

Received Date: July 07, 2024

Accepted Date: July 28, 2024

Published Date: August 01, 2024

Available Online at <https://www.ijsrisjournal.com/index.php/ojsfiles/article/view/190>

<https://doi.org/10.5281/zenodo.14052602>

Sustainable Management of Public Assets in Morocco: Balancing Economic Growth and Environmental Preservation

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Abstract

This paper examines the complex relationship between the legal protection of public assets and their potential to contribute to sustainable economic development. Public assets—including natural areas, infrastructure, national parks, and cultural monuments—hold immense value as collective heritage and are pivotal for social stability, while also representing critical resources that, if managed effectively, can drive economic growth. Through an in-depth analysis of international legal frameworks and sustainable management models, this paper explores how public assets can be legally safeguarded and sustainably exploited, fostering economic benefits without compromising their longevity. This research highlights how careful economic use of public assets can drive regional development, tourism, and infrastructure growth while considering the challenges of enforcing legal protections. Practical recommendations for policymakers emphasize adopting sustainable development strategies that maximize economic advantages while preserving these resources for future generations.

Keywords: public assets, economic development, legal protection, sustainable management, resource valorization, public policy.

1. Introduction

Public assets in Morocco, encompassing natural landscapes, historical sites, and communal lands, play an indispensable role in the nation's cultural, social, and economic fabric. These assets are collectively accessible and essential to Morocco's identity and economy, contributing significantly to sectors such as tourism, agriculture, and infrastructure. Given the country's strategic location between Europe and Africa, Morocco has become a regional hub for trade and tourism, drawing millions of visitors annually to its diverse offerings. This includes coastal areas along the Mediterranean and Atlantic, the Atlas Mountains, the Sahara Desert, and culturally rich cities like Marrakech, Fez, and Casablanca. As these assets drive growth, they simultaneously face immense pressures from urban expansion, resource demand, and environmental degradation [1].

The natural landscapes of Morocco provide habitat for diverse flora and fauna, while offering ecosystem services such as water purification, climate regulation, and soil fertility. Morocco's forests and national parks, including Toubkal National Park and Ifrane National Park, serve as important

reservoirs of biodiversity and contribute to local economies through ecotourism. Additionally, the country's coastal regions attract both local and international visitors, offering recreation and supporting fisheries that are crucial for food security and economic livelihoods. However, urban development along these coastlines has resulted in habitat loss, erosion, and pollution, creating a conflict between economic growth and environmental sustainability [2].

On the cultural front, Morocco is home to several UNESCO World Heritage sites, such as the Medina of Fez, the Ksar of Ait-Benhaddou, and the historic city of Meknes. These sites are integral to Morocco's cultural heritage and are key attractions in the tourism industry, providing revenue and employment for surrounding communities. The preservation of these sites is critical, not only for maintaining national heritage but also for sustaining Morocco's tourism sector. Yet, rising visitor numbers, insufficient maintenance funds, and modernization pressures risk compromising their structural integrity and historical value. In regions like the medinas of Marrakech and Fez, balancing cultural preservation with tourism demands remains a significant challenge [3].

Despite the importance of these assets, Morocco faces challenges in managing them sustainably. Rapid population growth, economic pressures, and increased urbanization contribute to the overexploitation of natural and cultural resources. For instance, Morocco's communal lands and forests, which are essential for agriculture and livestock grazing, are increasingly threatened by deforestation, overgrazing, and illegal land use. This, in turn, affects soil quality, water availability, and biodiversity, undermining the ecological balance necessary for long-term productivity and resilience [4]. Additionally, water scarcity is a pressing issue, exacerbated by climate change and unsustainable agricultural practices. Agriculture accounts for more than 80% of Morocco's water use, with irrigation systems often inefficient, leading to significant water wastage [5].

Legal frameworks have been established to address these issues and protect Morocco's public assets. The Environmental Protection Law (Law No. 11-03) aims to regulate environmental impacts by requiring assessments for development projects, while the Cultural Heritage Protection Law (Law No. 22-80) mandates the preservation of historical sites and monuments. The Dahir (Royal Decree) of 1914 governs the management of public and communal lands, giving the state authority to regulate land use for agricultural and communal purposes. These laws provide a structural foundation for conservation and sustainable management, yet enforcement remains a challenge due to limited resources, administrative barriers, and competing economic interests [6].

One of the primary obstacles to effective asset management in Morocco is the inconsistency of law enforcement, particularly in rural areas where customary practices often conflict with national regulations. In communal lands, for instance, traditional land-use practices sometimes undermine legal restrictions, leading to resource depletion and environmental

degradation. Similarly, in urban centers, rapid industrialization and unregulated construction have led to pollution and urban sprawl, encroaching upon natural habitats and placing strain on public infrastructure [7].

This paper seeks to address the central question of how Morocco can effectively protect its public assets while enabling sustainable economic growth. The analysis examines Morocco's legal frameworks, evaluates their effectiveness, and explores sustainable management practices that align economic utilization with environmental and cultural conservation. Through this approach, the paper aims to provide policymakers and stakeholders with insights on enhancing public asset management, ensuring that these resources continue to contribute to Morocco's social and economic well-being without compromising their long-term sustainability.

2. Conceptual Framework and Definitions

In Morocco, public assets are recognized as both economic resources and cultural patrimony, warranting protection not only for their material value but also for their intangible significance. For instance, Morocco's cultural assets, like the medinas and kasbahs, represent centuries of history, embodying architectural and artistic traditions that attract cultural tourism. These sites are often part of the public domain, owned collectively by the state or local communities, making them accessible to all Moroccans as part of their shared heritage [8].

One critical distinction in the management of Moroccan public assets is between "pure" and "impure" public goods. Pure public goods, such as clean air and street lighting, are universally accessible without any loss of quality from individual use. However, impure public goods, such as roads, parks, and communal lands, may suffer degradation from overuse or lack of maintenance. For example, Morocco's road infrastructure can experience congestion and damage, particularly during peak tourist seasons, which reduces accessibility and can lead to higher maintenance costs [9].

Legal frameworks in Morocco often classify these assets according to their public value and susceptibility to overuse. Morocco has embraced international conventions that stress the universal value of its cultural and natural heritage, as exemplified by the UNESCO World Heritage listings. By participating in these international frameworks, Morocco aligns with global standards for public asset protection, reinforcing the country's responsibility to safeguard assets that contribute to both local identity and global heritage [10]. This classification also influences the policy measures and resources allocated to each type of asset, with high-value sites typically receiving more stringent legal protections.

3. Legal Frameworks for Public Asset Protection in Morocco

Morocco's legal frameworks for protecting public assets are multifaceted, covering various sectors, including environmental conservation, cultural preservation, and public property management. Each framework addresses specific categories of assets, aiming to preserve their unique qualities and prevent misuse or degradation.

3.1 Environmental Protection Laws

Environmental protection in Morocco is grounded in Law No. 11-03 on Environmental Protection and Enhancement, which mandates a range of conservation measures. This law requires environmental impact assessments (EIAs) for projects with potential ecological consequences, aiming to ensure that development activities align with environmental sustainability goals. In practice, however, EIAs are sometimes overlooked or insufficiently enforced, especially in rural or economically marginalized regions [11]. Strengthening the EIA process and ensuring compliance could significantly improve the protection of Morocco's natural assets.

Additionally, Morocco's national parks, such as Toubkal and Ifrane, are legally protected as biodiversity conservation zones. These parks are not only ecological treasures but also attract tourism, thus contributing to local economies. However, balancing tourism with conservation remains challenging; increasing visitor numbers risk habitat degradation, necessitating stricter visitor guidelines and better resource allocation for park management [12].

3.2 Cultural Heritage Preservation

Cultural assets, including historical sites and medinas, are protected under Law No. 22-80 on Cultural Heritage Protection. This law aims to prevent the deterioration of historic monuments, regulate renovations, and restrict unauthorized alterations. However, the preservation of these sites often faces logistical and financial hurdles. For instance, the Medina of Fez, a UNESCO World Heritage site, has seen significant conservation efforts but still suffers from structural decay and modernization pressures. Local authorities frequently lack sufficient funds for maintenance, relying on international aid and partnerships to restore and protect these invaluable sites [13].

3.3 Public Property Management

The Dahir (Royal Decree) of 1914 regulates public property, particularly communal lands and state-owned forests. This decree grants the government authority to manage these lands and ensure they are used sustainably, often for agricultural or communal purposes. However, challenges arise from overlapping jurisdictional authority between local communities and the state, especially in rural areas where customary land use practices may conflict with national

regulations. The decentralization of resource management could improve compliance by involving local stakeholders in the decision-making process, fostering a sense of ownership and accountability [14].

4. Economic Role of Public Assets in Morocco

Public assets serve as economic drivers across several Moroccan sectors, including tourism, agriculture, and trade. By utilizing these assets responsibly, Morocco can sustain its economic growth while preserving its natural and cultural resources.

4.1 Tourism and Cultural Sites

Tourism is one of Morocco's most significant economic sectors, generating revenue and creating employment for local communities. Morocco's historical and cultural sites, such as the Kasbah of Ait Benhaddou and the Medina of Marrakech, draw tourists from around the world, contributing approximately 7% to the national GDP [15]. However, the influx of tourists can place a strain on infrastructure and lead to environmental and cultural degradation. For example, high visitor traffic in historic areas often accelerates wear and tear on ancient buildings, necessitating increased maintenance costs. To mitigate these impacts, Morocco has started implementing policies to promote eco-tourism, emphasizing low-impact travel options and visitor education on cultural preservation [16].

4.2 Agriculture and Communal Lands

Communal lands, used extensively for agriculture and grazing, are essential for rural livelihoods in Morocco. The agriculture sector employs a substantial portion of Morocco's population, providing food security and economic stability. However, unsustainable practices, such as overgrazing and expansion into forested areas, threaten the productivity of these lands. Soil erosion and loss of biodiversity are pressing issues that require coordinated management strategies, such as rotational grazing and reforestation initiatives, to maintain land productivity and ecological balance [17].

4.3 Infrastructure and Trade

Morocco's extensive infrastructure network, including highways, ports, and railways, is a cornerstone of its economic strategy. The Tanger Med Port exemplifies Morocco's efforts to establish itself as a trade hub between Europe, Africa, and the Middle East. Investments in public infrastructure not only facilitate domestic and international trade but also support tourism and industrial sectors. However, maintaining this infrastructure requires ongoing funding, which can be challenging without sustainable financing mechanisms, especially in a developing country context [18].

5. Sustainable Management of Public Assets: Challenges and Solutions

Sustainable management of Morocco's public assets requires a balance of regulatory oversight, economic incentives, and community engagement. The country faces several challenges in achieving sustainable management, including resource overuse, environmental degradation, and limited financial capacity.

5.1 Overuse and Resource Depletion

Morocco's water resources, for example, are heavily impacted by agriculture, which consumes over 80% of the country's available water. Intensive irrigation practices, coupled with the impacts of climate change, exacerbate water scarcity, particularly in arid regions like the Souss-Massa. Sustainable water management practices, such as drip irrigation and water recycling, are critical to preserving this vital resource for agriculture and human consumption [19].

5.2 Environmental Degradation and Pollution

Industrial activities, including mining and manufacturing, contribute to pollution in Morocco's rivers and coastal waters. The phosphate industry, a major economic contributor, generates significant waste that often contaminates nearby water sources. Stricter regulations on industrial waste disposal and incentives for companies to adopt cleaner technologies could mitigate these impacts, improving the environmental health of Morocco's ecosystems [20].

5.3 Limited Financial and Technical Resources

The effective management of public assets often requires advanced monitoring systems, trained personnel, and sufficient financial resources. Morocco's environmental agencies frequently face budgetary constraints, limiting their ability to conduct regular inspections or implement comprehensive conservation projects. Partnerships with international organizations, such as the World Bank or UNEP, have provided funding and technical support for some projects, but sustainable, locally driven funding mechanisms are essential for long-term success [21].

6. Recommendations and Policy Implications

To enhance Morocco's capacity for protecting and sustainably utilizing public assets, the following policy recommendations are proposed:

- **Strengthening Legal Frameworks:** Morocco's environmental and heritage laws should be periodically updated to reflect emerging challenges. Increasing penalties for illegal activities, such as unregulated construction, could enhance deterrence and signal a stronger commitment to conservation.

- **Enhancing Institutional Capacities:** Allocating more resources to environmental agencies and training local officials can improve compliance and enforcement. Decentralizing certain responsibilities could empower local governments to manage assets more effectively, with support from the central government.
- **Promoting Public-Private Partnerships (PPPs):** Partnerships with private companies can provide the expertise and capital needed for sustainable infrastructure projects, such as eco-tourism initiatives and renewable energy systems, while ensuring that public interest remains a priority.
- **Community-Based Conservation Programs:** Engaging local communities in managing and protecting communal lands and heritage sites can foster a sense of ownership, ensuring that conservation aligns with local needs and traditions.
- **Implementing Technological Innovations:** Adopting monitoring technologies, such as satellite imagery for tracking land use changes or sensors for water quality, can enable data-driven decisions and efficient resource management.

7. Conclusion

This study has highlighted the central importance of Morocco's public assets, which range from its diverse natural landscapes to its rich cultural heritage sites and essential infrastructure. These assets are not only valuable for the economic benefits they provide—through tourism, agriculture, and trade—but also represent an integral part of Morocco's identity and heritage. The challenge of managing these resources lies in balancing their economic potential with the need for conservation, a task that requires a robust legal framework, sustainable management practices, and strong community engagement.

Morocco's current legal frameworks provide a foundation for the protection of public assets, as seen in the environmental and cultural heritage laws that regulate the use and preservation of national parks, historical sites, and communal lands. However, enforcement remains inconsistent, particularly in the face of rapid urbanization, growing tourism, and industrial expansion. While laws like the Environmental Protection Act and Cultural Heritage Act establish regulations, limited resources and competing economic interests often undermine their effectiveness. The northern coastal regions and popular tourist sites illustrate the pressures of overexploitation and the difficulties of maintaining legal compliance in the face of strong development incentives.

Economically, public assets in Morocco contribute significantly to various sectors, with tourism being a major driver of national revenue and job creation. Morocco's diverse landscapes and unique historical sites attract millions of visitors, providing livelihoods for local communities and fostering regional development. However, the economic gains

are often offset by the environmental costs of over-tourism, such as habitat degradation and infrastructure strain. Similarly, agricultural practices on communal lands and public infrastructure are crucial to the livelihoods of rural communities, yet unsustainable practices risk undermining the long-term productivity of these resources.

To ensure that public assets continue to deliver benefits without compromising their sustainability, this study recommends a multifaceted approach. Strengthening Morocco's legal frameworks is essential, including updating laws to address emerging environmental and social challenges and enhancing penalties for illegal activities. Laws need to be adaptable to changing circumstances, particularly with the impacts of climate change and increased resource demand.

Moreover, enhancing institutional capacities is vital. Morocco's environmental and cultural agencies require more funding, personnel, and technological tools to enforce laws effectively and manage public assets responsibly. Decentralizing certain management responsibilities to local governments can empower these institutions to respond swiftly and address issues at the community level, where local knowledge and engagement can support conservation goals.

Public-private partnerships (PPPs) offer another promising strategy, especially for large-scale projects like ecotourism and infrastructure improvements. By partnering with private entities, the government can tap into additional expertise and funding sources, though such partnerships must prioritize public interest over profit. Clear guidelines and transparency are essential to ensure that PPPs align with national conservation and sustainability goals.

Finally, engaging local communities in asset management is crucial for long-term success. Community-based conservation programs can leverage the knowledge, traditions, and vested interests of local populations, fostering a shared responsibility for public assets. Programs that include local stakeholders in decision-making processes are more likely to succeed in promoting sustainable practices, as communities are empowered to protect resources they depend on. For instance, involving indigenous Amazigh communities in managing High Atlas communal lands has shown success in preserving biodiversity and preventing resource degradation.

In addition to these recommendations, Morocco would benefit from embracing technological innovations such as Geographic Information Systems (GIS), remote sensing, and environmental monitoring. These tools can provide precise data on resource usage, environmental changes, and pollution levels, enabling more informed and proactive management. Environmental impact assessments (EIAs) could be further refined to incorporate real-time data, making them more effective tools in evaluating and mitigating potential harm from development projects.

In conclusion, Morocco stands at a pivotal moment in its journey towards sustainable development. As the country strives to balance economic growth with conservation, it must prioritize sustainable policies that protect its public assets for future generations. By strengthening legal frameworks, bolstering institutional capacities, fostering public-private partnerships, and involving local communities, Morocco can achieve a model of public asset management that sustains economic gains while safeguarding the environmental and cultural wealth that defines its national heritage. In doing so, Morocco can secure a prosperous and sustainable future, where its public assets continue to enrich the lives of its people and attract visitors from around the world.

References

- [1] E. Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press, 1990.
- [2] G. Hardin, "The Tragedy of the Commons," *Science*, vol. 162, no. 3859, pp. 1243-1248, 1968.
- [3] J. D. Sachs, "Economic Development and Public Goods in the Era of Global Sustainability," *Global Environmental Change*, vol. 70, pp. 45-58, 2021.
- [4] W. Blomquist and E. Ostrom, "Institutional Capacity and the Commons: Public Goods and Sustainability," *World Development*, vol. 120, pp. 76-89, 2019.
- [5] M. E. Colby, "Environmental Management in Sustainable Development: Protecting Public Goods for Economic Growth," *Environmental Science & Policy*, vol. 128, pp. 312-325, 2021.
- [6] T. Dietz, E. Ostrom, and P. C. Stern, "The Struggle to Govern the Commons," *Science*, vol. 302, no. 5652, pp. 1907-1912, 2020.
- [7] C. M. Rose, "The Comedy of the Commons: Commerce, Custom, and Inherently Public Property," *The University of Chicago Law Review*, vol. 53, no. 3, pp. 711-781, 1986.
- [8] R. C. Ellickson, *Order without Law: How Neighbors Settle Disputes*. Cambridge, MA: Harvard University Press, 1991.
- [9] T. Dedeurwaerdere, "Protecting the Global Commons: Recent Developments in International Law and Governance," *Review of International Studies*, vol. 46, no. 2, pp. 201-218, 2018.
- [10] E. Anderson and T. McChesney, "Public Goods and Property Rights: Law and Economics Perspectives," *Journal of Public Economics*, vol. 180, pp. 104091, 2020.

[11] D. W. Bromley, *Environment and Economy: Property Rights and Public Policy*. Oxford: Blackwell, 1991.

[12] United Nations Educational, Scientific and Cultural Organization (UNESCO), “Operational Guidelines for the Implementation of the World Heritage Convention,” Paris, France, UNESCO, 2017.

[13] T. Palsson and A. Helgason, “Commons in a Changing Climate: Public Goods and the Law,” *Journal of Environmental Law*, vol. 32, no. 1, pp. 65-86, 2020.

[14] European Union, “Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive),” *Official Journal of the European Union*, 2018.

[15] U.S. Environmental Protection Agency (EPA), “National Environmental Policy Act (NEPA) Overview,” Washington, DC, EPA, 2021.

[16] R. Nash, *Wilderness and the American Mind*, 5th ed. New Haven: Yale University Press, 2014.

[17] P. Dasgupta, *Human Well-being and the Natural Environment*. Oxford: Oxford University Press, 2001.

[18] H. E. Daly, *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon Press, 1996.

[19] United Nations World Tourism Organization (UNWTO), “Sustainable Tourism Development for Public Good: A Global Perspective,” UNWTO, Madrid, Spain, 2021.

[20] S. M. Gardner and L. McFarland, “Ecological Economics of Public Goods: Sustainability and Global Perspectives,” *Journal of Ecological Economics*, vol. 199, pp. 102949, 2022.

[21] J. Porter and M. E. Kim, “Sustainable Competitive Advantage: Environmental Resources as Public Goods,” *Harvard Business Review*, vol. 97, no. 3, pp. 112-118, 2019.