



Sustainable Resource Governance in Higher Education: Evidence from a State University

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Abstract

Land is among the most valuable strategic assets of public universities, serving as the foundation for instruction, research, extension, production, environmental stewardship, and long-term institutional resilience. Despite its central role in university development, sustainable land governance has received relatively limited scholarly attention, particularly within higher education institutions in developing countries. As universities continue to expand, they increasingly face the challenge of balancing land protection with infrastructure development, resource generation, and competing stakeholder interests. Addressing this gap, the present study examines how a Philippine state university integrates land protection and land promotion within its governance system to achieve sustainable institutional development while safeguarding its land resources. A qualitative single-case study design was employed using document analysis. Institutional strategic plans, land-use plans, legal documents, university reports, demographic records, and relevant policy issuances were systematically analyzed through thematic analysis to identify recurring governance strategies, institutional challenges, and opportunities associated with sustainable land management. The findings reveal that rapid institutional expansion, reflected in increasing student enrollment, infrastructure growth, and rising resource demands, has significantly elevated the strategic importance of university land. At the same time, competing land claims and tenure-related disputes highlight the urgent need for proactive land protection measures. The study demonstrates that sustainable land governance is achieved through the integration of two complementary strategic dimensions: land protection, which safeguards institutional assets through legal, environmental, and governance mechanisms; and land promotion, which optimizes land utilization to strengthen instruction, research, extension, and responsible resource generation. Together, these dimensions form an integrated governance framework that advances institutional sustainability while preserving the university's public mandate. The study concludes that sustainable university land governance extends beyond conventional land conservation or income generation. Instead, it requires a balanced governance approach that simultaneously protects institutional land assets and strategically promotes their productive utilization to support broader higher education objectives. The proposed framework contributes to the emerging literature on university asset governance and offers practical guidance for Philippine State Universities and Colleges and other public higher education institutions facing similar land governance challenges.

Keywords: land governance, higher education, asset management, land protection, resource promotion, Central Mindanao University

Introduction

Higher education institutions (HEIs) operate in an increasingly complex environment characterized by financial uncertainty, expanding enrollment, rapid technological shifts, environmental challenges, and rising societal expectations. These conditions compel universities to radically reconsider how institutional resources are managed to sustain academic excellence while responding to emerging developmental priorities. Among these resources, land occupies a unique and irreplaceable position. It simultaneously functions as an educational space, a research platform, a production asset, an ecological reserve, and a strategic anchor for future institutional expansion. Consequently, proactive and effective land governance has become an essential pillar of long-term university sustainability. Globally, universities have shifted from viewing land merely as a static physical footprint toward recognizing it as a dynamic strategic resource capable of generating multiple forms of public value. Beyond accommodating classrooms, laboratories, and administrative facilities, university land increasingly supports innovation ecosystems, technology transfer hubs, agricultural experimentation, biodiversity conservation, renewable energy initiatives, and income-generating projects that reinforce institutional resilience. This broader perspective aligns with contemporary approaches to public asset management, where physical resources are expected to simultaneously drive economic efficiency, environmental stewardship, and social responsibility.

Public universities in developing countries experience these governance challenges acutely. Surging enrollment, expanding academic programs, escalating operational costs, and restrictive government appropriations have widened the gap between institutional needs and available financial resources. Universities are therefore pressed to identify sustainable mechanisms that bolster institutional capacity without compromising their core educational mandates. Strategic land governance has emerged as a viable response; properly managed university land can support academic advancement and responsible resource generation while preserving long-term institutional interests.

In the Philippines, the imperative of sustainable land governance has garnered significant policy attention. Republic

Act No. 11396, alongside its Implementing Rules and Regulations, mandates all State Universities and Colleges (SUCs) to develop Land Use Development and Infrastructure Plans (LUDePs) to ensure rational, sustainable, and mission-oriented land utilization. This legislation explicitly recognizes university land as a strategic national asset requiring meticulous planning, protection, and development. Rather than encouraging unrestricted commercialization, the policy champions balanced land management that holistically supports instruction, research, extension, production, environmental protection, and institutional growth. Despite these progressive policy frameworks, scholarly attention dedicated to university land governance remains disproportionately sparse. Existing studies largely examine campus planning, land administration, environmental management, or institutional infrastructure in isolation. Comparatively few investigations explore how public universities simultaneously *protect* their institutional landholdings while strategically *promoting* their productive utilization to advance academic, financial, environmental, and social objectives. The critical intersection between land protection and land promotion remains insufficiently theorized within higher education governance literature—particularly within developing-country contexts where legal, financial, and governance challenges heavily intersect.

This study addresses this empirical gap by examining the experience of Central Mindanao University (CMU), one of the Philippines' largest landholding SUCs. Established on approximately 3,401 hectares of government land, CMU has experienced sustained institutional growth in enrollment, academic programming, research productivity, extension services, and international engagement. This expansion has inherently intensified demands for new academic facilities, research infrastructure, student services, environmental conservation initiatives, and technological modernization. Simultaneously, portions of the university's landholdings have faced competing ownership claims, informal occupation, and complex governance challenges, requiring a delicate balance between institutional protection and sustainable development. Rather than treating land protection and land promotion as competing priorities, this study posits that they constitute complementary, foundational dimensions of sustainable land governance. *Land protection* safeguards legal ownership, ecological assets, institutional continuity, and intergenerational equity. Conversely, *land promotion* focuses on optimizing land utilization to elevate academic functions, research, innovation, extension, and carefully regulated resource generation. Sustainable governance emerges not from prioritizing one dimension over the other, but from seamlessly integrating both within a coherent institutional strategy that champions the university's public mission.

This study seeks to examine how a Philippine State University integrates land protection and resource promotion within its governance framework. Specifically, it aims to:

1. Identify the institutional factors influencing sustainable land governance.
2. Analyze the complementary roles of land protection and land promotion in advancing institutional sustainability.
3. Develop an integrated governance framework to inform policy and practice among Philippine SUCs and other public HEIs managing extensive land resources.

By extending existing discussions on university asset management beyond conventional land administration, this study introduces an integrated perspective that positions university land as a strategic governance asset capable of simultaneously generating academic, environmental, financial, and societal value.

1. Literature Review

1.1 Sustainable Land Governance in Higher Education

Land governance has evolved from a narrow administrative concern regarding ownership into a comprehensive framework encompassing the institutions, policies, and processes that determine how land is accessed, managed, protected, and utilized to achieve long-term economic, environmental, and social objectives. Contemporary scholarship emphasizes that effective land governance extends well beyond legal tenure to include stewardship, transparency, accountability, stakeholder participation, and sustainable resource utilization. Recent studies distinguish land *governance* from land administration and management, positioning governance as the overarching institutional framework that integrates policy direction, strategic decision-making, and stewardship across all land-related functions.

Within higher education, land represents considerably more than a physical campus boundary. Universities increasingly recognize their landholdings as strategic assets capable of advancing instruction, research, extension, innovation, environmental conservation, and community development. As universities globally pursue broader sustainability agendas, campus land has become an essential operational platform for integrating environmental stewardship, institutional resilience, and public service. Consequently, the governance of university land has become highly strategic; decisions regarding land use directly influence institutional competitiveness, environmental sustainability, financial resilience, and public trust.

1.2 Strategic Asset Management in Public Universities

Strategic asset management entails the systematic planning, protection, utilization, and continuous optimization of

institutional assets to achieve long-term organizational objectives. In the public sector, physical assets are increasingly viewed as resources capable of generating multiple forms of public value rather than merely supporting baseline operational activities. Universities are expected to maximize the educational, social, environmental, and economic contributions of their physical resources while maintaining strict accountability and transparency.

Unlike private entities that evaluate land primarily through the lens of financial return, public universities must balance multifaceted and frequently competing objectives. Institutional land-use decisions affect instructional quality, research capacity, student welfare, environmental protection, cultural preservation, and community engagement. Therefore, strategic land management requires carefully balancing operational efficiency with public accountability and the core institutional mission.

1.3 Land Protection as Institutional Stewardship

Land protection constitutes a foundational dimension of sustainable land governance. Traditionally associated with legal ownership and tenure security, contemporary scholarship expands this concept to include environmental conservation, biodiversity preservation, climate resilience, disaster preparedness, and institutional continuity. Responsible stewardship ensures that land remains capable of serving both present and future institutional needs.

Within the university context, land protection involves securing legal ownership titles, preventing unauthorized occupation or encroachment, safeguarding environmentally sensitive zones, preserving vital research sites, and ensuring that avenues for future academic expansion remain unhindered. These protective functions are paramount for universities possessing extensive agricultural lands, forests, watersheds, or ecologically significant ecosystems.

1.4 Land Promotion Through Strategic Resource Utilization

While protection secures institutional assets, land promotion focuses on optimizing their productive utilization to support the university's public mandate. Land promotion does not equate to unrestricted commercialization; rather, it encompasses strategic utilization that enhances academic excellence, research productivity, extension services, innovation ecosystems, student learning environments, and financial sustainability.

Examples of strategic land promotion include the development of research farms, technology incubation centers, renewable energy projects, public-private partnerships (PPPs), student entrepreneurship spaces, ecological tourism, and carefully regulated commercial developments that generate revenue to directly support core academic functions. International experience indicates that universities achieving long-term sustainability rarely depend entirely on government appropriations. Instead, they diversify their resource bases through meticulously planned land utilization strategies, ensuring that resource generation remains entirely subordinate to the institutional mission.

1.5 Integrating Land Protection and Promotion

Existing literature frequently isolates discussions of land protection from land utilization. However, sustainable governance inherently requires recognizing their deep interdependence. An overemphasis on protection may stagnate institutional development and stifle resource mobilization, whereas excessive promotion risks environmental degradation, mission drift, and public backlash.

This study argues that sustainable land governance materializes through strategic integration rather than the prioritization of a single dimension. Protection secures institutional security and environmental integrity; promotion generates academic, financial, and societal value. Based on this synthesis, the study advances an **Integrated Sustainable University Land Governance Framework**, where land protection and land promotion operate as mutually reinforcing governance pillars supporting comprehensive institutional sustainability.

2. Methodology

2.1 Research Design

This study adopted a qualitative single-case study design to facilitate an in-depth examination of complex governance processes within authentic institutional context. Rather than quantifying statistical relationships, this study sought to understand how land governance is practiced, interpreted, and institutionalized within a major Philippine State University.

2.2 Study Site

The investigation focused on Central Mindanao University (CMU), one of the Philippines' most Land-rich SUCs in terms of landholding. Managing approximately 3,401 hectares of government land, CMU provided an ideal case study setting as it has navigated substantial institutional growth while simultaneously confronting competing demands involving land utilization, infrastructure development, environmental stewardship, and complex land tenure disputes.

2.3 Data Sources and Collection

The study relied strictly on documentary evidence. Primary documents included:

- University Strategic Development Plans
- Land Use Development and Infrastructure Plan (LUDIP)
- Board of Regents resolutions
- Republic Act No. 11396 and its Implementing Rules and Regulations
- University annual reports, enrollment, and related records
- Campus development reports and institutional planning documents
- Official legal documents concerning university land tenure

To ensure credibility, data were triangulated across multiple institutional records and publicly available government publications. Only official documents directly related to university land governance, strategic planning, and institutional development were selected for analysis.

2.4 Data Analysis

Data were analyzed utilizing a systematic thematic analysis approach involving five distinct stages:

1. Familiarization with the corpus of documentary evidence.
2. Open coding of governance-related information and actions.
3. Grouping codes into broader structural governance themes.
4. Interpretation of themes through the lens of sustainable land governance principles.
5. Synthesis of findings into a cohesive, integrated governance framework.

2.5 Trustworthiness

Credibility was established through rigorous document triangulation. Dependability was reinforced via the systematic documentation of analytical procedures. Confirmability was ensured by strictly grounding all interpretations in the raw documentary evidence. Transferability was addressed by providing comprehensive descriptions of the institutional context, allowing readers to assess the applicability of the proposed governance framework to similar public HEIs.

3. Results and Discussion

3.1 Institutional Growth Intensifies the Strategic Value of University Land

Documentary analysis reveals that sustained institutional growth has exponentially increased the strategic importance of CMU's land. Over the observed period, the university experienced massive surges in student enrollment, programmatic offerings, research outputs, and international linkages. This rapid expansion generated immediate and corresponding demands for modernized classrooms, advanced laboratories, student housing, production zones, and digital infrastructure.

Consequently, land evolved from being viewed merely as a physical boundary into a critical strategic resource underpinning total institutional sustainability. Unlike standard organizational physical assets that depreciate over time, university land appreciates in strategic value, providing irreplaceable opportunities for future expansion and adaptation. The university's vast landholding enables the simultaneous execution of multiple institutional functions—agricultural experimentation, biodiversity conservation, instruction, community extension, and revenue generation. These multiple utility streams confirm that university land generates value not solely through its physical characteristics, but through the vast institutional opportunities it facilitates.

3.2 Land Protection as the Foundation of Institutional Sustainability

The evidence firmly establishes that protecting university land remains a fundamental, non-negotiable governance responsibility. CMU's historical and contemporary experiences with competing ownership claims, informal encroachments, and tenure-related disputes create an environment of uncertainty that severely threatens future institutional development.

The analysis identified four interconnected dimensions of land protection:

1. **Legal Security:** Defending titles and resolving tenure disputes.
2. **Environmental Conservation:** Preserving ecological integrity and biodiversity.
3. **Governance Accountability:** Maintaining transparent, rule-based land management.
4. **Strategic Reservation:** Banking land for future infrastructural and academic expansion.

Protecting institutional land ensures intergenerational equity—guaranteeing that future cohorts of students and researchers inherit the resources necessary for instruction and public service. Furthermore, this protection acts as a proactive governance strategy rather than a reactive legal defense. For Philippine SUCs, where university lands are public assets entrusted for specific educational purposes, robust protection safeguards the broader national investment in higher education.

3.3 Strategic Land Promotion Creates Long-Term Institutional Value

While protection acts as the defensive foundation, strategic land promotion serves as the offensive mechanism for expanding the university's developmental footprint. Planning documents heavily emphasize optimizing land utilization to elevate academic excellence, research productivity, and financial independence, actively avoiding the pitfalls of unrestricted commercialization.

Strategic promotion at CMU includes expanding state-of-the-art instructional facilities, scaling agricultural research and production enterprises, developing innovation spaces, and fostering carefully regulated partnerships (e.g., PPPs). These initiatives demonstrate that resource promotion directly reinforces the educational mission when strictly guided by transparent governance principles. Crucially, the data suggests that revenue generation must remain a byproduct rather than the primary objective of land utilization.

Projects designed to strengthen teaching, technology transfer, or community development inherently enhance institutional sustainability while contributing to responsible resource mobilization.

3.4 Integrating Protection and Promotion for Sustainable Land Governance

The principal theoretical contribution of this study lies in establishing that land protection and land promotion are not competing governance priorities. Instead, sustainable university land governance is born exclusively from their strategic integration.

This relationship is conceptualized as two mutually reinforcing governance pillars supporting the overarching roof of institutional sustainability. Land protection secures the institution's future through legal certainty, environmental stewardship, and strategic reservation. Land promotion breathes life into that future by optimizing academic utilization, driving innovation, and securing financial independence. Their dynamic interaction maximizes institutional capacity while ensuring all development remains tethered to the university's core educational mandate. This integrated perspective shifts the paradigm from isolated, administrative land management toward holistic, strategic asset governance.

4. Conclusion

As higher education institutions navigate expanding academic mandates, severe financial constraints, and evolving societal expectations, university land has emerged as an asset of paramount strategic importance. This study definitively demonstrates that sustainable land governance requires transcending traditional land administration to adopt an integrated governance perspective.

Sustainable land governance is achieved through the delicate, continuous balancing of two complementary dimensions. Land protection safeguards institutional ownership, ecological integrity, and future developmental horizons. Land promotion strategically optimizes land utilization to directly augment instruction, research, extension, innovation, and responsible resource generation. Rather than existing at odds, these dimensions act synergistically when embedded within a coherent institutional governance framework.

The introduction of the Integrated Sustainable University Land Governance Framework provides a critical roadmap explaining how universities can simultaneously protect their physical assets while maximizing their contributions to long-term academic and societal goals. While derived from the context of a Philippine State University, the principles of this framework offer highly transferable insights for public universities globally that manage extensive land resources under similar governance pressures.

Policy Implications

National higher education policies must urgently pivot from basic infrastructure planning toward comprehensive land governance frameworks. These frameworks must holistically integrate legal protection, environmental stewardship, institutional planning, and strategic resource optimization. Future iterations of LUDeP mandates should incorporate strict governance and sustainability indicators alongside standard physical land-use planning. Furthermore, government agencies should bolster technical assistance to help universities navigate the complexities of balancing institutional protection with mission-oriented resource generation.

Managerial Implications

University administrators must fundamentally reclassify land as a primary strategic governance asset. Institutional planning should deeply embed land governance into overarching strategic development plans, capital investment roadmaps, and financial sustainability initiatives. All decision-making concerning land utilization must unequivocally prioritize long-term institutional value creation over short-term financial returns. To ensure robust oversight, universities should establish interdisciplinary land governance committees integrating legal experts, environmental specialists, financial managers, academic researchers, and community representatives to champion evidence-informed, transparent strategic planning.

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