is presented in **Table 1**, illustrating how diverse forms of evidence were integrated to address the research objectives.

Table 1. Data Sources and Purposes

Data Type	Source	Purpose of Use
Primary Data	Semi-structured interviews with university leaders (rectors, vice rectors, deans)	To capture strategic perspectives on integrating USR and SDGs into institutional policies.
	Research and Community Engagement Board (BPPM)	To examine institutional mechanisms and operational practices.
	Faculty researchers and doctoral students	To explore experiences and challenges in linking academic projects with community development.
	External stakeholders: government officials, industry partners, community leaders	To understand external perspectives on regional collaboration and multi-stakeholder engagement.
	Focus Group Discussions (FGDs)	To validate findings and identify cross-cutting issues among stakeholders.
Secondary Data	Institutional documents (strategic plans, annual reports, sustainability reports)	To analyze institutional commitments, policies, and achievements.
	Program reports and memoranda of understanding (MoUs)	To evaluate practical implementation of research and outreach programs.
	Government regulations and national policy frameworks	To situate practices within national higher education and sustainability contexts.
	Global benchmarks (UI GreenMetric, QS Sustainability Rankings)	To assess institutional performance relative to international standards.
	Academic publications and statistical datasets	To support triangulation and provide theoretical and empirical grounding.

Through this methodology, the study captures both institutional perspectives and external insights, enabling a holistic understanding of how universities integrate USR and SDGs with regional collaboration. The next section discusses the findings, highlighting three key themes roles, challenges, and strategic mechanisms that emerged from the analysis and are outlined in Table 2.

Table 2. Summary of Findings

Thematic Cluster	Key Findings	Illustrative Evidence
Institutional Roles and Functions	• The Research and Community Engagement Board (BPPM) serves as a coordinating hub linking research, community outreach, and regional development priorities. • Universities act as knowledge brokers, facilitating transfer of expertise to government, industry, and society.	Interview insights from university leaders highlighting BPPM's strategic role; policy documents showing integration of SDGs and USR into institutional agenda.
Challenges and Opportunities	• Limited resources and bureaucratic hurdles constrain the implementation of collaborative initiatives. • Divergence in priorities between academic and external stakeholders creates alignment difficulties. • Despite these constraints, there are growing opportunities for partnerships with local government and industries.	Stakeholder interviews revealing funding and coordination challenges; MoUs showing expanding collaborations with regional government and industry partners.
Strategic Mechanisms	• Strengthening governance and institutional support systems (e.g., clear policies, dedicated units). • Expanding multi-stakeholder platforms for dialogue and joint problem-solving. • Embedding sustainability principles into research, teaching, and outreach activities.	FGDs and interviews highlighting the importance of policy alignment; institutional reports showing integration of sustainability frameworks.

FINDINGS/RESULTS

The findings of this study are organized into three thematic clusters: (1) institutional roles and functions, (2) challenges and opportunities, and (3) strategic mechanisms for institutional strengthening. This structure allows for a comprehensive understanding of how the Research and Community Engagement Board (BPPM) contributes to integrating University Social Responsibility (USR) and Sustainable Development Goals (SDGs) with regional collaboration.

The Research and Community Engagement Board (BPPM) serves as the institutional anchor for advancing both research productivity and community-based initiatives. In 2023, Universitas Brawijaya facilitated more than 2,500 research projects and 1,200 community engagement programs, with BPPM coordinating funding allocation, monitoring outputs, and liaising with external stakeholders. These activities illustrate the "third mission" of universities, which emphasizes societal contribution alongside teaching and research (Compagnucci & Spigarelli, 2020).

Qualitative evidence reinforces this institutional positioning. A senior administrator explained, *"BPPM is not only a coordinating body but also a bridge that connects our academic strengths with regional priorities."* Industry representatives further noted that the board functions as a gatekeeper, ensuring that research outputs are translated into usable technologies. This dual role aligns with Rossoni et al. (2023), who argue that intermediary bodies within universities reduce coordination failures in multi-stakeholder collaborations.

However, gaps remain. More than 60% of research projects are still discipline-based and fragmented, limiting the university's ability to tackle complex SDG-related challenges that require cross-sectoral approaches. While BPPM fulfills a central coordinating role, its potential as a systemic integrator of research, outreach, and policy dialogue has not yet been fully realized.

Resource constraints consistently emerged as a major challenge. In 2023, only 7.5% of the university's total expenditure was allocated to research and community engagement, a proportion that significantly limits program scalability and innovation capacity. This finding reflects broader financing pressures documented for Indonesia's SDG agenda, where innovative and blended financing mechanisms are needed to close persistent gaps ((UNDP), 2024), and is consistent with evidence from Southeast Asia that the sustainability of higher education funding remains a structural challenge (Secretariat, 2023). These fiscal constraints also intersect

with institutional barriers such as cultural resistance and managerial limitations that hinder comprehensive sustainability integration in Indonesian universities (Abo-Khalil, 2024; Harjatanaya, 2025; Wibowo, 2025).

Faculty workload further amplifies these constraints: lecturers carry an average teaching load of 14–16 credit hours per semester, leaving limited time for research and outreach. A faculty member reflected, *"It is difficult to balance teaching, research, and community service because teaching consumes most of our time."* Such conditions mirror previous studies arguing that excessive teaching commitments reduce the absorptive capacity of academics to engage in collaborative innovation (Rossoni et al., 2023). Government officials echoed this concern, one remarking, *"Without a clear reallocation of resources, the university will struggle to act as a true driver of regional development."*

Despite these challenges, opportunities are also evident. BPPM's outreach has fostered over 150 MoUs with regional governments and industries, creating pathways for joint innovation. Student participation is expanding, with more than 5,800 students involved annually in community projects. These opportunities underscore the potential for universities to scale their contributions to regional development if resource and workload challenges can be systematically addressed.

To overcome these challenges and leverage opportunities, several strategic mechanisms have been implemented. First, BPPM organizes an annual Regional Partnership Forum, which in 2023 brought together over 300 participants from government, industry, and civil society to align research agendas with regional priorities. Second, the university has strengthened its intellectual property system, resulting in 25 patents registered in the past two years. While modest compared to global benchmarks, this signals a shift toward applied research and innovation.

Qualitative insights highlight the impact of these mechanisms. A doctoral student reflected, *"Through collaborative projects facilitated by BPPM, we learned how to translate our research into community solutions."* This experience reflects the development of "boundary spanners" (Santos & Thune, 2021), individuals who bridge academic knowledge with real-world application. The university's inclusion in the UI GreenMetric top 200 further demonstrates institutional commitment to sustainability and provides international validation.

Nevertheless, the long-term effectiveness of these mechanisms depends on governance coherence and sustained resource support. As one government official stated, *"Mechanisms are valuable only if they are supported by transparent allocation and long-term commitment."* This highlights that while initiatives such as forums, patents, and sustainability benchmarking strengthen institutional credibility, they must be embedded in structural reforms. This resonates with Hansen et al. (2021), who emphasize aligning governance innovations with systemic change in higher education.

The three clusters of findings roles, challenges, and mechanisms are summarized in Table 2 below, which consolidates both quantitative and qualitative insights into a comparative format.

Table 2. Summary of Findings

Cluster	Key Findings	Illustrative Evidence	Quantitative Highlights
Institutional Roles	BPPM anchors research and outreach; bridges academics with regional priorities	"BPPM connects academic strengths with regional priorities" (Admin)	2,500 research projects; 1,200 community programs (2023)
Challenges & Opportunities	Limited resources and teaching overload, but strong external MoUs and student participation	"Teaching consumes most of our time" (Faculty); "Reallocation needed for impact" (Govt)	7.5% budget allocation; 14–16 teaching credits; 150 MoUs; 5,800 students involved
Strategic Mechanisms	Forums, patents, sustainability rankings strengthen institutional positioning	"Collaborative projects translate into solutions" (Student)	300 participants in forum; 25 patents; top 200 UI GreenMetric

As summarized in Table 2, the findings illustrate three interrelated clusters. First, BPPM plays a pivotal role in anchoring research and outreach activities, with more than 2,500 research projects and 1,200 community programs documented in 2023. Second, persistent challenges such as limited funding allocation (7.5% of total expenditure) and faculty workload of 14–16 credits per semester hinder institutional capacity, although opportunities arise from strong external partnerships (over 150 MoUs) and extensive

student involvement (5,800 participants annually). Finally, strategic mechanisms including the Regional Partnership Forum, patent registration, and sustainability benchmarking (UI GreenMetric top 200) highlight the university's efforts to institutionalize its role in regional collaboration. Together, these clusters reveal a cyclical process of roles, challenges, and mechanisms that shape the integration of USR and SDGs into regional development.

The relationship between institutional roles, challenges, and strategic mechanisms is best understood as a cyclical process rather than a linear sequence. Institutional roles provide the foundation for outreach and collaboration, yet resource and governance challenges constantly shape their effectiveness. In turn, strategic mechanisms such as collaborative forums, sustainability rankings, and innovation outputs mediate these tensions and feed back into strengthening roles and addressing challenges.

Figure 1 presents this conceptual model, highlighting the dynamic interaction across the three clusters. The circular arrows emphasize that institutional development is iterative, requiring continuous adaptation rather than one-off interventions. This framework not only synthesizes the findings summarized in Table 2 but also provides an analytical lens for discussing broader implications in the following section.
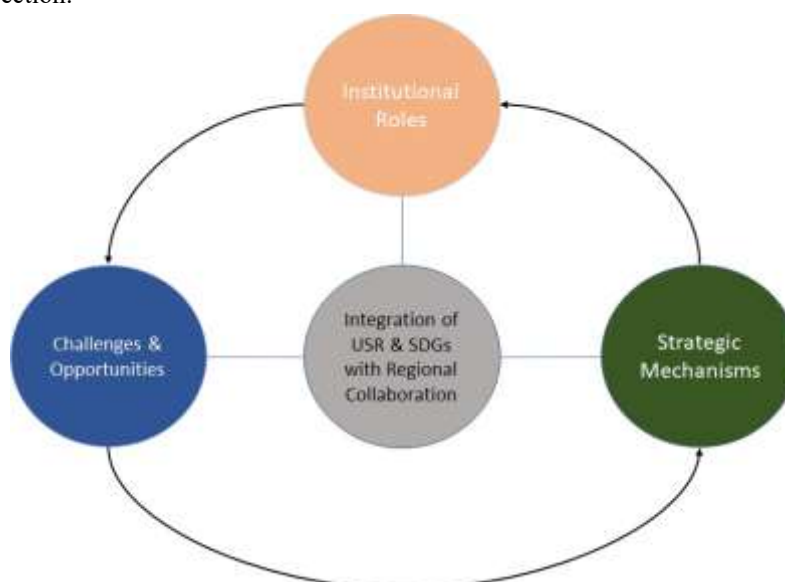

Figure 1. Conceptual Model of Institutional Roles, Challenges, and Strategic Mechanisms

The model conceptualizes the dynamic interplay between institutional roles, challenges, and strategic mechanisms as identified in this study. Source: Author's elaboration based on empirical findings.

Taken together, these findings demonstrate that BPPM plays a pivotal role in anchoring institutional contributions to regional development, but its effectiveness is constrained by limited resources and heavy workloads. At the same time, strategic mechanisms such as partnership forums, patent management, and sustainability benchmarking provide valuable pathways for institutional strengthening. These dynamics, summarized in Table 2 and conceptualized in Figure 1, provide a solid foundation for the following Discussion, where the findings are interpreted within broader debates on university social responsibility, sustainable development, and institutional governance.

DISCUSSION

The analysis reveals that the Research and Community Engagement Board (BPPM) serves as a pivotal unit that connects academic capacity with regional needs. This role resonates with prior studies that highlight the significance of institutional governance structures in facilitating collaboration between universities and their external stakeholders (Ahmed et al., 2022; Rossoni et al., 2023). Yet, the Universitas Brawijaya case advances this conversation further. Rather than being limited to administrative coordination, BPPM actively integrates research and outreach into the university's broader development agenda, thereby reinforcing its role as a strategic hub for embedding University Social Responsibility (USR) and the Sustainable Development Goals (SDGs) within regional planning frameworks.

The study also underscores the persistence of resource constraints. Only 7.5 percent of the university's total budget is devoted to research and community engagement, a figure that lags far behind international benchmarks such as the OECD's 20 percent recommendation for research-intensive institutions (OECD, 2022). This limited funding, coupled with teaching responsibilities averaging 14–16 credits per semester, restricts the extent to which faculty members can meaningfully participate in outreach. Similar patterns are observed in other settings, where financial shortfalls and administrative pressures undermine sustainability initiatives (Abo-Khalil, 2024). Nevertheless, there are also enabling conditions. The existence of more than 150 memoranda of understanding and the involvement of nearly 6,000 students annually in community activities demonstrate the university's growing role as a regional development partner. This dual picture constraints on the one hand and opportunities on the other echoes Harjatanaya's (2025) argument that participatory approaches can transform institutional weaknesses into drivers of collaboration.

Several mechanisms have been established to address these challenges while enhancing the university's contribution to society. The Regional Partnership Forum exemplifies how structured platforms can bring together diverse stakeholders to co-develop strategies for local development. This finding aligns with the quadruple helix model, which emphasizes the importance of collaboration among academia, government, industry, and communities (Yun & Liu, 2019). Moreover, the registration of 25 patents and the university's ranking in the top 200 of the UI GreenMetric provide evidence that these mechanisms not only serve regional needs but also strengthen global competitiveness. As Wibowo (2025) notes, internal alignment of values and practices is essential to sustain SDG-related efforts, and the Universitas Brawijaya experience illustrates how innovation and recognition at the institutional level can reinforce both legitimacy and impact.

From a theoretical perspective, the study contributes to debates on how USR and the SDGs can be operationalized within higher education. While much of the existing literature has emphasized macro-level frameworks and commitments (Aleixo et al., 2020; Fuchs et al., 2023), these findings highlight how institutional mechanisms at the micro-level such as BPPM function as mediators that translate abstract commitments into practice. On the practical side, the study suggests that universities should invest in strengthening their research and engagement boards, not only to coordinate activities internally but also to foster stronger partnerships externally. For policymakers, the findings underscore the need for funding structures that are aligned with sustainability mandates, while local governments could view universities as co-creators of knowledge and innovation for sustainable regional development.

Despite its contributions, the study has several limitations. It draws upon a single institutional case, which may limit the extent to which the findings can be generalized to other higher education contexts. Moreover, the reliance on qualitative evidence provides depth but does not fully capture the scale of institutional performance. Future research could benefit from comparative approaches across universities or regions, as well as from integrating quantitative indicators with qualitative insights. Longitudinal designs would also help to illuminate how institutional roles, challenges, and mechanisms evolve over time, particularly as sustainability agendas become more embedded in higher education systems.

CONCLUSION

This study has examined how internal institutional mechanisms in higher education, particularly the Research and Community Engagement Board (BPPM) of Universitas Brawijaya, can strategically integrate University Social Responsibility (USR) and the Sustainable Development Goals (SDGs) within regional collaboration frameworks. The findings indicate that BPPM functions not merely as an administrative body but as a strategic hub that connects academic capacities with societal needs, thereby positioning the university as a key actor in regional development.

The analysis also reveals a dual reality: while limited budget allocations and heavy teaching loads constrain faculty engagement, strong external partnerships and significant student participation provide momentum for collaborative initiatives. Strategic mechanisms such as partnership forums, innovation outputs, and global sustainability rankings illustrate how universities can adapt and innovate despite institutional constraints.

By highlighting these dynamics, the study advances both theoretical and practical debates. Theoretically, it contributes to the growing literature on operationalizing USR and SDGs by showing how institutional mechanisms translate abstract commitments into actionable practices. Practically, it underscores the importance of investing in research and engagement bodies, aligning funding structures with sustainability mandates, and strengthening cross-sectoral partnerships.

Although limited to a single case, the study provides insights with broader relevance for universities in similar contexts, particularly in emerging economies where higher education is increasingly expected to play a transformative role. Future research could expand this inquiry by adopting comparative and longitudinal approaches to capture how institutional capacities evolve in response to sustainability challenges.

In sum, the study affirms that the integration of USR and SDGs through robust institutional mechanisms not only enhances academic legitimacy but also reinforces the university's role as a catalyst for sustainable regional development.

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