

Vanuatu: A flagship for the world

Vanuatu, often referred to as a Small Island Developing State due to its limited land area spread across 80 islands, is, in reality, a Large Ocean State with more than 680,000 km² (larger than the Ukraine) of the Pacific Ocean within its Exclusive Economic Zone. Its vast size and isolation, combined with high levels of poverty, compound its climate vulnerability and thus make it more difficult to adapt to climate impacts. These impacts include higher temperatures on both land and at sea, volatile precipitation patterns, sea-level rise, and greater exposure to violent cyclones.^{1,2} All of these patterns will become more extreme over the coming decades, leading to erosion of arable land along the coast, destruction of infrastructure, intrusion of ocean water into agricultural areas and freshwater sources, coral reef bleaching and subsequent impacts on fish stocks, and, perhaps most importantly for an isolated Large Ocean State, a reduction in water quantity and quality.^{3,4}

Climate adaptation is then quite literally a question of survival for citizens of Vanuatu. And, because water is the major connecting element between the land and the sea, with rivers transporting drinking water, pollutants and sedimentation to coastal areas while the ocean rises and strips away the coast or seeps into freshwater supplies and farms, Integrated Water Resources Management (IWRM) is essential for ensuring adaptation efforts produce immediate and long-term tangible benefits for the population's health, and food and livelihood security.

Indeed, Vanuatu has already seized on this fact, explicitly including IWRM in its National Adaptation Plan of Action (NAPA) as a priority project to reduce vulnerability to climate change across the nation's watersheds.⁵ Similarly, the country's Nationally Determined Contribution (NDC) integrates water management across sectors and focal areas such as forestry, gender and health, among others, citing a need for "natural resource related measures to protect climate vulnerable urban water supplies [e.g., watershed restoration],"⁶ which are dependent almost entirely on limited aquifers vulnerable to seawater contamination.⁷

1 <https://www.gfdr.org/en/publication/climate-risk-and-adaptation-country-profile-vanuatu>

2 <https://climateknowledgeportal.worldbank.org/country/vanuatu/vulnerability#:~:text=According%20to%20a%201998%20Commonwealth,earthquakes%2C%20tsunamis%2C%20and%20cyclones.>

3 <https://www.gfdr.org/en/publication/climate-risk-and-adaptation-country-profile-vanuatu>

4 <https://www.adaptation-undp.org/projects/bf-pacc-vanuatu>

5 See page 52: <https://unfccc.int/resource/docs/napa/vut01.pdf>

6 See page 60: <https://unfccc.int/sites/default/files/NDC/2022-08/Vanuatu%20NDC%20Revised%20and%20Enhanced.pdf>

7 file:///C:/Users/pc/Downloads/VUT_UNHabitat_2015_PVVA_FullReport.pdf



Recent initiatives have also contributed to the policy framework and enabling environment needed for IWRM, including the GEF-LDCF funded Vanuatu Coastal Adaptation Project (now in Phase II), which indicated freshwater supplies as a major climate-related concern and therefore a priority for its adaptation measures. In focusing on water, the project also sought to “increase the efficiency of agriculture and fisheries, food and water management at the local level; and improve inter-institutional coordination and local governance capacity,”⁸ while identifying key entry points for water conservation in various sectors and how ecosystem restoration can contribute to more reliable water supplies.

Additionally, the recent “Integrated Sustainable Land and Coastal Management” project promoted “the integrated management of watersheds and associated landscapes in four main project localities [Maskelyne islands, North Efate, Mystery Island and Tongoa] in such a way as to deliver multifocal [...] benefits,”⁹ built on a 2009 regional Ridge-to-Reef (R2R) programme’s efforts which laid the foundations for future IWRM work.¹⁰ R2R management recognizes the fundamental yet often overlooked fact that, via the force, flow, and chemistry of water, the ocean is linked to the land, and, conversely, the land to the ocean, so human activities in one area will affect the other. And, given the importance of water for the country, this integrative project helped begin mainstreaming R2R-related policies across various economic sectors and in environmental planning processes while also initiating the development and implementation of R2R management plans for 100,000 hectares of land.¹¹ Unfortunately, several challenges such as a volcanic eruption, extremely destructive cyclone,

and Covid-19 arose during the project, slowing implementation progress.

Despite those challenges, Vanuatu continues to move forward, building on its IWRM experiences with the new “SIDS Ecosystem Restoration Flagship Project (SIDS Flagship)” as part of the UN Decade on Ecosystem Restoration. The SIDS Flagship project, with the help of innovative finance mechanisms,¹² will link coastal and marine restoration initiatives via further R2R and seascape management mainstreaming, aiming to close inefficiency-producing gaps stemming from conventional, siloed resource governance approaches focusing on only one ecosystem or sector at a time.¹³ For example, the project emphasizes a “Blue Recovery” to rebound from the pandemic, engaging stakeholders at key target sites for linking R2R and seascape planning and management, and developing public-private partnerships to scale up restoration efforts. Importantly, the project recognizes Vanuatu’s dependence on tourism (ranging between 30% to 40% of the economy, before the Covid-19 pandemic),¹⁴ and focuses on the industry’s role in R2R and seascape management, emphasizing training for decision-makers, dive shops, cruise lines, and hotels to integrate watershed, coastal, and mangrove (i.e., the ecosystems stretching from ridges to reefs) protection and restoration into development and business planning, respectively.¹⁵

Whether explicitly stated or embedded within the terminology of R2R management or other resource governance principles, IWRM features prominently in Vanuatu’s climate change adaptation and development planning, and, in a way, reflects a return to pre-colonial customary law, which understood reefs to be extensions of the land.¹⁶ In this light,

8 See page 53: <https://www.greenclimate.fund/sites/default/files/document/funding-proposal-fp184.pdf>

9 <https://www.thegef.org/projects-operations/projects/5397>: See Project Document, page 2.

10 This project was part of and build on a regional programme titled “Pacific Islands Ridge-to-Reef National Priorities: Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods” that began in 2009. It focused heavily on IWRM, establishing a water advisory council, flood management plan, and general training related to water management for communities up to cabinet members. See: <https://www.pacific-r2r.org/sites/default/files/2020-03/Vanuatu.pdf>

11 <https://www.thegef.org/projects-operations/projects/5397>: See FAO-GEF Project Implementation Report, pages 6-7.

12 The project will explore applicability of (Blue) carbon credits, biodiversity banking, PES for coastal protection, etc.

13 <https://www.nab.vu/project/sids-ecosystem-restoration-flagship-vanuatu-comores-and-santa-lucia>

14 <https://www.worlddata.info/oceania/vanuatu/tourism.php>

15 https://www.nab.vu/sites/default/files/documents/NAB%20SOP%20Project%20profile%20form%20final_FAO_SIDS.pdf

16 https://www.researchgate.net/publication/259453003_Traditional_Marine_Management_Areas_of_the_Pacific_in_the_Context_of_National_Land_International_Law_and_Policy/link/54be3bcb0cf218d4a16a558a/download

Vanuatu could truly be considered a flagship for the rest of the world to emulate, starting with the following key takeaways:

1. Integrating customary knowledge and resource governance traditions into modern, science-based protected area management can not only enhance ecosystem restoration and conservation but also build the necessary stakeholder buy-in and long-term cooperation crucial to ensuring that those ecosystems contribute to adaptation needs.
2. In some countries, climate impacts are already so dire that IWRM/R2R/adaptation projects' design should take into consideration the fact that their project activities could themselves be affected directly or indirectly by a climate-induced disaster. For example, tropical cyclone Harold, while not directly causing damage to the Integrated Sustainable Land and Coastal Management project's equipment or interventions, forced its team to focus its resources and time on disaster response and recovery instead of watershed management and R2R implementation for the prevention of water-related disasters.
3. Finally, R2R and IWRM, as silo-breaking and beneficial as they are in the long term, do require major initial investments in coordination and role setting in the short term to avoid confusion and misestimations regarding, respectively, responsibilities and related partner implementation capacities. Project design must make realistic estimates of time and financing needed for coordination and role setting.¹⁷



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17 <https://www.thegef.org/projects-operations/projects/5397>:
See Mid-term Review

18 Adapted from: <https://www.pacific-r2r.org/sites/default/files/2020-03/Vanuatu.pdf>