

馬祖水資源管理之分析與初探

Preliminary Study and Analysis of Matsu Island Water Resources

國立臺北大學自然資源與環境管理研究

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摘要

隨著經濟的快速發展和人口的持續增長，水資源的永續管理成為全球關注的焦點，尤其是在資源有限的島嶼地區更是如此。近年來由於氣候變遷影響，造成水資源缺乏，因此滿足永續發展指標並具有氣候變遷衝擊調適之潛力評估亦有待研究。對馬祖水資源進行 SWOT 分析，有助於全面了解馬祖水資源的優點、缺點、機會與威脅，為未來的水資源管理提供政策參考。

氣候變遷和人類活動的影響，馬祖的水資源管理面臨日益嚴峻的挑戰。本研究圍繞著馬祖列島獨特的地理環境和季節性雨量分佈特徵，採用 SWOT 分析法深入探討馬祖水資源的永續利用問題。深入了解馬祖水資源的 SWOT 分析，有助於找出目前水資源管理中存在的問題和不足，為未來提供改善建議和措施。因此，對馬祖水資源進行初探研究，對於推動馬祖水資源管理的永續發展具有正面的意義。透過挖掘馬祖水資源的優勢，可以更好地發揮水資源的運用，提高水資源利用效率。同時，辨識馬祖水資源面臨的威脅和劣勢，有助於預防水資源管理中可能出現的問題，並保護水資源的生態環境。馬祖水資源的 SWOT 分析為馬祖的水資源管理提供決策基礎。本研究不僅為馬祖水資源管理提供了確實可行的策略，也可為其他類似島嶼地區的水資源永續利用研究提供了重要參考與貢獻。

關鍵詞：水資源，氣候變遷，永續發展，SWOT 分析

Abstract

With rapid economic development and continuous population growth, sustainable water resource management has become a global focus, especially in resource-limited island regions. In recent years, climate change has exacerbated water scarcity issues, prompting the need to assess the potential to meet sustainable development goals and adapt to climate impacts. Conducting a SWOT analysis of water resources in Matsu can help comprehensively understand its strengths,

weaknesses, opportunities, and threats. This analysis would provide valuable policy insights for future water resource management.

Climate change and human activities pose increasingly severe challenges to water resource management in Matsu. This study focuses on the unique geographical environment and seasonal rainfall distribution characteristics of the Matsu Islands, using SWOT analysis to explore the sustainability issues of water resources. A comprehensive SWOT analysis of Matsu's water resources helps identify current problems and deficiencies in water resource management, offering recommendations and measures for improvement in the future. Therefore, this preliminary exploration of Matsu's water resources holds significant implications for promoting sustainable development in water resource management. By uncovering the strengths of Matsu's water resources, optimizing their utilization and enhancing efficiency is possible. Simultaneously, identifying threats and weaknesses helps anticipate potential issues in water resource management and protects the ecological environment of water resources. The SWOT analysis of Matsu's water resources serves as a decision-making foundation for water resource management in the region. This study provides feasible strategies for water resource management in Matsu and contributes valuable references to similar studies on sustainable water resource utilization in other island regions.

Keywords: water resources, climate change, sustainable development, SWOT analysis