REVISED STAP SCREENING TEMPLATE, OCTOBER 2022

GEF ID	**12283**
Project title	**Niue Infrastructure, Ecosystems and Communities Integrated Project (Niue IECI)**
Date of screen	**14 May 2026**
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1. Summary of STAP's views of the project

The strength of this proposal lies in its integrative approach, which aims to link resilient infrastructure, renewable energy, water security, ecosystem restoration, community engagement, and protected-area finance. The focus on vulnerable villages and the plan to influence national strategies are also positive aspects of the proposal.

However, there are areas where the proponents lean towards making claims that the current project design would struggle to deliver. The theory of change makes several assumptions that are not adequately evidenced. For example, it assumes that access to risk maps will change planning decisions, that village shelters will be maintained, that eco-tourism will generate revenue, that restoration will deliver measurable resilience and carbon benefits, and that trust-fund capitalisation will improve marine management at scale. The proponents claim 31.8 million ha of marine area will be under improved management, but no new protected area is being created, implying the claim depends entirely on improved management effectiveness, yet the baseline on management-effectiveness scores is missing.

In addition, the causal link between GEF funding and measurable improvements is vague. In the case of the NOW Trust, fiduciary due diligence and 1:1 match from non-GEF sources are deferred. It would be good to see co-financing verified, especially where planned or external investments are treated as if they are already secured. For instance, problems could include possible overlaps with funding from the Government of New Zealand and NZ-MFAT; the Adaptation Fund amount being linked to a planned concept-stage project; ADB technical assistance being treated as investment mobilised; and the NOW Trust capitalisation depending on a deferred 1:1 non-GEF match. The proposal is inconsistent about whether the GEF contribution to the trust fund is USD 2.5 million or USD 2.7 million.

Issues related to site selection, land tenure, ownership, operations and maintenance costs, revenue arrangements, engineering standards, grid integration, battery replacement and cyclone-resilience specifications remain largely unresolved, yet they will be key in determining whether the shelters, solar and water components will function and endure. Given the unresolved fiduciary, technical, co-financing, O&M and additionality issues, the risk ratings appear too low. Proponents may need to revise them upwards and propose stronger mitigation measures.

Overall, the proposal has merit, but the investment case is currently weak. The proponents should further clarify their marine management claims, NOW Trust governance and matching funds, co-financing, shelter scaling, restoration baselines, GHG emissions calculations, and O&M arrangements. If postponed until implementation, these unresolved issues could become barriers to the project's success.

STAP's assessment*

□ Concur - STAP acknowledges that the concept has scientific and technical merit

X Minor - STAP has identified some scientific and technical points to be addressed in project design

□ Major - STAP has identified significant concerns to be addressed in project design

Please contact the STAP Secretariat if you would like to discuss.

2. Project rationale, and project description – are they sound?

The proponents did a good job of explaining Niue's vulnerability to climate change and the challenges posed by remoteness, fragile infrastructure, overdependence on fossil fuels, water and energy insecurity, risks to the tourism sector, ecosystem degradation, and limited institutional capacity. The proposal demonstrates a clear understanding of the system linkages between water, energy, disaster risk, tourism, and ecosystems. However, the level of analysis is still too broad. There is a need to quantify which places, assets or communities face the highest compound risks and how the system interconnections justify the selected investments.

While the proponents include relevant climate projections, there is a need to develop alternative future scenarios or narratives. This will enable the proponents to reflect on the robustness of the project design against plausible futures such as continued outmigration, tourism growth or decline, delayed energy reforms, worsening climate extremes or uncertain donor finance. STAP publication on Simple Narratives could be a useful resource.

The proposal has credible baselines of fragmented planning, vulnerable infrastructure, degraded coastal ecosystems, weak conservation finance and limited institutional capacity. The proponents have identified relevant barriers, such as limited staffing, high costs, data gaps, and weak O&M arrangements. However, proponents may need to provide additional evidence to strengthen some of the claims, such as those for 31.8 million ha of improved marine management. Currently, the proposal does not specify the climate-resilience management actions to be conducted across these areas. In the case of the 1,142 direct beneficiaries, it is unclear whether the assumption is that the 5 shelters can justify direct benefits for 1,142 people. What is the occupancy capacity of each shelter? There is also a need to reflect on other design and operational aspects of these shelters, as a building with PV and tanks is not automatically an emergency shelter.

The theory of change is plausible. However, the causal logic is not clearly demonstrated. For example, it is not clear who will change behaviour, what institutions will change, how assets will be maintained, how recurrent costs will be funded and how trust capitalisation will produce measurable marine-management improvements. Furthermore, the logic for ensuring enduring outcomes is reliant on optimistic conditions without detailing contingency pathways should these not materialize e.g. reaching full capaitalization of the NOW trust. The additionality needs further evidence through the provision of management-effectiveness baselines and targets.

The proponents need to reflect on the project's components. For example, for Component 1, it is not clear how the proponents can achieve all the stated objectives with the requested budget. Furthermore, the approach to climate and energy risk information generation appears to position communities and village councils as recipients of expert-produced assessments and GIS tools rather than as active co-producers of knowledge. Yet participatory and community-based data generation, particularly drawing on traditional ecological knowledge, would not only yield richer, more locally grounded risk information but also significantly increase the likelihood that it will be meaningfully understood, trusted, and applied in local decision-making and planning processes.

Component 2 needs to be strengthened with information on shelter locations, engineering standards, ownership, O&M and cost-recovery arrangements. Component 3 should include site-level ecological baselines and restoration methods. Component 4 should include more detail on the fiduciary and attribution requirements needed to justify GEF capitalisation of the NOW Trust. It is also important to be clear on who among the project partners is responsible and accountable for integrated safeguards, procurement, M&E, reporting, risk ownership and cross-component coordination. There appears to be duplication between Component 5 and the additional M&E component. It is important to be clear whether these two components and their separate budgets are justified.

The proponents identified the right stakeholder groups. However, their operational roles are not adequately defined. For example, village councils are expected to maintain assets, but there is no clear financial model, and private sector participation lacks clear selection criteria, definitions of their obligations, ownership rules, and

benefit-sharing arrangements. For example, how will commercial or tourism use be subordinated to public emergency use? Who will collect the revenue? Who will pay for any damage? Is public access guaranteed? Moreover, how will conflicts between resilience and revenue generation be resolved in an emergency?

The proponents need to be clear about the complementarity of this project with prior and current investments, as several activities appear to overlap. Lessons learned from those other initiatives should be translated into concrete design decisions. For example, the description makes it clear that policy coherence is weak, especially in relation to issues that will affect this project's success, such as energy regulation, tariffs, PPAs, land tenure, and long-term O&M. Proponents should reflect on these aspects.

It is good to see a knowledge management component, considering the limited institutional capacity and high staff turnover. However, it needs to be more specific and clearly define knowledge products, learning cycles, data ownership, institutional responsibilities, decision triggers for adaptive management, and processes for retaining lessons after the project ends.

The proponents should reflect more on their design to ensure the project is truly transformative. The integrated model is beneficial but not inherently innovative, given past initiatives in Niue. It is not clear how GEF funding will de-risk or scale the model from the current proposed scale of five shelters, 60 ha restored and 0.1 MW solar PV. To be truly transformative, proponents need to focus on clear institutional reforms, financing durability, scaling-out mechanisms, policy change, and measurable step improvements in GEBs.

The proponents identify key and relevant risks. However, risk is currently treated too optimistically, given several unresolved issues such as site selection, O&M financing, trust-fund conditionality, co-financing uncertainty, institutional capacity constraints, and safeguard inconsistencies. A major inconsistency is that the project records overall project/program risk as “High or Substantial” while the main risk table gives an overall risk rating of “Moderate”. This needs to be clarified. Moreover, firm mitigation mechanisms should be explored.

3. Specific points to be addressed, and suggestions

STAP recommends that proponents address the issues raised in Section 2 above, including the following specifics:

- In the summary, the proponents mention that the project will be delivered through “four mutually reinforcing components” and then describe five components. These inconsistencies should be addressed.
- For components 1, the proponents list several related initiatives but should consider providing details on the overlaps, especially on climate information, energy integration, invasive species, tourism, and ecosystem restoration.
- Provide further evidence of additionality, particularly related to the 31.8 million ha marine-management claim. Include data on the current management-effectiveness baseline.
- Ensure that issues related to NOW Trust fiduciary and match-funding conditions are resolved, as this aspect is critical for project success.
- Ensure that shelter design, siting, land and O&M issues are resolved early.
- Currently, the proposal states that 2.79 MW solar PV will reduce diesel consumption by 816,000 litres annually, avoiding 22,200 tons CO_2e annually. However, the proponents mention that they use a factor of 2.68 kg CO_2 per litre. Using that factor (816,000 litres x 2.68 kg CO_2/liter = 2,186,880 kg CO_2) this is about 2,187 tCO_2e, not 22,200 tCO_2e.
- PV accounting needs to be checked. On page 50, the proponents calculate that the direct renewable energy reductions over a 25-year asset lifetime amount to 24,000 litres of diesel per year, yielding a total reduction of 1,608 tCO_2e. However, on p. 49, the non-AFOLU accounting period is 20 years, implying that the direct solar reductions are 1,286 tCO_2e rather than 1,608 tCO_2e. These estimates need to be corrected.

- The carbon removal estimates are given as 4,756 tCO_2e over 30 years. Without details on the inputs to the EX-ACT model, it is hard to tell whether, for the 60 ha, a total of 79 tCO_2e/ha over 30 years is plausible given Niue soils, species options, disturbance risks, and maintenance assumptions. STAP recommends that more details be provided to verify these numbers.
- The project describes restoration of coastal terraces, native vegetation, natural barriers and mangroves, while the core indicator tables mention that the 60 ha is under "natural grass and woodland". Reconsider this classification and ensure that the indicator category and carbon methodology match
- The sex-disaggregated beneficiary numbers are inconsistent on page 5; it is stated that 560 men / 582 women, while on pages 49 and 52, the beneficiaries are listed as 582 male / 560 female. It is not clear which is correct.
- Revisiting the risk rating, especially for areas where the proponents identified significant risks to project success (See the STAP advisory document on Risk)
- The claim for transformation needs to be revisited and clear evidence provided (See the STAP paper on transformation).
- To demonstrate water security benefits, proponents need to provide details and estimates on aspects such as water balance calculations, drought design assumptions, water-quality standards, maintenance responsibilities, and emergency operating protocols.
- While groundwater is mentioned as part of the water security rationale of this project, the SCCF metadata marks "Groundwater quality/quantity" as false, yet 20% is assigned to water resources management. The proponent should address this inconsistency.
- The project should explicitly address the full lifecycle of solar panels and batteries within the project design, including end-of-life disposal, regional take-back arrangements, and alignment with any existing Pacific waste management frameworks, rather than treating this solely as a safeguards risk. Given Niue's geographic isolation and the sensitivity of its marine environment, a circular economy strategy should be employed that aligns with Niue's Integrated Solid and Hazardous Waste Management strategy.
- Given the project's ambition to attract private sector financing and accelerate NOW Trust capitalization, it would be advisable to prioritize the blue carbon scoping assessment early in the PPG phase.
- Diaspora engagement is promising but underdeveloped, and given Niue's chronic capacity constraints, the project should elaborate a more structured diaspora engagement strategy that actively leverages this significant human capital resource across all components, not solely as a knowledge-sharing mechanism under Component 5.