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Ecosystem services critical to community livelihoods, Wagina Island

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Abstract:

Ecosystems services are critical to supporting the livelihoods of the people of Wagina Island and highlight the importance of natural ecosystems for perpetuating the community's way of life. Wagina Island (also known as Vaghena) is located at the southern extent of Choiseul Province, Solomon Islands. With a land area around 82 square kilometres, Wagina Island is an emerged atoll with karst/limestones features and is surrounded by a number of shallow marine lagoons and smaller islands.

A recent initiative for Wagina Island is the execution of an 'ecosystems and socioeconomic resilience analysis and mapping' (ESRAM) project, which will inform ecosystem-based adaptation priorities. The ESRAM found that the people of Wagina are heavily dependent on natural ecosystems, especially the coastal and marine environments, for their livelihoods including the provision of food, water, shelter, both commercial and cash economies, and socio-cultural values. Through a community participatory approach, the ESRAM documented and mapped natural resources, ecosystems, and ecosystem goods/services critical for environmental sustainability and socio-ecological resilience of the Wagina community. The study also identified both existing and future threats to ecosystem change, followed by an assessment of options for developing resilience-building opportunities through ecosystem-based adaptation (e.g. restoring ecosystem health, securing ecosystem services).

Initial results from the study reveal broadly intact ecosystems for Wagina Island, albeit at high risk to the combination of both climate change effects and other pressures (e.g. population increase, overharvesting of natural resources, vegetation clearing for subsistence farming, and a major mining proposal). The community participatory approach has the added benefits of enhancing the community's adaptive capacity through grass-roots recognition of the vulnerability and threats to their ecosystems, and will ensure the community are a willing part of the solution.