Ministry of Climate Change
Government of Vanuatu

Environmental and Social Impact Assessment

Project title: **Adaptation to Climate Change in the Coastal Zone of Vanuatu – Phase II (V-CAP II)**		
Country(ies): Vanuatu	**Implementing Partner (GEF Executing Entity):** Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management	**Execution Modality**: Assisted NIM
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LIST OF ACRONYMS

AWS	AWS Automatic Weather Stations
BIOPAMA	EU-ACP Biodiversity and Protected Areas Management (IUCN)
CBOs	Community-Based Organizations
CCA	Community Conservation Area
CCAP	Climate Change Adaptation Plan
CDCCC	Community Disaster and Climate Change Committee
CO	Country Office
CSOs	Civil Society Organizations
DARD	Department of Agriculture & Rural Development
DoCC	Department of Climate Change
DEPC	Department of Environmental Protection and Conservation
DFAT	Department of Foreign Affairs and Trade (Australian Government)
DLA	Department of Local Authorities
DoWR	Department of Water Resources
DoF	Department of Forestry
DWA	Department of Women Affairs
DRR	Disaster Risk Reduction
DSPPAC	Department for Strategic Planning, Police & Aid Coordination
ECARE	Expanding Conservation Areas Reach and Effectiveness in Vanuatu (IUCN project funded by GEF)
ESIA	Environmental and Social Impact Assessment
EIS	Environmental Impact Statement
ESMF	Environmental and Social Management Framework
EU	European Union
EWS	Early Warning System
FAD	Fish Aggregating Device
FPIC	Free Prior and Informed Consent
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GOV	Government of Vanuatu
IAS	Invasive Alien Species
ICZM	Integrated Coastal Zone Management

IPP	Indigenous Peoples Plan
IUCN	International Union for Conservation of Nature
KBAs	Key Biodiversity Areas
LDC	Least Developed Country
LDCF	Least Developed Country Fund
LDN	Land Degradation Neutrality
M&E	Monitoring & Evaluation
MCCAMGEEDM	Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Environment, Energy and Disaster Management
MDG	Millennium Development Goals
MPA	Marine Protected Area
NAB	National Advisory Board (on Climate Change and Disaster Risk Reduction)
NAPA	National Adaptation Program of Action
NBSAP	National Report on National Biodiversity Strategy and Action Plan
NDCs	Nationally Determined Contributions
NDMO	National Disaster Management Office
NGOs	Non-Governmental Organizations
NICZMF	National Integrated Coastal Zone Management Framework
NIWA	National Institute of Water and Atmospheric Research (New Zealand Government)
NSDP	National Sustainable Development Plan 2016 – 2030
OHS	Occupational Health and Safety
VMGD	Vanuatu Meteorology and Geo-Hazards Department
PA	Protected Area
PAA	Priorities and Action Agenda 2006 – 2015
PMU	Project Management Unit
SECU	Social and Environmental Compliance Mechanism
SRM	Stakeholder Response Mechanism

EXECUTIVE SUMMARY

This Environmental and Social Impact Assessment (ESIA) has been conducted for the Vanuatu Coastal Adaptation Project – Phase II (VCAP-II), implemented across nine Area Councils in six provinces. The assessment follows the requirements of the UNDP Social and Environmental Standards (SES), the Environmental Protection and Conservation Act of Vanuatu, and relevant international good practice guidelines.

VCAP-II aims to strengthen the climate resilience of vulnerable communities through the restoration of degraded ecosystems, the establishment and management of Community Conservation Areas (CCAs), Marine Protected Areas (MPA), climate-resilient infrastructure, and early warning systems. Given its scope and geographical spread, the project is classified as Substantial Risk under UNDP's SES, triggering several environmental and social safeguard standards.

The ESIA includes a detailed review of the legal and institutional framework, a comprehensive environmental and social baseline (Chapter 4), and an assessment of potential risks and impacts (Chapter 5). Thirteen key environmental and social risks were analyzed, including invasive species management, land access and tenure issues, biodiversity impacts, risks to traditional knowledge, and gender-based discrimination. Risk levels were further disaggregated by site based on ecological, social, and governance criteria.

Mitigation and management measures have been developed and are incorporated into the site-specific Environmental and Social Management Plan (ESMP). A structured methodology based on likelihood and impact was used to prioritize risks. Notably, cross-cutting risks such as lack of FPIC documentation, weak monitoring systems, and labour-related risks in infrastructure components require reinforced safeguards procedures and closer coordination during implementation.

The stakeholder engagement process included a review of participatory mechanisms already established under the project and consultations conducted during the ESIA, including a multi-community meeting held in West Coast Santo (Wusi) in March 2025. A project-specific FPIC protocol and Grievance Redress Mechanism (GRM) were developed and will be systematically applied to all activities.

The ESIA concludes that while the project offers significant opportunities for inclusive, climate-resilient development, its success will rely on the effective operationalization of safeguards across all sites. Particular attention must be given to gender equality and social inclusion (GESI), recognizing the structural barriers faced by women and marginalized groups in decision-making, benefit-sharing, and access to natural resources. Gender-related risks, including the reproduction of discriminatory practices and the risk of gender-based violence—require targeted mitigation measures and inclusive governance structures. Recommendations also highlight the need to strengthen monitoring systems, institutionalize FPIC and GRM protocols, and allocate adequate resources to build safeguards capacity at local and provincial levels.

1. INTRODUCTION

1.1. BACKGROUND

1. The Global Environmental Fund (GEF) and the Least Developed Countries Fund (LDCF) have provided the Government of Vanuatu with a grant to support the preparation and implementation of VCAP-II (Adaptation to Climate Change in the Coastal Zone of Vanuatu -Phase II (VCAP II)). The grant, together with other funding sources, is used to improve Vanuatu's community resilience in climate change adaptation and biodiversity conservation. In May 2022, the project started implementation for a period of six years.

2. The VCAP-II aims to enhance resilience to climate change in vulnerable coastal communities across six provinces of Vanuatu. Building upon the foundations of VCAP-I, this new phase operates at a larger geographic scale and involves a broader range of actions. Project activities are planned across diverse island environments, many of them remote, ecologically fragile, and logistically difficult to access. These characteristics, combined with the project's multi-component design, require an Environmental and Social Impact Assessment (ESIA) that adequately reflects complexity of the project while remaining practical and actionable.

3. This ESIA has been developed in compliance with the Environmental Protection and Conservation Act (2002) and in alignment with UNDP's Social and Environmental Standards (SES). Its objective is to identify and assess the environmental and social impacts associated with the project, and to propose appropriate mitigation and enhancement measures. The assessment serves as the foundation for a site-specific Environmental and Social Management Plan (ESMP), which will guide the implementation of safeguard measures throughout the life of the project.

4. The VCAP-II project is built on a layered intervention model that integrates infrastructure rehabilitation, coastal and upland ecosystem restoration, institutional support, and community-based adaptation. These components often overlap spatially and thematically, requiring an analytical approach that can consider cumulative effects and interactions across systems. While the project does not follow a uniform model across sites, it does adhere to shared principles of resilience, sustainability, and inclusion.

5. Given the diversity of sites and the current limitations in field data, this ESIA adopts a structured but flexible approach. While it does not aim to provide a detailed diagnosis for each location, it identifies common environmental and social aspects that may influence project outcomes across the landscape. The assessment remains attentive to potential overlaps between interventions and the specific vulnerabilities of each context, laying the groundwork for management strategies that can be adapted as more site-level information becomes available.

6. A key principle guiding this ESIA is the centrality of community-based governance and participatory decision-making. Many of the target areas are governed through traditional structures and rely on customary tenure systems for land and marine resource management. In such settings, the legitimacy and sustainability of project interventions depend on the ability to align with local values and leadership, while also ensuring inclusivity—particularly regarding women, youth, and other underrepresented groups.

7. Project design supports a range of adaptation measures, including: (i) support community-led and ridge-to-reef planning processes; (ii) integration of climate risk profiling into infrastructure design and local development planning; (iii) establishment of an early warning system coordinated with VMGD and tailored to community-level use; (iv) awareness raising and capacity building at community and institutional levels; and (v) creation and operational support for Community Conservation Areas (CCAs), Marine Protected Areas including development of Protected Area Management Plans.

8. This ESIA aims to review, analyze, evaluate and propose measures to prevent, control, mitigate, retore and/or compensate the potential environmental and social impacts of the VCAP-II so that the project complies with UNDP's SES and relevant national legislation and ensure the socio environmental sustainability of its different components.

1.2. OBJECTIVES OF THE ESIA

9. The objectives of the Environmental and Social Impact Assessment (ESIA) are to guide project implementation by supporting compliance with legal and policy frameworks, identifying key environmental and social impacts and informing the development of targeted mitigation and monitoring measures. Specifically, the ESIA will:

- Ensure compliance with national legislation, specifically the Environmental Protection and Conservation Act [Cap 283], Part 3, which mandates the preparation of an Environmental Impact Assessment for qualifying projects in Vanuatu;
- Comply with UNDP Environmental and Social Safeguards requirements, and the requirements established in the Social and Environmental Screening Procedure (SESP) and assess the corresponding potential impacts within the current environmental, socio-economic and cultural context;
- Review and update the environmental and social risks initially identified in the project's Social and Environmental Screening Procedure (SESP), and assess them within the current environmental, socio-economic, and cultural context of the project areas to inform appropriate mitigation and management measures during implementation;
- Provide an analysis of the project intervention areas and assessment of the full range of social impacts of the project, with particular focus on impacts in local communities;[1]
- Assess and discuss impact on natural habitat, gender aspects and cultural heritage as required by the SES policies;
- Evaluate potential access restrictions affecting landowners and land users in accordance with Standard 5 (Involuntary Resettlement), and assess any risks related to adverse impacts on traditional knowledge and practices.

1.3. Development of the ESIA

10. Preparation of the ESIA has involved several stages including (a) documentation review, (b) field mission, (c) consultation with stakeholders and communities, (d) risk updates, impact analysis and identification measures to avoid, minimize or mitigate these impacts, (e) preparation of ESIA report and the accompanying site specific ESMP. In the following paragraphs these steps are further defined.

11. **Preliminary documentation review.** As well as the national legislation and UNDP SES Policies, several documents related to VCAP-II were reviewed namely:

- VCAP-II Project Document (ProDoc), including all annexes, SESP screening, and SEP.
- Preliminary environmental assessment (PEA) for Area Council Climate Proof Office in Yarsu (South Epi-Shefa), and in Wusi (Sanma),

[1] In Vanuatu, where Indigenous and local communities are often regarded as synonymous, alternative mechanisms such as memorandums of understanding and consent letters are used for stakeholder engagement and community consultations. These mechanisms partially fulfil the intended purpose of FPIC.

- Application forms for environmental permits in the following Area Council Climate Proof Offices: Kwamera (South Tanna-Tafea), Yarsu (South Epi-Shefa), Wusi (Sanma), Futuna (Tafea), West Ambrym (Malampa), and Early Warning Back-Up Center in Luganville Santom,
- Environmental permits for Yarsu (South Epi-Shefa), Wusi (Sanma), Futuna (Tafea), West Ambrym (Malampa) and Early Warning Back-Up Center in Luganville Santo.
- IPP for South Epi (Shefa),
- Back to office reports conducted between April to August 2024 in South Tanna (Tafea), South Epi (Shefa), West Ambrym (Malampa), Big Bay Inland and West Coast (Sanma).
- Report on potential CCA located in Baiap, Horhor, Craig Cove, Lonwolwol and Emioutungan (West Ambrym-Malampa) for the PA in West Ambrym,
- Inception report of 15 Rapid Ecological Assessments and Local Capacity building.
- Vanuatu Forest and Landscape Restoration Strategy (2018) – a key national policy linked to land use and conservation, particularly relevant for Risks 4 and 12.
- Community Conservation Area (CCA) Guidelines (DEPC) – national reference document for CCA establishment and governance.
- VCAP-II GESI report and Gender Equality Policy of Vanuatu and National Sustainable Development Plan (NSDP) – to inform safeguards integration and alignment with national goals.

12. **Field mission.** A field mission was conducted to Efate and Santo islands between 10-23 March 2025. Extensive stakeholder consultations were conducted as part of the SESA and ESIA processes. The consultations took place in Port Vila, Luganville in Santo, and the West Coast of Santo (Wusi community), using face-to-face interviews, community awareness sessions, questionnaires, and guided discussions. The Wusi consultation, held on 17 March, brought together over twenty participants, including landowners, traditional leaders, community conservation areas rangers and managers, women, and members of the project's technical team.

13. Key outcomes from stakeholder consultations and institutional interviews highlighted the dual governance structure of the VCAP-II project, which combines formal government administration with the traditional *kastom* system. Chiefs and customary landowners are central to land access and the recognition of Community Conservation Areas (CCAs) and Marine Protected Areas (MPAs). The FPIC process requires repeated engagement with communities. Some reluctance was observed around the formalization of *tabu*[2] areas by the communities, due to concerns about government appropriation and legal ambiguity, pointing to the need for more transparent communication and inclusive legal recognition of traditional land uses.

14. Further outcomes emphasized the project's challenges in ensuring inclusive participation in remote communities. Village Development Committees are being established to enhance local governance, particularly in relation to women, youth, and vulnerable groups inclusion and integration of traditional knowledge in conservation planning. Although efforts have been made to improve safeguards, the Grievance Redress Mechanism (GRM) remains in draft form and no formal procedures are yet in place for public disclosure of project documents.

[2] A *tabu area* (or *tabu eria* in Bislama) refers to a marine or terrestrial zone traditionally closed—either temporarily or permanently—under customary rules to protect natural resources, support ecosystem regeneration, or maintain cultural and spiritual practices. Unlike modern protected areas, *tabu areas* are based on local kastom (customary law), have strong cultural legitimacy, and are often more adaptable to local needs.

15. Institutional coordination and policy alignment emerged as critical factors for project success. Collaboration with initiatives such as Expanding Conservation Areas Reach and Effectiveness (ECARE) and FAO's Forest and Landscape Restoration Strategy (FLRS) continues to evolve, with regards to harmonizing conservation, climate resilience, and sustainable livelihoods objectives. Stakeholders stressed the need to revise the Environmental Protection Act to recognize tabu areas and reinforce CCA governance. A review of the EPC Act (Cap 283, Part 4 on Community Conservation Areas) is currently in progress.

16. In parallel, the rollout of climate-resilient infrastructure, including construction and upgrades of Area Council buildings, community access routes and investments in early warning systems, reflects the vision of increasing long-term local capacity and adaptive management.

17. The institutional stakeholders interviewed during the field mission are listed in chapter 6. A debriefing session was held on March 21 2025 in Port Vila. The ESIA team shared a presentation with updated risks and then identified further steps.

18. The **preparation of the report** included a step-by-step process combining document review, stakeholder input, and findings from field-based analysis. The following actions were undertaken:

    • **Baseline data collection**: Compilation of information on environmental and social conditions at project sites, including ecosystems and biodiversity, land tenure, livelihoods, and local infrastructure.
    • **Risk review**: Assessment and validation of previously identified risks, ensuring that mitigation measures remained relevant and appropriately targeted.
    • **Impact identification**: Evaluation of potential impacts on land access, governance structures, natural habitats, and community dynamics.
    • **Mitigation measures**: Definition of specific measures to avoid, minimize, or manage the identified environmental and social impacts.
    • **Monitoring framework**: Included in the site-specific ESMP, detailing indicators, responsibilities, and procedures to ensure ongoing oversight and effective implementation of mitigation measures.

1.3.1. Document disclosure

19. In accordance with the UNDP SES, projects classified as **Substantial Risk** are required to disclose the ESIA report, including the ESMP for a minimum of 60 calendar. The draft ESIA and associated documents will be reviewed by UNDP Regional Safeguards Team for quality assurance, with a focus on alignment with UNDP SES.

20. Feedback received during the public disclosure period, including from government stakeholders, community members and civil society will be consolidated in the final version of the ESIA and ESMP. The final version will outline the key comments received and describe how they were addressed into the final version. The process is intended to reinforce transparency, improve safeguards quality, and promote accountability in line with UNDP SES[3].

1.3.2. Structure of the ESIA report

21. The contents of the ESIA report follow the requirements of UNDP SES Standards. The ESIA report is divided into the following sections.

    - **Executive summary.**

[3] UNDP SES Guidance Note on Disclosure and Transparency, 2021. Documents can be disclosed at the project website: https://www.undp.org/pacific/projects/vanuatu-coastal-adaptation-project-phase-ii

- **1. Introduction.** This chapter provides background information about the Project and highlights ESIA objectives, methodology and structure.
- **2. Project Description.** This chapter describes in detail the project context, components, actions and activities of VCAP-II, and its associated project support activities. It also broadly describes the governance and management arrangements at the implementation stage.
- **3. Institutional and Legal Framework.** This chapter summarizes the applicable legislative and regulatory context in the Vanuatu Islands and notes the SES policies requirements including the requirements of the ESIA and ESMP.
- **4. Environmental and Social baseline.** This section describes the available baseline data on the physical, biological and socio-economic data within the project area of influence.
- **5. Assessment of risks and impacts.** This section describes potential environmental and social impacts that are anticipated as a result of implementation. It reviews identified risks and discusses, assesses and evaluates mitigation measures.
- **6. Stakeholder Engagement.** This section outlines the stakeholder engagement process carried out during the project preparation and ESIA phases. It includes a summary of consultations conducted, key outcomes, gaps identified, and the application of the Free, Prior and Informed Consent (FPIC) process.
- **7. Analysis of Alternatives.** This chapter presents a comparative analysis of project alternatives considered during design, including the 'no project' scenario. It assesses how environmental and social considerations were integrated into the decision-making process and explains the rationale for the selected project configuration.
- **8. Conclusions and Recommendations.** This final chapter synthesizes the main findings of the ESIA, confirms alignment with safeguard requirements, and proposes actionable recommendations for implementation, monitoring, and risk management.

2. PROJECT DESCRIPTION

22. This chapter describes in detail the project context, components, and activities of VCAP-II and its associated project support facilities. It also broadly describes the activities in the project area and the project requirements.

2.1. PROJECT CONTEXT

23. Communities in Vanuatu are highly dependent on terrestrial and marine ecosystems for their food, water, livelihoods, cultural identity and well being. These ecosystems are increasingly threatened by land clearing, invasive species, overfishing, and climate-related hazards. The country's geography, where almost all land is close to the sea, creates a strong ecological link between terrestrial and coastal systems. As such, any degradation of forested areas or river catchments is likely to have direct consequences on downstream marine environments. Due to the interdependence of marine and terrestrial ecosystems, as well as the pressures driving degradation, an integrated approach to managing these environments holistically is essential.[4]

24. This integrated approach, known as 'ridge-to-reef' (R2R) management, has been widely promoted and applied across Pacific Island countries, including Vanuatu, to enhance socio-ecological resilience. R2R is particularly suited to the Vanuatu context, given its dispersed population, archipelagic geography, and the proximity of highland areas to coastal zones.

25. VCAP-II adopts the R2R approach to promote the conservation of interconnected ecosystems while strengthening the adaptive capacity of vulnerable communities. Building on lessons from Phase I, the project works through Area Councils to implement nature-based solutions—such as the establishment of Community Conservation Areas (CCAs), Marine Protected Areas and ecosystem restoration—together with infrastructure improvements, enhanced climate services, and strengthened local governance. It also supports early warning systems and improves access to data, helping communities prepare for extreme weather events, while embedding resilience in local development planning and reinforcing institutional coordination at all levels.

26. These efforts are closely aligned with national policy priorities, particularly those outlined in the National Environment Policy and Implementation Plan (2016–2030), the National Biodiversity Strategy and Action Plan (2018–2030), and Vanuatu's Climate Change and Disaster Risk Reduction (CCDRR) Policy.

27. At project design, 14 Area Councils—some of which had already participated in VCAP-I—were proposed through consultations with government and key stakeholders. These councils were selected to align with geographic coverage and implementation feasibility targets outlined in the ProDoc. The list was later narrowed to 12 priority Area Councils based on criteria such as geographic balance, biodiversity value, connectivity, and potential for community engagement[5]

28. The main environmental issues in each Area Council were initially identified through the Baseline Biodiversity Report (2020) prepared during the project design phase to support the ProDoc. The report outlines biodiversity features, current ecological conditions and trends, key environmental challenges, and recommended management actions for each Area Council

29. The Site Selection and Prioritization Report (2024) presents the results of a criteria-based process that were used to identify sites for rapid ecological assessments. While this analysis incorporated biodiversity data and spatial considerations, the selection of the 12 target sites in 9 Area Councils for

[4] Jupiter, S. D., et al. (2013). *Principles for integrated island management in the tropical Pacific*. Pacific Conservation Biology

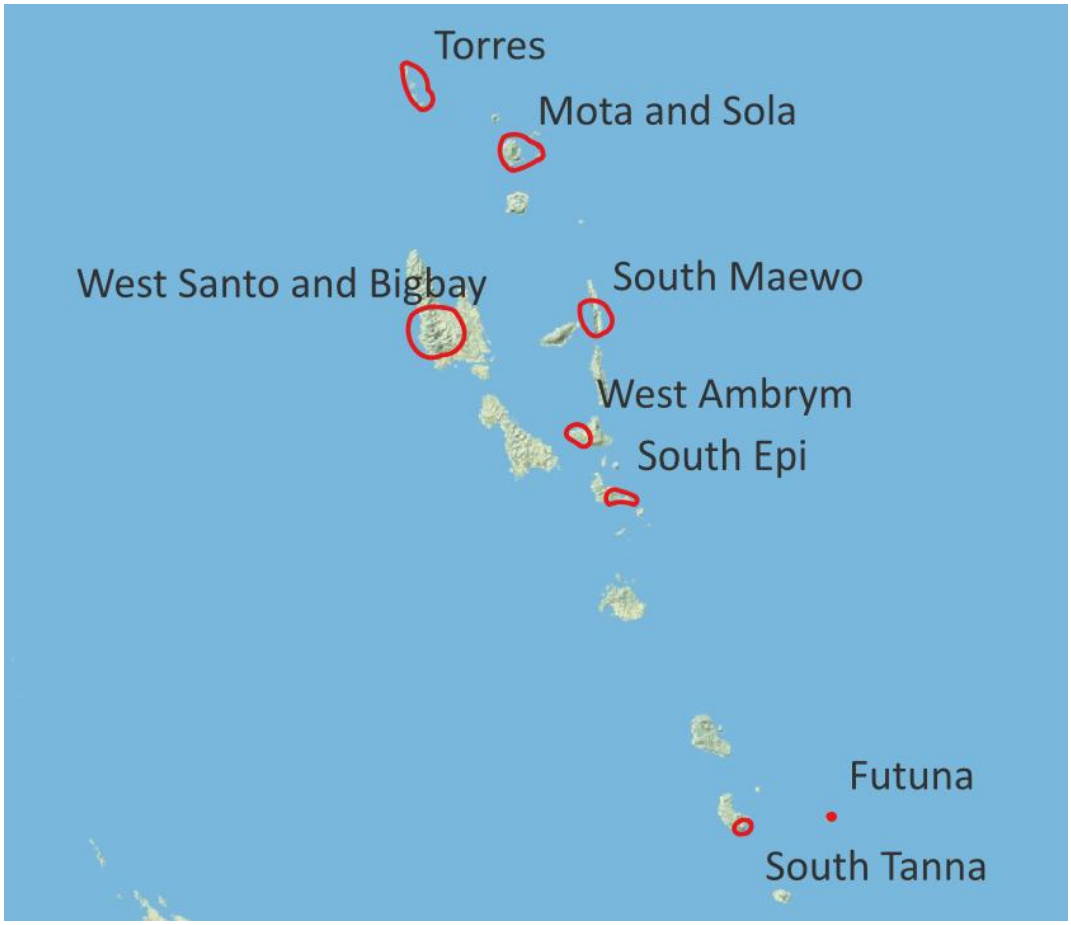
[5] VCAP2 Site Selection and Prioritisation Report (2024), Section 1.3

VCAP-II largely followed the original list defined during project design. This was primarily due to the need to meet implementation indicators and targets outlined in the ProDoc.

30. The biodiversity assessments and spatial analyses conducted during and after project design have contributed to a more detailed understanding of each selected site. This includes information on ecosystem types, species of conservation concern, customary marine tenure systems, and local reliance on natural resources. These insights have informed the identification of site-specific potential environmental and social impacts and the planning of appropriate conservation and adaptation measures within each Area Council.

31. Spatial delineation and detailed mapping of sensitive biodiversity areas, geomorphology and land use are essential for effective impact management, such mapping is addressed at the site level within the Environmental and Social Management Plans (ESMPs). These site-specific maps and associated management measures are therefore included in the ESMPs annexed to this ESIA, where they directly inform the implementation, monitoring, and enforcement of mitigation and adaptation actions.

Figure 1 VCAP-II sites location



Source: Author's own elaboration using VCAP-II information and Google Satellite imagery, 2025.

2.2. PROJECT OBJECTIVES

32. The key general objectives of VCAP-II project are the following:

To strengthen ecosystem and community resilience by restoring degraded landscapes, protecting terrestrial and marine ecosystems through the creation of Community Conservation Areas (CCAs), Marine Protected Areas, and promoting sustainable land, water, and coastal management.

To improve climate-adaptive infrastructure and local livelihoods by supporting access to safe water, resilient access routes, diversified agriculture, and improved disaster preparedness through nature-based and inclusive investments.

To embed climate adaptation and biodiversity conservation in local governance systems by ensuring Area Council Development Plans are aligned with national strategies and implemented through participatory planning processes that reflect community priorities.

To support inclusive and informed decision-making by promoting gender and social equity, respecting traditional knowledge, securing Free, Prior and Informed Consent (FPIC), and ensuring vulnerable groups are empowered to engage in planning and benefit from project outcomes.

To enhance institutional capacity, climate services, and knowledge sharing by strengthening early warning systems, data generation and use, monitoring of resilience indicators, and disseminating lessons learned to improve national policy and future programming.

33. The project's geographic scope and targets include the protection of 2,298 hectares of terrestrial areas (including 575 hectares of Marine Protected Areas, newly designated), the restoration of 5,000 hectares of degraded land across forests, agricultural areas, and grasslands, and the climate-proofing of 25 public infrastructure facilities. It also includes the development of 20 community adaptation plans, the installation of 6 Automatic Weather Stations, and the training of 2,000 individuals, with a strong emphasis on gender balance and inclusive participation at all levels. Table 1 indicates the number of targeted communities and beneficiaries, reflecting the project's broad geographic reach and community-level impact.

2.3. PROJECT COMPONENTS

34. The project is designed around interlinked components and intended outcomes, rather than stand-alone activities. Individual actions are implemented as part of broader intervention packages that combine planning processes, capacity building, governance support, and community-level implementation. For this reason, activities are best understood within the logic of each component. A detailed, site-specific description of project activities is therefore provided in the Environmental and Social Management Plans (ESMPs), where implementation arrangements are defined. Table 1 in this chapter presents an overview of project interventions by location, covering integrated community approaches, climate-resilient infrastructure works, AWS installation and water supply and WASH planning and construction.

35. The Project interlinked components are as follows:

- **Component 1.** Integrated community approaches to natural resource management and climate change adaptation developed and implemented.
- **Component 2.** Information and early warning system on coastal hazards
- **Component 3.** Institutional Strengthening for Climate and Disaster Risk Governance
- **Component 4.** Knowledge Management and Lessons sharing

36. Component 2, which focuses on strengthening early warning systems and meteorological infrastructure, is excluded from the scope of the ESIA. Activities under this component involve the installation of Automatic Weather Stations, server upgrades, and improvements to data collection and dissemination. These interventions are small-scale, non-invasive, and take place within existing

government facilities or controlled environments. They do not involve land clearing, resource extraction, or civil works that could trigger significant environmental or social risks. Accordingly, they were screened as low risk during the UNDP Social and Environmental Screening Procedure (SESP) and do not require further assessment under the ESIA.

37. Component 4, dedicated to knowledge management, awareness-raising, and the dissemination of lessons learned, is also outside the ESIA scope. This component includes activities such as documentation of best practices, training workshops, community outreach, and the development of communication materials. These actions are informational and educational in nature and do not involve physical interventions or changes in land use. As such, they pose no direct environmental or social risks, and their implementation does not require mitigation measures beyond inclusive stakeholder engagement and culturally appropriate communication strategies.

2.3.1. COMPONENT 1: Integrated community approaches to natural resource management and climate change adaptation developed and implemented

38. This component focuses on restoring degraded terrestrial and coastal ecosystems and improving access to climate-resilient infrastructure in target communities. Activities include the establishment of Community Conservation Areas (CCAs), Marine Protected Areas (MPAs), reforestation, erosion control, and the rehabilitation of coastal buffer zones. In parallel, the project supports the construction or upgrading of small-scale infrastructure—such as footpaths, bridges, and water systems—to strengthen community resilience to climate hazards. These interventions build on lessons learned from VCAP-I and are implemented using participatory, community-led approaches aligned with customary governance systems.

2.3.2. Outcome 1.1 Biodiversity conserved to improve the integrity of natural ecosystems towards increased climated resilience.

39. This outcome consists of 3 outputs that have the objective to select, assess, and develop the management plans of 6 different CCA across the country. The assessment of CCAs is done by producing baseline biophysical, ecological, and socioeconomic profiles for each site. Community mapping determines site boundaries and conservation targets. The project supports the formal registration of both terrestrial and marine CCAs, and for each site, a tailored Management Plan will be prepared in compliance with DEPC's CCA requirements and the planning guidelines established by ECARE.

40. The management plans will define core conservation zones, internal zoning and permitted uses, integrating principles of sustainable land and marine resource management. They will also address key management challenges and outline strategies to reduce pressure. All planning processes incorporate FPIC and GESI principles.

41. VCAP-II further supports the implementation of these Management Plans by strengthening community governance structures, and locally adapted monitoring tools. The Department of Environmental Protection and Conservation (DEPC) leads implementation in close coordination with communities and relevant government partners. Annual workplans for each site will guide training, resource allocation, and technical support, adapting over time based on progress and community feedback.

2.3.3. Outcome 1.2. Supported Sustainable Land Management initiatives at the community level to restore ecosystem services and improve resilience to climate change

42. Landscape restoration interventions based on prior assessments of land degradation and landscape characteristics (output 1.2.1). Approximately 10,000 hectares of degraded land are targeted for

rehabilitation through strategies defined jointly with Area Councils and local communities. Planned measures include the planting of ecologically appropriate, non-invasive species (such as vetiver grass and pineapple) in erosion-prone areas, and the promotion of agroforestry and intercropping practices in degraded agricultural zones. Priority sites include the islands of Tanna, Maewo, and Santo, where erosion risks are high. DEPC is responsible for validating species selection to prevent ecological risks[6].

43. The project also supports value chain improvements for sustainable agriculture and forestry as part of landscape restoration. In areas overlapping with terrestrial protected areas, activities will aim to reinforce sustainable land management, including the definition of buffer zones to reduce pressure on protected ecosystems and align with Outcome 1.1.[7]

44. From a safeguards perspective, all planned activities must be screened for potential environmental and social risks. These may include potential impacts related to changes in land use, the introduction of new species, or issues related to land ownership. Stakeholder engagement processes must ensure inclusive participation, particularly of women and vulnerable groups, in accordance with UNDP's Social and Environmental Standards (SES), especially those related to biodiversity, livelihoods, land and resource access, and gender equality.

2.3.4. Outcome 1.3. Improved climate resilience of coastal and upland areas through integrated approaches

45. Lessons from successful climate-smart agriculture practices in Vanuatu and other Small Island Developing States will be collected to inform the design of model farms tailored to the agroecological conditions of each of the 9 Area Councils. These farms will showcase sustainable techniques such as agroforestry, soil conservation, and resilient crops. Male and female farmers will be trained in their management, with toolkits and regular monitoring to support implementation.

46. The project will also strengthen climate resilience of coastal infrastructure in the targeted Area Councils. This includes upgrading footpaths to reduce erosion, applying nature-based solutions to protect roads and river crossings, and improving access to safe drinking water through infrastructure and safety plans. Some Area Council offices will be upgraded or newly built to serve as Emergency Operations Centres with basic supplies.

2.3.5. COMPONENT 3: Institutional Strengthening for Climate and Disaster Risk Governance

47. This component aims to embed climate adaptation and biodiversity conservation into local and national planning systems. It supports the integration of Community Climate Change Adaptation Plans (CCAPs) into Area Council and provincial development plans, strengthens relevant policies and coordination frameworks, and reinforces traditional governance in natural resource management. It also builds institutional and community capacities to plan, implement, and monitor ecosystem-based and inclusive adaptation actions

[6] VCAP-II Project Document (2022). *Vanuatu Coastal Adaptation Project – Phase II (VCAP-II)*. Final ProDoc, 28 May 2022. Output 1.2.1, pp. 37–38

[7] VCAP-II Project Document (2022). *Final ProDoc*, 28 May 2022. Output 1.1.3, p. 36.

2.3.6. Outcome 3.1. Climate Change Adaptation Plans at the community level and enabling policies and supportive institutions in place at both local and national levels

48. Vanuatu's governance is decentralized across national, provincial, and Area Council levels. The Decentralization Act (2006), implemented by the Department of Local Authorities (DLA), guides this structure. Provinces prepare development plans aligned with national policies, while 71 Area Councils develop their own plans through participatory processes. These plans reflect local priorities, including climate adaptation, and inform DLA's fund allocations via the provinces. Vanuatu is committed to mainstreaming biodiversity, SLM and climate adaptation in national planning. Key policies call for cross-sector coordination, and while progress has been made, the Disaster Risk Reduction Plan is being updated to reflect new legislation.

49. VCAP-II helps integrate Community Climate Change Adaptation Plans (CCAPs) into local and provincial planning. It reviews existing processes, identifies gaps, and strengthens coordination across governance levels. Through inclusive engagement with Area Councils, the DLA, and local committees, the project supports updated tools and builds local capacity. CCAPs focus on sustainable land and water use, disaster preparedness, biodiversity, and climate-resilient infrastructure, with strong emphasis on gender and social inclusion.

50. The project also supports policy reforms to mainstream climate adaptation across sectors. It contributes to implementing the Climate Change and Disaster Risk Reduction (CCDRR) Policy by improving monitoring systems. Under Output 3.1.1, VCAP-II will review relevant planning policies and support the development of key frameworks, such as a national coastal zone policy, revised water sector policies with catchment management, and adaptation indicators for future planning.

2.3.7. Outcome 3.2. Mainstreaming Biodiversity and Sustainable Land Management in National development and sectoral policies

51. In Vanuatu, land is managed through customary systems rooted in ancestral conservation practices. Western models of protected area management are not directly applicable; instead, VCAP-II supports the development of protected areas through approaches that combine traditional governance with sound science and landscape-based planning adapted to the local context.

52. VCAP-II will align with the ECARE Project to support Outcome 1, which aims to revise and improve policies, guidelines, and knowledge related to protected areas. This collaboration will contribute to national efforts at multiple levels. The proposed changes will be assessed through a Strategic Environmental and Social Assessment (SESA) to ensure alignment with safeguards requirements.

53. In parallel, VCAP-II will support the development of a Land Degradation Neutrality (LDN) strategy, strengthening sustainable land management (SLM) approaches, and building technical capacities for forest landscape restoration. These actions will be guided by international best practices and national priorities and will be assessed, as in the previous activity, through a Strategic Environmental and Social Assessment (SESA) to ensure consistency with safeguards requirements.

2.3.8. Outcome 3.3. Human resources in place at the National, Provincial and Area Council (AC) levels to support integrated approaches to natural resource management and Climate Change Adaptation

54. Output 3.3.1 focuses on building the capacity of national and provincial institutions to manage climate policies and nature-based solutions. This includes training in ecosystem-based adaptation, strengthening data and compliance systems, and creating tools to monitor key species. A national database will also be developed to support community profiling, all aligned with regional strategies for long-term results.

55. Output 3.3.2 supports communities in developing and implementing Community Climate Action Plans (CCAPs) that address biodiversity, sustainable land use, water and sanitation (WASH), and disaster risk reduction. Ten pilot communities will lead the process, with expansion to 30 more. Activities include training, technical assistance, and regular monitoring to ensure the plans reflect local needs and promote gender and social inclusion.

56. The table "VCAP-II indicative Focus of Project Intervention "outlines how project activities are distributed across provinces and Area Councils. It shows the approach taken in each location, combining community planning, resource management and climate-resilient infrastructure such as upgraded water systems, roads and Area Council offices. The table also indicates the number of targeted communities and beneficiaries, reflecting the project's broad geographic reach and community-level impact. Detailed mapping of sites is included in the ESMP.

Table 1 VCAP-II indicative focus of project interventions

Province	**SHEFA**	**SANMA**	**PENAMA**	**TAFEA**	**MALAMPA**	**TORBA**
Island group	**Epi**	**Espiritu Santo**	**Maewo**	**Tanna & Futuna**	**Ambrym**	**Torres & Mota**
Area Councils	Yarsu	West Coast Santo Big bay Inland	South Maewo	South Tanna Futuna	West Ambrym	Torres Mota
Target villages /communities	14communities in one area council	10 communities within 2 area councils on 1 island	9 communities in 18 villages on one island	4 communities in 10 villages on 4 islands	5 communities in 7 villages on 4 islands	5 communities in 10 villages on 5 islands
Immediate Beneficiary	1,645	1,575	2,397	2,464	1,945	1,951
Additional Beneficiary	200	1,5	1000	750	600	500
Province	**SHEFA**	**SANMA**	**PENAMA**	**TAFEA**	**MALAMPA**	**TORBA**
Island group	**Epi**	**Espiritu Santo**	**Maewo**	**Tanna & Futuna**	**Ambrym**	**Torres & Mota**
Integrated community approaches to resource management and climate change adaptation developed and implemented						
Specific focus	Area council planning with a focus on SLM, CCA and MPA.	Area council focus including CCA, MPA, SLM with R2R approaches.	Area council focus with specific R2R approach including SLM PAs and MPA.	Focused delivery-Specific R2R approach including land degradation, CCA and MPA.	Area council focus with specific R2R approach including SLM, MPA and CCA.	Area council planning addressing vulnerability and specific MPA and CCA approaches.
Climate proofing infrastructure						
Area Council Offices refurbishment / construction	Strengthening construction of Area Council office in South Epi (Yarsu).	Construction of New Area Council office building in Wusi, West Coast Area council in Santo.	Construction of New Area Council office building in South Maewo Area Council.	Construction of new Area Council office building in Futuna Area Council Refurbishment & climate proofing Construction of new Area council office building in South Tanna Area Council.	Construction of new Area Council office building in West Ambrym.	Strengthening Construction of new Area Council office building in Torres.

Rehabilitation of pathways and roads	Road slopes near Votlo, Port Quimi and Nulnesa. Road crossing near Filakara.	,	Road erosion near Naviso.	Construction and reparation of 28 Footpaths around Futuna.	.	
Water	DWSSP Plan development and implementation . Upgrading of water source and water system from the water source to the AC building. WASH.	DWSS Plan development and its implementation. Upgrading of water source and water system from the water source to the AC building dispensary, nearby school and to the new constructed tap stands. WASH.	DWSS Plan development. Implementation of DWSSP. Construction of WASH water supply and WASH in Baitora.	DWSSP Plan development and implementation. Upgrading of water source, water supply and WASH. Office construction in Futuna.	DWSSP Plan development and implementation Upgrading of water source, WASH and water supply in upland areas.	DWSSP Plan. Upgrading of water source and construction of water system of the AC building and the school. WASH water catchment / water supply.
AWS	Installation of a new AWS.	-Installation of 2 new AWS (North Santo and West Coast Santo), river gauges at South Santo River and Sarakata River. Upgrading of existing observation station.	Installation of a new AWS (North Maewo).	Upgrade of observation stations at Whitegrass (Tanna) and Aneityum		Installation of a new AWS (Torres, Sola), upgrade of observation stations at Sola.

2.4. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

57. VCAP-II is implemented by the Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management. DOCC (Department of Climate Change) is responsible for the day-to-day implementations. The Ministry holds full responsibility for the use of resources and the achievement of project outputs. A comprehensive overview of the institutions is given in section 3.

58. DOCC plays a leading role in the implementation of VCAP-II. DOCC also ensures integration of other GEF initiatives in the country including the GEF 6 ECARE project and the GEF 5 FAO project Integrated Sustainable Land and Coastal Management Project.

59. Other departments such as DEPC, VFD, DLA, DOF, DARD, DoWR, VMGD, DWA, are responsible parties for individual components of the project. The staff is fully funded by the project and appointed by the relevant department and operate according to their own procedures and technical standards but remains responsible for compliance with the project's overall objectives and safeguards.

60. The PMU is housed in the DOCC, handling day-to-day implementation. Strategic coordination is ensured through the National Advisory Board.

61. At the community level, local governments and community groups are recognized as key stakeholders and implementation partners. Communities are directly involved in the implementation of project activities, including the implementation of sustainable land management initiatives,

climate smart model farms and climate proofing infrastructures. Their participation is also essential in CCA, MPA mapping and management planning, and their free, prior, and informed consent (FPIC) is required for all activities conducted on customary land.

3. INSTITUTIONAL AND LEGAL FRAMEWORK

3.1. INSTITUTIONAL FRAMEWORK

62. This section presents the government agencies involved in the implementation of VCAP-II and outlines their mandate policies, and strategic objectives in relation to the project. This section also identifies the key legal obligations and safeguard requirements that guide the ESIA process and the design of the ESMP.

3.1.1. Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management

63. Established in 2014, this Ministry brings together the government departments responsible for environmental management, disaster preparedness, and climate governance. For the purposes of the ESIA, the Ministry provides overall institutional coordination supporting VCAP-II implementation, particularly through the DOCC and DEPC, which provide technical and operational leadership for the environmental and social components embedded in the project.

3.1.2. Department of Climate Change (DOCC)

64. The Department of Climate Change (DOCC) hosts the Project Management Unit (PMU) and leads the overall implementation of VCAP-II. It ensures that climate-related considerations and safeguard requirements are integrated into project activities. DOCC facilitates the collection and use of climate data to support impact assessment and monitoring, and coordinates with national and international partners to ensure coherence with national climate change strategies. The PMU team under DCC includes personnel specialized in safeguards, gender, GIS, water systems, forestry, and communications, who contribute directly to ESIA implementation and compliance.

65. In addition to its role in project oversight, DOCC acts as the Secretariat to the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB), and ensures that project activities align with the National Climate Change Policy and the National Adaptation Programme of Action (NAPA). The department facilitates coordination with central government agencies on operation and policy matters as required under the National Implementation Modality.

3.1.3. Department of Environmental Protection and Conservation (DEPC)

66. DEPC plays a central role in ESIA implementation, and acts as the technical authority for environmental oversight. It guides the alignment of project activities with national environmental regulations and standards. In the context of VCAP-II, DEPC leads on environmental baseline validation, application of mitigation measures, and integration of Community Conservation Areas (CCAs) into broader land use planning. DEPC also supports ecosystem-based adaptation and coastal zone management components, which are key to mitigating potential adverse impacts.

3.1.4. Department of Local Authorities (DLA)

67. DLA is mandated to support the integration of VCAP-II related safeguards into Area Council Development Plans. DLA is expected to ensure that potential environmental and social impactsidentified through the ESIA are addressed at local planning levels. DLA's coordination role with Area Councils is well placed to enable effective stakeholder engagement and implementation of community-level mitigation measures. In line with the Decentralization Act, DLA should also ensure that governance structures at the subnational level comply contribute to project follow-up and grievance redress mechanisms.

68. DLA ensures that VCAP- II aligns with the Decentralization Act, particularly its 2013 amendment, by reinforcing governance mechanisms at both provincial and Area Council levels. It builds upon lessons learned from previous community-based adaptation initiatives and provides leadership in local training, capacity building, and facilitation of infrastructure upgrades necessary to sustain project outcomes.

3.1.5. Vanuatu Fisheries Department (VFD)

69. Under the VCAP-II framework, the Vanuatu Fisheries Department contributes to the development of marine ecosystem baselines and to the design of mitigation measures related to sustainable fisheries management. The VFD supports the assessment of cumulative impacts and promotes locally adapted marine protection strategies. This includes technical guidance for activities that may affect marine ecosystems, especially in project sites where pressure on fisheries resources has been documented.

3.1.6. Department of Forests (DoF)

70. The Department of Forests supports VCAP-II implementation through its expertise in land degradation, forest conservation, and biodiversity monitoring. It provides technical inputs to restoration strategies and risk mitigation for terrestrial ecosystems. The department also advises tree planting and nursery establishment as part of the mitigation hierarchy for land-based impacts.

3.1.7. Department of Agriculture and Rural Development (DARD)

71. The Department of Agriculture and Rural Development (DARD) contributes to VCAP-II by providing technical guidance on sustainable agricultural practices aimed at reducing environmental pressures. These include risks related to land degradation, soil erosion, and the introduction of non-resilient or invasive crop species. DARD advises on the selection of climate-resilient crops, agroforestry systems, and soil conservation techniques, which are integrated into site-specific mitigation strategies. It also support community engagement to ensure that agricultural interventions align with environmental safeguards while contributing to food security and climate adaptation goals.

3.1.8. Department of Women's Affairs (DWA)

72. The Department of Women's Affairs (DWA) provides technical input to ensure that gender considerations are mainstreamed throughout the implementation of VCAP-II. Based on risks identified in the SESP—such as gender-based violence, unequal participation in community decision-making, and limited access of women to resources and benefits—DoWA supports the development of inclusive mitigation measures. These include actions that promote women's leadership, safeguard their rights, and reduce gender-based vulnerabilities. The department also contributes to the implementation and monitoring of the Gender Equality and Social Inclusion (GESI) Action Plan, ensuring its alignment with national gender policies and community realities.

3.1.9. Provincial Governments

73. Provincial governments are expected to play a facilitative and monitoring role in the delivery of VCAP-II. In the context of this ESIA, they are key actors in reviewing and endorsing site-specific adaptation plans, including interventions related to coastal protection, upland restoration, and infrastructure resilience. Their involvement helps ensure that proposed measures are responsive to potential environmental and social imlacts identified in their respective provinces, and that local realities are reflected in project design.

74. Beyond technical oversight, provincial governments are also involved in mobilizing community engagement and supporting capacity-building activities. They may contribute in-kind resources, such as staff time, facilities, or logistical support. These contributions help strengthen the project's

legitimacy at the local level and facilitate the implementation of mitigation and monitoring measures outlined in the ESIA.

3.1.10. Area Councils (AC)

75. Area Councils and local communities are central to the community-level implementation of VCAP-II. Area Councils serve as formal administrative links to the provincial government but often have limited operational capacity and representation. Area councils is therefore largely exercised through direct engagement with communities. Traditional leaders, particularly village chiefs, hold important symbolic and representative roles. However, decision-making tends to be horizontal and distributed among various community actors, which increases the complexity of coordination and requires FPIC processes to engage multiple voices and build collective agreement.

3.2. POLICY BACKGROUND

3.2.1. Vanuatu National Sustainable Development Plan (NDSP) 2016-2030[8]

76. The NSDP provides the overarching national vision and policy priorities, grouped under three pillars: society, environment, and economy. Within the environmental pillar, five key objectives are articulated: enhancing food and nutrition security, promoting blue-green economic growth, improving climate and disaster resilience, ensuring sustainable natural resource management, and conserving biodiversity. These priorities form a foundational reference for the integration of environmental and social safeguards under the VCAP-II project.

3.2.2. Constitution of Vanuatu[9]

77. Vanuatu's Constitution sets the legal basis for governance and land ownership. It affirms respect for human rights and asserts that all land belongs to the customary owners and their descendants. Only indigenous citizens can own land permanently, as stated in Articles 73 and 75. Article 81 allows the government to acquire land from custom owners for redistribution to indigenous communities, emphasizing ethnic and cultural continuity. These provisions shape the land access conditions and are vital for ensuring that project activities uphold FPIC and customary land governance.

3.2.3. Indigenous Peoples and Customary Law

78. Vanuatu's legal framework includes several provisions and laws concerning IP, particularly regarding land ownership and customary practices. Key aspects include land ownership, customary law (article 95), custom land management[10], and Islands Court Act (1983). The act created courts with jurisdiction to hear minor civil and criminal cases in accordance with local custom "so far is not in conflict with any written law and is not contrary to justice, morality and good order". Vanuatu has also been active in international discussions, emphasizing the importance of IP's rights and traditional knowledge in addressing climate change, for example at COP21 in Paris.[11]

[8] https://www.gov.vu/images/publications/Vanuatu2030-EN-FINAL-sf.pdf

[9] https://faolex.fao.org/docs/pdf/van132926.pdf

[10] https://www.fao.org/faolex/results/details/en/c/LEX-FAOC150052/

[11] https://www.sprep.org/news/vanuatu-supports-rights-indigenous-people-sharing-their-traditional-knowledge-tackle-climate?utm_source=chatgpt.com

3.2.4. National Adaptation Programme of Action (NAPA)[12]

79. Finalized in 2007, the NAPA identifies urgent climate adaptation priorities in Vanuatu. VCAP-II addresses key priorities from the NAPA, including community-based marine resource management, integrated coastal zone planning, land use management, and mainstreaming climate risk into development policies. These objectives align closely with ESIA goals of managing potential adverse environmental and social impacts and supporting resilience through locally grounded strategies.

3.2.5. National Advisory Board for Climate Change and Disaster Risk Reduction (NAB)[13]

80. Established in 2012, the NAB serves as Vanuatu's highest-level platform for climate change and disaster risk policy coordination. It provides strategic guidance and supports climate finance mechanisms. The NAB has endorsed VCAP-II and requested support for the National Adaptation Plan (NAP), reinforcing the role of the project's ESIA in aligning interventions with national priorities and institutional coordination.

3.2.6. National Biodiversity Strategy and Action Plan (NBSAP) 2018-2030[14]

81. NBSAP guides national efforts to protect biodiversity and promote sustainable resource use. It includes targets for expanding terrestrial and marine protected areas, controlling invasive species, and conserving key ecosystems. VCAP-II supports implementation under several strategic areas, such as community-based conservation and invasive species management, which are directly addressed in the ESIA mitigation and monitoring strategies.

3.2.7. Land Degradation Neutrality (LDN)

82. Vanuatu's LDN targets, articulated through the Forest Landscape Restoration Strategy (FLRS) 2020–2030, guide land restoration and soil conservation efforts. VCAP-II aligns with these commitments, and during project preparation, agencies pledged to review LDN progress. The ESIA supports LDN by identifying degraded areas and designing restoration plans to achieve neutral or positive land outcomes

3.2.8. Vanuatu National Environment Policy and Implementation Plan (NEPIP) 2016-2030

83. NEPIP serves as the strategic framework for environmental governance in Vanuatu. It emphasizes climate adaptation, biodiversity protection, and integration of environmental considerations into development planning. VCAP-II contributes to NEPIP implementation, and the ESIA process ensures alignment with its policy goals by evaluating project impacts and proposing safeguards that reinforce sustainability and institutional coherence.

3.3. APPLICABLE REGULATORY FRAMEWORK FOR ESIA

84. The applicable environmental and social legislation and policies are summarized in Table 4 to support the gap analysis against the UNDP Social and Environmental Standards (SES). Below is a description of the policy and regulatory framework influencing ESIAs in Vanuatu.

[12] https://unfccc.int/resource/docs/napa/vut01.pdf

[13] https://www.nab.vu/

[14] https://environment.gov.vu/images/Vanuatu_NBSAP_2018-2030.pdf

3.3.1. Environmental Protection and Conservation Act (CAP 283) and its subsequent amendments[15]

85. The Act establishes the protection of the environment within Vanuatu and makes provision for the conservation, sustainable development and management of the environment and the regulation of related activities. Part 4 of the EPC Act on Community Conservation Areas is currently under review to recognize traditional governance of conservation. This includes land, air and water.

86. Any proposed activity or development that may have a significant impact on the environment must undergo an Environmental Impact Assessment (EIA) before receiving approval. Department of Environmental Protection and Conservation (DEPC) is the authority responsible for determining whether a project requires environmental screening, requesting a scoping report, overseeing the preparation and review of the ESIA report, and granting (or rejecting) the corresponding Environmental Permit.

87. In addition to the EPCA, there are other instruments that support its implementation:

- Environmental Impact Assessment Regulations (2011)[16] – they establish the specific procedures, deadlines and requirements for the preparation and review of ESIAs.
- Environmental Impact Assessment Guidelines[17] – technical support documents for Project proponents and consultants, detailing how to prepare an ESIA in accordance with national requirements.

3.4. INTERNATIONAL TREATIES AND AGREEMENT

88. There are several international treaties and agreements related to the environment and social aspects that Vanuatu ratified. The table below provides broader requirements in relation to the project, with ratification date and focal point.

- Convention on Biological Diversity (1993)[18], DEPC
- Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity[19] (2014), DEPC
- Convention of International Trade in Endangered Species of Wild Fauna and Flora[20] (CITES, 1989) DEPC, VFD, DoF
- International Plant Protection Convection[21] (BV)

[15] https://mocca.gov.vu/images/publications/legislation/DEPC/Legislation/Environmental%20Protection%20and%20Conservation%20Act%20PC_Act_2002_%28consolidated_version_incl_2011_amends%29.pdf

[16] http://www.paclii.org/vu/legis/sub_leg/emacaeiar2011871

[17] https://environment.gov.vu/images/EIA/EIA_G%20EIA%20&%20VIPA.pdf

[18] https://www.cbd.int/doc/legal/cbd-en.pdf

[19] https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf

[20] https://cites.org/eng/disc/text.php?utm_

[21] https://openknowledge.fao.org/items/74275fa0-6e22-4fce-9681-884b88725d04

- Memorandum of Understanding for the Conservation of Cetacean and their Habitats in the Pacific Island Region (2006)[22], VFD
- United Nations Convention to Combat Desertification in those countries experiencing serious drough and or desertification (1999)[23], DEPC
- Stockholm Convention on Persistent Organic pollutants (2005)[24], DEPC
- Agreement Establishing the South Pacific Regional Environment Programmes (2006, SPREP) [25], DEPC and DoFA
- United Nations Framework Convention on Climate Change (1993)[26], VMGD and DoFA
- Kyoto Protocol the United Nations Frameworks Convention on Climate Change (1998)[27], VMGDA and DoFA
- Convention concerning the Protection of the World Cultural and Natural Heritage (2002)[28], Vanuatu National Commission for UNESCO, MoE
- Convention for the Safeguarding of the Intangible Cultural Heritage (2009)[29], Vanuatu National Commission for UNESCO, Moe

3.5. UNDP SES POLICIES[30]

89. All activities under VCAP-II will be guided by the UNDP Social and Environmental Standards (SES), which serve as the overarching framework for identifying, avoiding, mitigating, and managing potential adverse impacts. Effective since 1 January 2021, the SES reflects UNDP's commitment to integrating social and environmental sustainability into project design and implementation, in alignment with sustainable development goals. They also form part of UNDP's broader quality assurance and risk management systems. Compliance with the GEF Policy on Environmental and Social Safeguards is achieved through the application of the UNDP Social and Environmental Screening Procedure (SESP).

90. The SES are designed to mainstreaming social and environmental sustainability in UNDP's Programs and Projects to support sustainable development. The SES objectives are to:

- Strengthen the quality of programming by ensuring a principled approach;

[22] https://www.cms.int/pacific-cetaceans/en/page/agreement-text-0

[23] https://www.unccd.int/sites/default/files/2022-02/UNCCD_Convention_ENG_0_0.pdf

[24] https://www.pops.int/Portals/0/download.aspx?d=UNEP-POPS-COP-CONVTEXT-2023.English.pdf

[25] https://www.sprep.org/

[26] https://unfccc.int/resource/docs/convkp/conveng.pdf

[27] https://unfccc.int/resource/docs/convkp/kpeng.pdf

[28] https://whc.unesco.org/archive/convention-en.pdf

[29] https://ich.unesco.org/doc/src/15164-EN.pdf

[30] https://www.undp.org/publications/undp-social-and-environmental-standards

- Maximize social and environmental opportunities and benefits;
- Avoid adverse impacts to people and the environment;
- Minimize, mitigate, and manage adverse impacts where avoidance is not possible;
- Strengthen UNDP and partner capacities for managing social and environmental potential impacts, and
- Ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

91. The SES are a core component of UNDP's quality assurance and risk management framework. They are operationalized at the project level through the Social and Environmental Screening Procedure (SESP), which informs project design and safeguards planning.

92. To ensure transparency and accountability, the SES are supported by an Accountability Mechanism comprising two elements:

a) A Stakeholder Response Mechanism (SRM)[31], which provides individuals, communities, and other stakeholders with a means to raise concerns and resolve disputes related to project activities; and

b) A Compliance Review process (SECU)[32], that investigates allegations that UNDP has not adhered to the SES and recommends corrective actions if required.

3.6. UNDP SES STANDARDS

93. The SES are mandatory for all UNDP-supported projects and guide the identification and management of potential environmental and social impacts. In the case of VCAP-II, the ESIA is the key instrument to demonstrate compliance with these standards and to ensure that project design and implementation are aligned with both international and national safeguards.

94. The SES framework is composed of three main pillars: Programming Principles, Project-Level Standards, and Procedures and Accountability. These components collectively aim to ensure that development interventions are environmentally sustainable, socially inclusive, and contribute to equitable outcomes. Table 2 summarizes the key elements of the SES.

Table 2 Key elements of UNDP Social and Environmental Standards (SES)

Programming Principles	Project Level Standards	Procedures and Accountability
Principle 1: Leave No One Behind	**Standard 1**: Biodiversity Conservation and Sustainable Natural Resource Management	Quality Assurance and Risk Management
Principle 2: Human Rigths	**Standard 2**: Climate Change and Disaster Risk	Screening, Assessment and Management of SES Risks and Impact

[31] https://www.undp.org/accountability/audit/secu-srm/stakeholder-response-mechanism

[32] https://ses-toolkit.info.undp.org/compliance-review

Principle 3: Gender Equality and Women's Empowerment	**Standard 3**: Community Health, Safety and Security	Stakeholder Engagement and Response Mechanism
Principle 4: Sustainability and Resilience	**Standard 4**: Cultural Heritage	Access to Information
Principle 5: Accountability	**Standard 5**: Displacement and Resettlement	Monitoring, Reporting and Compliance
	Standard 6: Indigenous Peoples	
	Standard 7: Labour and Working Conditions	
	Standard 8: Pollution Prevention and Resource Efficienty	

95. The eight project-level standards focus on specific environmental and social risks and associated impacts and guide the identification of appropriate mitigation measures. Table 3 below summarizes how each standard has been applied in the ESIA process.

Table 3 Summary of UNDP SES Project level standards

Project Level Standards	Summary
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	Promotes biodiversity conservation and ecosystem services, ensuring natural resource use is sustainable and strengthens community resilience.
Standard 2: Climate Change and Disaster Risk	Addresses risks from climate change and disasters, requiring projects to assess climate vulnerability and avoid contributing to increased hazard exposure.
Standard 3: Community Health, Safety and Security	Seeks to avoid or minimize health, safety, and security risks for communities, especially those arising from construction, transport, pollution, or labour influx.
Standard 4: Cultural Heritage	Protects cultural heritage, recognizing its social, spiritual, and economic value, especially in the context of Indigenous or minority groups.
Standard 5: Displacement and Resettlement	Aims to avoid displacement. Where unavoidable, safeguards ensure compensation, legal protections, and participatory planning.
Standard 6: Indigenous Peoples	Requires respect for Indigenous Peoples' rights and FPIC, ensuring their full participation in decisions that affect their land, culture, and resources.

Standard 7: Labour and Working Conditions	Safeguards workers' rights through compliance with ILO conventions, decent work conditions, and health and safety protections.
Standard 8: Pollution Prevention and Resource Efficienty	Promotes pollution prevention and efficient resource use, consistent with international good practice and local environmental conditions.

96. A Social and Environmental Screening Procedure (SESP) was completed for VCAP-II during the design phase, identifying triggered standards and informing the scope of this ESIA.

97. A comparative analysis was conducted to determine which UNDP Social and Environmental Standards (SES) are triggered by the project and how they relate to Vanuatu's existing legal and policy frameworks. Table 4 summarizes the areas of alignment as well as gaps that require complementary measures to meet UNDP safeguard requirements.

98. The SES principles reinforce and broaden the scope of national legislation. Principle 2 (Human Rights) advances commitments to inclusivity and non-discrimination, expanding coverage across additional grounds. Principle 3 (Gender Equality and Women's Empowerment) deepens national efforts by promoting structural transformation and addressing underlying social and institutional barriers. The SES also strengthens stakeholder engagement and access to grievance redress, complementing national frameworks by enhancing their reach and operational clarity.

99. The eight project-level standards complement national legal provisions as follows:

Standard 1 enhances existing environmental laws by requiring comprehensive assessment of biodiversity, ecosystem services, and natural resource impacts as part of the ESIA.

Standard 2 adds value by addressing climate change and disaster risks in a systematic manner, beyond existing national hazard management provisions.

Standard 3 broadens the scope of health and safety regulations to encompass community impacts, construction-related risks, and public health considerations.

Standard 4 recognizes intangible heritage and traditional knowledge, supporting national efforts under customary law and promoting FPIC.

Standard 5 aligns with land and resettlement frameworks, introducing structured livelihood restoration measures, formal grievance redress, and monitoring of displacement.

Standard 6 strengthens the protection of Indigenous Peoples' rights, complementing customary protections with formal FPIC procedures and benefit-sharing mechanisms.

Standard 7 incorporates ILO conventions and good international practices, expanding on national labour laws to ensure safe, inclusive and gender-responsive working conditions.

Standard 8 promotes pollution control and efficient resource use by applying international best practices, thereby reinforcing national pollution and waste management laws.

100. To ensure full compliance, the ESIA adopts the SES framework as a complement to national systems. Where gaps are identified, mitigation and monitoring measures are aligned with UNDP guidance while also supporting local implementation capacity and contributing to national policy objectives.

101. The next chapters present a site-specific assessment of environmental and social baseline conditions, along with an evaluation of potential impacts and assciated risks in accordance with the SES standards applicable to VCAP-II.

Table 4 Gap analysis national regulation and UNDP SES

UNDP SES	National Regulations	Comparative Analysis
Principle 2: Human Rights Triggered Requirements UNDP recognizes the centrality of human rights to sustainable development, poverty alleviation, sustaining peace and ensuring fair distribution of development opportunities and benefits and is committed to supporting "universal respect for, and observance of, human rights and fundamental freedoms for all	Constitution of Vanuatu Requirements The Constitution of Vanuatu is supreme law and sets out the legal framework, which deals with the respect of human rights. Vanuatu has ratified core human rights treaties, including: • Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), • Convention on the Rights of Persons with Disabilities (CRPD), • Convention on the Rights of the Child (CRC), • International Convention on Civil and Political Rights (ICCPR), • Convention Against Torture (CAT). In addition, Vanuatu has also ratified a number of International Labor Organization (ILO) conventions that aim to protect and uphold the rights of its workers	UNDP upholds the principles of accountability and the rule of law, participation and inclusion, and equality and non -discrimination, noting that prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth, health status or other status including as an indigenous person or as a member of a minority. UNDP also ensures the meaningful, effective and informed participation of stakeholders in the formulation, implementation, monitoring and evaluation of programmes and projects which is limited in reference to the country's regulations on human rights. **Through the application of this Principle, inclusivity and accessibility to all vulnerable groups in the project affected and beneficiary communities can be ensured.**
Principle 3: Gender Equality and Women's Empowerment Triggered The promotion of gender equality and the empowerment of women are intrinsic to UNDP's human rights-based approach to development programming.	**Constitution of Vanuatu** Vanuatu's 1980 Constitution guarantees the fundamental rights and freedoms of individuals regardless of race, place of origin, religious or traditional beliefs, political opinions, language, or sex. Custom Land Management Act 2013	UNDP Principle 3 ensures that UNDP projects promote gender equality and empowerment of women. UNDP strengthens interventions tackling structural changes and removes the institutional, societal, political and legal barriers to accelerate gender equality and women's empowerment. They strive to close the gender gap by focusing on empowering and creating agency for women and men. UNDP's requirement for Principle 2 provides a broader approach to gender equality and

This effort includes advocating for women's and girls' human rights, combating discriminatory practices, and challenging the roles and stereotypes that create inequalities and exclusion.	The Act allows for the participation of women in customary institutions which are involved in decision - making regarding land matters. **Citizenship (amendment) Act 2013** The Act guarantees gender equality in citizenship eligibility.	women's empowerment than the Constitution and respective Acts mentioned herein.
Principle 5: Accountability Triggered UNDP promotes accountability to programme and project stakeholders by (i) enabling active local community engagement and participation in decision -making, particularly those at risk of being left behind; (ii) ensuring transparency of programming interventions through provision of timely, accessible and functional information regarding supported activities, including on potential environmental and social risks and impacts and management measures; (iii) ensuring stakeholders can communicate their concerns and have access to rights-compatible complaints redress processes and mechanisms; and (iv) ensuring effective monitoring and environmental risk management measures.	**National RTI Policy 2013** The Policy takes into account the guiding principles of social justice, human rights, good governance, transparency and accountability, and public participation. The Government recognizes the importance of information disclosure to good governance, an indicator of which is increased transparency	UNDP promotes accountability to programme and project stakeholders by actively engaging with them and being participants in the decision-making process. Thus, ensuring transparency of programming interventions through provision of timely, accessible and functional information. **The principles also mention the setting up a robust Grievance Redressal Mechanism for the project which is broader in scope as related to the requirements under the RTI Policy**.

Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management Triggered UNDP is committed to integrating biodiversity and ecosystem management into development planning and production sector activities, strengthening protected areas systems, and managing and rehabilitating ecosystems for adaptation to and mitigation of climate change.	**Environmental Protection and Conservation Act 2002 and its subsequent amendments** The Act establishes the protection of the environment within Vanuatu and makes provision for the conservation, sustainable development and management of the environment and the regulation of related activities. This includes land, air and water. Specifically, the Act introduces the requirement for environmental impact assessment and provides for the conservation of biodiversity and the establishment of protected areas in Vanuatu. **Water Resources Management Act 9 of 2002 (Water use rights).** The Water Resources Management Act (2002) provides for the protection, management and use of water resources in Vanuatu. The act allows for the designation of policies to protect water resources; and provides for water conservation zones to be established. Section 7 of the Act states that 'a person must apply to the Director for the right to construct, operate or maintain works for any purpose that does not comply with Section 4 or 5, including: a) any work in or adjacent to any water or any bore; or b) any work whose purpose is to supply water to any other person	UNDP SES Standard 1 ensures that the assessment of the impacts on the natural resources, biodiversity and ecosystem services should be undertaken as an integral part of ESIA studies so that adequate mitigation measures can be adopted to offset the risks and impacts identified. The Environmental Protection and Conservation Act and Forestry Act [CAP 276] and Regulations is restrictive in ensuring that an assessment of the impacts on the natural resources, biodiversity and ecosystem services should be undertaken as an integral part of ESIA study. **Hence, Standard 1 of UNDP SES shall be complied to ensure that the risks and impacts related to the project activities are identified so that appropriate mitigation measures are developed**.

	The application of the act mandates for an application to the Director for Water Works and Water Use Permits prior to works commencing. **Forestry Act No 31 of 2019** This Act makes provision for the management, conservation and development of forestry resources in Vanuatu, establishes the Forests Board of Vanuatu, provides for the granting of rights relating to forest exploitation, for the declaration of Conservation Areas, for the protection of the environment and the establishment of the Forestry Project Fund for purposes of reforestation and regulates the export of timber. The Act introduces two main requirements for any commercial forestry operations, i.e., an agreement under Part 4 and a licence under Part 5.	
Standard 2: Climate Change and Disaster Risks Triggered This Standard is applicable to projects that (i) have development outcomes that may be threatened by climate change or disaster risks; (ii) may contribute to increased exposure and/or vulnerability to climate change or disaster risks; or (iii) may produce significant GHG emissions.	**Meteorology, Geological Hazards and Climate Change Act 2016 (Act No. 25 of 2016).** The Meteorology, Geological hazards and Climate Change act sets the following objectives: 1) to ensure a high quality services provided in relation to weather, climate, flood forecasting and geological hazards; 2) to promote capacities of governments, communities and organisations to understand and respond to risks arising from weather events, climate change and geological hazards; 3) address the needs of operators of ships and aircrafts and of tourists to access all necessary weather	UNDP SES Standard 2 ensures that the projects avoid or minimize the exacerbation of impacts caused by natural or man-made hazards, such as landslides or floods that could result from land use changes due to the project activities which is wider in scope as compared to the Meteorology, Geological Hazards and Climate Change Act 2016. Standard 2 shall be complied with to ensure that the project does not contribute towards disaster risks and that adequate measures are developed and implemented throughout the project cycle.

	forecasts, bulletins, alerts, warnings and information concerning geological hazards; 4) facilitate the use and application of relevant information, forecasts, bulletins and warnings generated to and by local, regional and international bodies.	
Standard 3: Community Health, Safety and Security Triggered This Standard addresses the need to avoid or minimize the risks and impacts to community health, safety and security that may arise from project-related activities, with particular attention given to disadvantage and marginalized groups	**Health and Safety at Work Act (Cap. 195).** This Act deals with various aspects of occupational health and safety. Specifies duties of employers to ensure health, safety and welfare at work of employees and manufacturers.	UNDP Standard of Community Health, Safety and Security ensures that risks and impacts caused to the community are adequately mitigated which is broader in scope that the national regulations that looks into only the health and safety of workers. **Standard 3 shall be complied with to ensure that the community health&safety including working aspects are evaluated and mitigated during the various phases of the project cycle.** **Structural elements shall be designed and constructed by competent professionals and certified or approved by the competent authorities or professionals. For projects with structural elements or components whose failure or malfunction may threaten the safety of the workers, UNDP ensures that the plans for project supervision, operation, and maintenance are developed and monitored. Independent expertise on the verification of design, construction, and operational procedures is used and periodic safety inspections are carried out. This shall be complied with by the contractor for all structures that would be constructed as part of the project.**

		UNDP ensures that the projects avoid or minimize transmission of communicable diseases that may be associated with the influx of temporary or permanent project labour. The contractor will adhere to the national regulation while setting up the sanitary facilities for workers at the construction area. In addition, the proponent will also comply with UNDP Standard 3 requirements to ensure appropriate services for the labourers are provided to minimize the impact generated by the facilities to the environment.
Standard 4: Cultural Heritage Triggered This Standard seeks to ensure tha Cultural Heritage is preserved, protected and promoted in project activities in a manner consisted with UNESCO Cultural Heritage conventions or other relevant national or international legal instruments.	**Traditional Knowledge and Expressions of Culture Act (Act No. 21 of 2019)** This law, effective since January 2020. Protects the rights of traditional owners over traditional knowledge and cultural expressions such as dances, music, art, stories and symbols. It establishes perpetual, inalienable moral and cultural rights and prohibits their use without prior consent. It also creates the Tradtional Knowledge and Expressions of Culture Authority, with oversees registration usage agreement and dispute resolution. **Preservation of Sites and Artefacts Act (Cap. 29).** This act protects sites and objects of historical, ethnological, archaeological or artistic significance. It provides a framework for the identification, registration and conservation of these elements.	UNDP standard 4 adopts a broader definition, encompassing both tangible and intangible heritage, including traditional knowkedge, spiritual values and natural features. The SES also mandates FPIC before using cultural heritage. Custormary law plays a central role in Vanuatu and is often effective in protecting heritage, but it lacks formal documentation or monitoring structures.
Standard 5: Displacement and Resettlement Triggered	**National Policy on Climate Change and Disaster-Induced Displacement (2018)** Is the main national policy addressing all forms of displacements, including due to natural disasters,	In standard 5, SES introduces the development of formal Resettlement Action Plans, systematic livelihood restoration measures, and structured, documents consultation aligned with FPIC principles.

This Standard recognizes that changes in land tenure arrangement and access to resources can lead to physical relocation and economic rehabilitation.	climate change, development projects and land conflicts. Establishes principles for protection, consultation, planned relocation and integration of displaces persons. **Customary Land Management Act (2013)** Establishes mechanisms for resolving land disputes under customary law. Crucial when dealing with access to land or resettlement of affected people on customary lands.	UNDP also calls for formal Grievance Redress Mechanisms and ongoing monitoring and reporting of displacement impacts.
Standard 6: Indigenous People Triggered The promotion and protection of the rights of indigenous peoples, especially concerning their lands, territories, resources, traditional livelihoods, tangible and intangible Cultural Heritage, are necessary to achieve UNDP's goals of advancing human rights, respecting indigenous peoples identities and improving their well-being.	**Protection of Traditional Knowledge and Expressions of Culture Act 2019 (Act No. 21 of 2019)** The Act provides for the protection, regulation and management of traditional knowledge and expressions of culture in Vanuatu and for related matters.	Standard 6 ensures that projects undertaken by UNDP avoids adverse impacts on the rights of indigenous peoples, their lands, territories, resources, to mitigate and remedy residual impacts, and to ensure provision of just and equitable benefits and opportunities for indigenous peoples in a culturally appropriate manner. While the Act specifically discusses about safeguarding traditional knowledge, the UNDP's Standard 6 is specific as it ensures the full and effective participation of indigenous peoples, with the objective of securing their free, prior, and informed consent (FPIC) where their rights, lands, territories, resources, traditional livelihoods may be affected.
Standard 7: Labour and Working Conditions Triggered	**Employment Act (Cap 160)** The Act takes into account the labour codes, general labour and employment conditions.	UNDP Standard 7 ensures that the projects are gender-sensitive and considers the risks on the health and safety of the women and children. **Standard 7 of UNDP shall be complied by the contractor to ensure that the labourers are provided**

The pursuit of inclusive and sustainable economic growth, full and productive employment and decent work for all requires the protection of workers' fundamental rights, their fair treatment, and the provision of safe and healthy working conditions.	**Minimum Wage and Minimum Wages Board Regulations (Order No. 56 of 1987) and its subsequent amendments** This Act sets the minimum wage rate in Vanuatu for workers in municipalities, agricultural workers and students and young workers.	**with safe and healthy working environment (aligned with RB EHS Guidelines and ILO conventions), considering the risks inherent to the particular sector, including gender bias, and specific classes of hazards in the work areas as the national regulation** is restrictive in terms of encompassing risks inherent to various sectors and classes of hazards in the work areas. Standard 7 of UNDP shall be complied with as it ensures that the steps are taken to prevent accidents, injury, and disease arising from, associated with, or occurring during the course of work .
Standard 8: Pollution Prevention and Ressource Efficiency Triggered The Pollution Prevention and Resource Efficiency Standard recognizes that increased industrial activity, urbanization, and intensive agricultural development often generate increased levels of pollution1 to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global level. Pollution prevention and resource efficiency are core elements of a sustainable development agenda and UNDP projects must meet	**Pollution (Control) Act No.10 of 2013** The objectives of this Act are to minimize and manage the discharge and emission of pollution and encourage all levels of government to work together to control the discharge and emission of pollution. Clause 8 imposes a requirement on owners and occupiers of premises to comply with prescribed standards for the discharge of pollution, wastewater and the emission of noise, odour or electromagnetic radiation and Clause 9 establishes a permit scheme for the discharge or emission of pollutants and creates offences for the discharge or emission of pollutants without a permit. **Waste Management Act No.24 of 2014** An Act to provide for the protection of the environment through encouragement of effective waste services and operations.	UNDP's Standard 8 ensures that the projects avoid the release of pollutants, and when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release. This applies to the release of pollutants into the air, water, and land due to routine, non-routine, and accidental circumstances. The Pollution (Control) Act No.10 of 2013 and Waste Management Act No.24 of 2014 are restrictive as it discusses how effluents should be treated. Standard 8 shall be complied with as it considers minimisation and/or control mechanism in terms of controlling the intensity and mass flow of the pollutant's release. UNDP Standard 8 ensures that pollution prevention and control technologies and practices, consistent with international good practice, are applied during

good international practice in this regard.	A designated waste management operator must prepare and submit reports relating to any aspect of waste management under its responsibility to the Department, the Ministry of Health and the Department of Biosecurity.	the project life cycle. The technologies and practices applied shall be tailored to the hazards and risks associated with the nature of the project. The respective national Acts ensure the respect and recognize international and regional standards and other national standards which are based on international standards.

4. ENVIRONMENTAL AND SOCIAL BASELINE

4.1. METHODOLOGY AND INFORMATION STATUS

102. This chapter presents the physical, biological, and socioeconomic characteristics of the VCAP-II project areas, which together constitute the baseline for the assessment of potential environmental and social impacts and for future monitoring. Given that the project operates across multiple provinces, the assessment area includes all identified implementation sites. Where project locations have not yet been confirmed, provisional or most likely areas have been considered to ensure that both direct and indirect impacts are accounted for.

103. The baseline information presented here is primarily based on a desktop review of existing literature, previous assessments, and technical reports relevant to the target islands. It is complemented by site-specific information gathered during a field visit in March 2025, as well as by publicly available datasets and survey results from VCAP-II and other recent projects operating in the same regions.

104. Due to time and logistical constraints, no new quantitative field studies were conducted for this ESIA. Where significant data gaps were identified—particularly in relation to biophysical indicators, land use, and infrastructure—the accompanying ESMP flags the need for additional investigation and monitoring during project implementation. This approach ensures that future updates to impact assessments and mitigation plans can be informed by improved site-specific evidence.

4.2. PHYSICAL CONTEXT OF VANUATU

4.2.1. Geology and soils[33] [34]

105. Vanuatu is a volcanic archipelago located along the tectonically active boundary between the Indo-Australian and Pacific plates. It forms part of the New Hebrides Island Arc, which was created by the subduction of the Australian Plate beneath the Pacific Plate at the New Hebrides Trench. This geodynamic setting results in frequent seismic activity, volcanism, and tectonic uplift.

106. The islands exhibit diverse geological formations, ranging from active volcanoes to older eroded volcanic landscapes, uplifted coral terraces, and sedimentary deposits. Active volcanoes such as Mount Yasur (Tanna) and Ambrym continue to reshape the environment, presenting ecological and social risks. The dominant rock types are volcanic—mainly basalt and andesite—alongside limestone and coral-derived sediments, particularly in coastal areas and uplifted platforms.

107. The geomorphology of Vanuatu reflects this geological complexity. Larger islands such as Espiritu Santo, Malekula, and Efate are characterized by volcanic mountain ranges, deeply incised plateaus, and steep river valleys. Mount Tabwemasana, on Espiritu Santo, is the highest point in the country at 1,879 meters above sea level. Coastal areas feature fringing coral reefs, narrow plains, and uplifted coral terraces.

108. Fluvial systems in Vanuatu are generally short and steep, with limited alluvial plains. River channels are often dynamic and can transport significant sediment loads during intense rainfall events, contributing to soil erosion and localized flooding. These processes are intensified by deforestation, road construction, and other land-use changes.

[33] FAO. 2016. AQUASTAT Country Profile –Vanuatu. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy

[34] Pro Natura International. The Natural History of Santo (2006).

109. Ongoing geomorphological processes—including landslides, coastal erosion, and volcanic activity—continue to modify the landscape. Many communities are located in areas highly exposed to these hazards. Understanding the geological and geomorphological setting is essential for informing infrastructure planning, applying nature-based solutions, and reducing disaster risks in the context of VCAP-II.

4.2.2. Hydrology and water resources

110. Most communities in Vanuatu rely on rainwater harvesting systems, springs, and shallow hand-dug wells for their water supply. Access and reliability vary significantly across islands. While many sources are located near households, their availability is highly seasonal, with prolonged dry periods leading to water scarcity in several areas.

111. Rainwater is generally preferred due to its relative safety, but in remote or low-infrastructure areas, unprotected springs and surface water sources remain in use. In coastal and low-lying regions, groundwater salinization is a growing concern. To address these challenges, the project includes the development and expansion of piped water distribution networks to enhance water security and ensure year-round access to safe drinking water.

112. Vanuatu's rivers and streams are ecologically valuable, with high levels of freshwater endemism and healthy fish populations. The Government of Vanuatu, in collaboration with the French Natural History Museum, has conducted surveys of freshwater ecosystems on several major islands to document the aquatic biodiversity**.** [35]

113. According to the 5th National Biodiversity Strategy and Action Plan (NBSAP) Report, various activities are negatively impacting freshwater ecosystems and species. These include upstream disturbances, sand extraction, and riverbank encroachment due to settlements and infrastructure development.

114. The Vanuatu Climate Resilient Transport Project (VCRTP)[36] has documented how continuous sand extraction along rivers alters natural watercourses near estuaries and contributes to coastal erosion. This, in turn, affects coastal vegetation and worsens the impacts of sea level rise. Altered river morphology also allows saltwater intrusion to reach further inland than under natural conditions, degrading the ecological function of these systems.

4.2.3. Climate and natural hazards (cyclones, earthquakes, volcanic activity)

115. Vanuatu is consistently ranked among the most disaster-prone countries in the world. According to the World Risk Index 2023, it holds the highest global disaster risk score, driven by its high exposure to natural hazards, limited response capacity, and socio-economic vulnerability[37]. Its location within the South Pacific cyclone belt and on the seismically active Pacific Ring of Fire exposes the population to both climatic and geophysical hazards, which directly impact livelihoods, infrastructure, and basic services such as water and food security.

116. **Tropical cyclones** are the most frequent and destructive climate-related hazards affecting Vanuatu, with an average of two to three tropical cyclones per season (November to April). Severe cyclones such as Pam (2015), Harold (2020), and the twin cyclones Judy and Kevin (2023) have had devastating effects on coastal and inland communities, especially on outer islands[38]. The selected

[35] https://www.cbd.int/doc/world/vu/vu-nr-05-en.pdf

[36] https://documents1.worldbank.org/curated/en/336121574320056386/pdf/Environmental-and-Social-Impact-Assessment.pdf

[37] https://weltrisikobericht.de/wp-content/uploads/2024/01/WorldRiskReport_2023_english_online.pdf

[38] UNOCHA (2023). Vanuatu: Situation Report – Tropical Cyclones Judy & Kevin

project sites, including those in Tanna, Epi, Espiritu Santo, and the Torres Islands, are particularly exposed due to their location and the limited protective infrastructure. Cyclones commonly result in the destruction of homes and public buildings, contamination of water sources, damage to food gardens, and disruption of communication and transport networks.

117. **Heavy rainfall and flooding** often accompany cyclones and are increasing in intensity and frequency due to climate change[39]. Flash floods and prolonged wet seasons can lead to landslides and road inaccessibility, especially in highland or steep areas like Maewo, Ambrym, and parts of Santo. These events frequently affect water supply systems, either by damaging infrastructure or contaminating sources with runoff and sediments. As climate change alters rainfall patterns, these risks are expected to increase in severity and unpredictability.

118. **Heatwaves** and droughts are becoming increasingly significant in Vanuatu. Although the climate is typically humid tropical, recent years have seen longer and more intense periods of high temperatures, affecting water demand and human health—particularly among vulnerable groups such as children and the elderly. Droughts, especially during El Niño years, further reduce water availability and agricultural productivity, with severe effects in areas such as Futuna, Ambrym, and the Torres Islands. [40]

119. Vanuatu is also exposed to frequent **seismic and volcanic activity**[41]. Earthquakes occur regularly and may trigger landslides or, in rare cases, tsunamis. Several islands within the project area—such as Ambrym, Tanna (Mount Yasur), and Epi have near active volcanoes. Eruptions can degrade air quality, contaminate water sources with ashfall, damage crops, and force temporary evacuations. Past volcanic events have led to community displacement, notably in Ambrym and Ambae. [42]

120. **Sea level rise and coastal erosion** are slow-onset climate hazards affecting many of the project's coastal communities, particularly in the Torres Islands, West Santo, and South Tanna. Saltwater intrusion into freshwater lenses and gardens is already reported in low-lying areas. Over time, these changes may compromise the long-term viability of traditional water sources and agricultural zones.

121. Given these risks, the project areas exhibit chronic vulnerability, which is exacerbated by limited local capacity, geographic isolation, and inadequate infrastructure. Understanding the local exposure to these hazards is essential in designing climate-resilient water supply systems and infrastructure, supporting early warning systems, and strengthening community preparedness and adaptation efforts.

122. Under a high greenhouse gas emissions scenario (RCP 8.5), the number of **tropical cyclones** passing within 500 km of Vanuatu is projected to decrease by 12% by the end of the 21st century. However, the average wind speed of cyclones is expected to increase slightly (by 2–6%), potentially leading to more intense and damaging events[43].

123. Overall, the VCAP-II target areas face a complex and interlinked set of climate and geophysical hazards. Their chronic vulnerability is exacerbated by geographic isolation, limited infrastructure, and weak coping capacities. Understanding this risk landscape is essential to design effective adaptation measures, disaster-resilient infrastructure, and early warning systems to enhance local resilience.

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[39] SPREP (2021). Vanuatu State of Environment and Outlook Report. https://vanuatu-data.sprep.org/dataset/climate-change-and-social-change-vulnerability-and-adaptation-rural-vanuatu-olivia-warrick

[40] IPCC (2021). *Sixth Assessment Report, Working Group II – Impacts, Adaptation and Vulnerability*.

[41] USGS (2023). *Recent Earthquakes in the Southwest Pacific*.

[42] https://www.gns.cri.nz/research-projects/vanuatu-volcano-monitoring-system/

[43] Tropical cyclone observations, trends and projections for Vanuatu

4.3. BIOLOGICAL ENVIRONMENT

4.3.1. Terrestrial and marine ecosystems

124. Vanuatu hosts a wide range of terrestrial and marine ecosystems that provide essential environmental services, sustain local livelihoods, and are deeply embedded in the cultural practices of rural communities. The diversity of ecosystems across the project's seven island sites reflects Vanuatu's complex volcanic origins, varying topography, and exposure to climatic and geophysical dynamics.[44]

125. **Terrestrial ecosystems** in the project areas include lowland and upland tropical forests, riverine vegetation, secondary forest mosaics, food gardens, and areas under shifting cultivation. In Torres and Mota, communities depend heavily on forest cover for fuelwood, timber, medicinal plants, and protection of freshwater sources[45].. Forests in West Coast Santo remain relatively intact and serve as important biodiversity corridors, water catchments, and habitat for endemic species. In South Maewo, land pressure is increasing, and the landscape consists of a mosaic of secondary forests and degraded areas under cultivation.

126. In West Ambrym, volcanic activity has shaped a distinctive and fragile ecological landscape, marked by fragmented forests, recurrent ashfall, and dynamic natural regeneration. While upland forests support local agriculture and water supply, recovery is limited by land pressure and volcanic disturbance. South Tanna and Futuna present a mosaic of forest patches, bush gardens, and coastal vegetation, with a high dependence on land for subsistence farming. In Yarsu (Epi), upland forest remnants are increasingly threatened by garden expansion. Across all sites, invasive species—particularly *Merremia peltata*—and uncontrolled bushfires pose significant risks to forest integrity and resilience. [46]

127. **Marine and coastal ecosystems** include fringing coral reefs, seagrass beds, mangroves, and nearshore fishing grounds. These systems are essential for local diets, small-scale income, and cultural practices[47]. In Torres and Mota, communities rely on nearshore reefs and traditional fishing methods; reef health remains relatively good, though signs of overfishing and coral bleaching are emerging. Coral reefs in South Maewo are under stress, and community-based marine management remains limited in enforcement capacity.

128. In West Ambrym, fishing grounds show declining productivity, and knowledge of marine resource management is limited, though some traditional "tabu" practices persist[48]. South Tanna experiences intense human pressure on coastal resources and lacks formal protection mechanisms. In contrast, Futuna demonstrates strong community commitment to marine conservation, including traditional marine protected areas and improved local enforcement. In Yarsu (Epi), communities are actively engaged in marine protection, though reef health remains vulnerable due to climate-related stress and declining fish stocks[49].

129. Across all sites, the sustainability of terrestrial and marine ecosystems is tightly linked to customary land and marine tenure systems. Communities manage resources through traditional rules, with varying degrees of formal support. However, ecological degradation—driven by land

[44] SPREP (2021). *State of Environment and Outlook Report – Vanuatu*

[45] FAO (2012). *Vanuatu Forestry Outlook Study*.

[46] VNSO & GIZ (2020). *Community Climate and Ecosystem Risk Profiles – Vanuatu Islands*

[47] IUCN & MACBIO (2017). *Marine Ecosystem Services Valuation for Vanuatu*

[48] WCS Vanuatu (2020). *Community-Based Marine Conservation in Ambrym and Santo*.

[49] VESS (2021). *Community Marine Management and Compliance Assessment – Tafea Province*.

pressure, invasive species, unsustainable harvesting, and climate change—is weakening the ability of these ecosystems to support livelihoods and maintain ecological functions. Reforestation, mangrove restoration, and reinforcement of local conservation governance are identified as urgent priorities for ecosystem recovery and resilience[50]. The key features of terrestrial and marine ecosystems by project site are summarized in the table below, highlighting community uses and the main pressures identified during baseline assessments[51].

Table 5 Summary of Terrestrial and Marine ecosystems

Site	Terrestrial Ecosystems	Marine Ecosystems	Community Use	Key Pressures / Threats
Yarsu (Epi)	Upland and secondary forest; food gardens	Fringing reefs; seagrass beds	Gardening, timber, reef fishing, community conservation	Garden expansion, reef pressure, bleaching, bushfires, illegal harvesting of turtles
West Coast Santo	Intact lowland and montane forests; rivers; biodiversity corridors	Reefs and river mouths	Water catchment, hunting, reef fishing, customary use	Sedimentation, overharvesting, forest encroachment, illegal fishing activity
Big Bay (Santo)	Highland forest; some cleared forest for agriculture, rivers	Mangrove-fringed estuary areas	Subsistence farming, fishing, firewood collection, water catchment, fishing	Logging, shifting cultivation, climate variability, invasive species
South Maewo	Mosaic of degraded forest, secondary growth and gardens	Coral reefs under stress; low enforcement of marine rules	Subsistence agriculture, fishing, traditional resource harvesting	Invasive species, land pressure, weak marine governance
West Ambrym	Volcanic terrain; patchy forest, ash-affected land, regenerating areas	Degraded reefs; limited mangroves	Fuelwood, farming, fishing (declining), ad hoc *tabu* areas	Volcanic disturbance, low marine knowledge, invasive species
South Tanna	Mixed coastal forest, bush gardens, agroforestry	Pressured reefs, limited protection, small-scale fisheries	Coastal agriculture, reef fishing, ceremonial use	Overfishing, coastal erosion, weak marine enforcement
Futuna	Coastal forest and food gardens	Coral reefs with community-designated *tabu* zones	Marine harvesting, gardens, customary reef protection	Small reef area, climate stress, isolation limits enforcement capacity
Torres and Mota	Forested islands; freshwater-dependent systems	Healthy reef systems, fringing coral, mangroves	Timber, bush gardens, reef fishing, mangrove use	Sea level rise, invasive vines, risk of marine overuse with increasing pressure

[50] NBSAP Vanuatu (2018–2030). *National Biodiversity Strategy and Action Plan*.

[51] The information included in the table is consistent with the data presented in the annexes 20 and 21 of the ProDoc.

4.3.2. Representative flora and fauna

130. The project areas encompass a wide range of biodiversity-rich environments, from montane forests and freshwater systems to coral reefs and coastal wetlands. Each site supports flora and fauna that are ecologically significant and culturally embedded in local livelihoods, traditional knowledge, and food systems[52].

131. In **Torres and Mota**, dense forested islands support native tree species such as Canarium indicum (Nangai), Terminalia spp., and tree ferns. The fauna includes the coconut crab (Birgus latro), flying foxes (Pteropus spp.), including the endemic fruit bat species, the Banks Flying Fox (*Pteropus fundatus)* and sightings of dugongs *(Dugong dugon)* in nearshore waters. The Vanuatu megapode (Megapodius layardi), listed as vulnerable, remains culturally and ecologically significant[53].

132. **West Coast Santo** contains some of the most intact native forest in Vanuatu, hosting species such as wild yams, *Pometia pinnata*, and tree ferns. The area also supports the critically endangered Santo mountain starling *Aplonis santovestris,* endemic to the island, as well as coconut crabs, skinks, and freshwater prawns and eels, which are key to local diets[54].

133. In **Big Bay (inland Santo)**, riverine ecosystems are used for seasonal fishing of *Anguilla* spp. and *Macrobrachium* spp. Traditional *tabu* practices protect specific sections of rivers, ensuring species persistence. Upland forest remnants host forest birds and fruit bats.

134. **South Maewo** is dominated by secondary forest and agroforest systems, with cultivated and wild varieties of taro (*Colocasia* spp.), banana, and breadfruit. Common fauna include flying foxes, bush fowl, herons, and coconut crabs, which are still widely gathered for food[55]. There is also characterized by numerous rivers that support a diversity of freshwater species, providing important resources for local communites.

135. **West Ambrym** presents a disturbed volcanic landscape, but supports resilient flora such as *Metrosideros collina*, wild kava (*Piper methysticum*), and dense fern cover. Faunal diversity includes the Vanuatu megapode (*Megapodius layardi)* and endemic bird species found only in Vanuatu. It is unique in its breeding behavior, as it buries its eggs in warm sand or volcanic soils, relying on geothermal heat for incubation. The Vanuatu Megapode is classified by the IUCN as Endangered (EN), with a declining population due to egg havesting, predators and habitat loss. The megapode and its eggs are protected under local rules[56].

136. **Futuna** features coastal forest with *Barringtonia asiatica*, vines, and medicinal plants. The fauna includes marine birds, fruit bats, and reef fish that are heavily relied upon. Futuna is home to the endemic Palm Lorikeet *(Charmosyna palmarum)*, a nectar-feeding parrot listed as Near Threatened (IUCN) and the endemic Aneitum Skink (*Emoia aneityumensis),* a small forest dwelling lizard classified as Vulnerable (IUCN). The community has shown high awareness of changes in species availability and maintains *tabu* reef areas for conservation[57].

137. **Yarsu (Epi)** retains upland forests with *Nangai*, secondary forest species, and cultivated plots. The area supports endemic birds such as the Vanuatu kingfisher, fruit bats, and freshwater invertebrates.

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[52] The information summarized in this section draws primarily from the biodiversity inventories and stakeholder consultations referenced in Annexes 20 and 21

[53] NBSAP Vanuatu (2018–2030); SPREP (2021)

[54] SPREP (2021); WCS Vanuatu (2020); IUCN Red List

[55] FAO Forestry Outlook Study (2012)

[56] DEPC (2020); Local ecological knowledge, Ambrym field note

[57] MACBIO (2017); WCS-VESS workshop reports

Community conservation efforts are active but face challenges from land clearance and fire[58]. Invasive species such as *Merremia peltata* and feral pigs are present in several sites, affecting native flora and fauna. In addition, the coastal areas provide important nesting sites for marine turtles, including green turtle *(Chelonia mydas)*, leatherbak *(Dermochelys coriacea),* and hawksbill *(Eretmochelys imbricata).*

4.3.3. Endemic, threatened and protected species

138. Vanuatu hosts 129 globally threatened species, with an important number of endemic, threatened, and protected species that require special attention in conservation and management efforts. The Vanuatu megapode (*Megapodius layardi*), classified as vulnerable by the IUCN, is found in several project areas and is protected under local customary laws. The Santo mountain starling (*Aplonis santovestris*), critically endangered and endemic to Santo island, depends on intact forest habitats.Similarly, the collared petrel (*Pterodroma brevipes*), a near-threatened seabird species, nests on Tanna and is vulnerable to habitat loss and invasive predators.[59]

139. The endemic flying foxes, *Pteropus fundatus*, *Pteropus anetianus* and other *Pteropus* spp., play a vital ecological role as pollinators and seed dispersers but face threats from hunting and habitat degradation. The Vanuatu kingfisher (*Todiramphus farquhari*), found in upland forests of Epi island, is an endemic species with restricted range and is sensitive to land clearance and fire.[60]Conservation of these species is supported by a mix of a combination of community-based tabu areas, local customary protections, and national regulations.

140. In response to these conservation challenges, the project support the integration of species-specific management measures within Community Conservation Area (CCA) Management Plans, developed in collaboration with local communities and in coordination with NGOs and technical partners. These measures will address species of concern identified within project sites, including the Vanuatu Megapode (*Megapodius layardi*), Banks Flying Fox (*Pteropus fundatus*), Collared Petrel (*Pterodroma brevipes*), Coconut Crab (*Birgus latro*), and marine turtles such as Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), and Leatherback (*Dermochelys coriacea*), all of which are listed under threatened categories of the IUCN Red List.

141. The CCA Management Plans will also incorporate provisions for invasive species control, and will include targeted actions to mitigate illegal and unsustainable use of species and reduce pressures on vulnerable ecosystems. Through this integrated approach, the project seeks to safeguard endemic and threatened species while enhancing ecological integrity and resilience to climate change.

142. The following paragraphs detail key species and conservation challenges across the project sites. The table below summarizes the key endemic and threatened species identified across the VCAP-II project sites, based on information compiled from Annexes 20 and 21 of the ProDoc. It highlights species of conservation concern, the main threats they face and the current status of local or formal management efforts. This synthesis provides a basis for prioritizing site-specific biodiversity actions within the ESMP and for aligning conservation interventions with national and community-based protection frameworks.

[58] NBSAP Vanuatu; Epi island biodiversity notes, DoE (2020)

[59] International Union for Conservation of Nature. (2020). *Pterodroma brevipes* (Collared Petrel): Conservation Status Report. IUCN Species Survival Commission.

[60] Pacific Biodiversity Information Forum. (2020). *Endemic Birds of Vanuatu: Ecology and Threats*. PBIF Technical Report No. 14.

143. **Torres Islands**: Dugongs (*Dugong dugon*, Vulnerable) are frequently sighted around Hiu, Loh, and Toga Islands. Coconut crabs (*Birgus latro*) are reportedly overharvested, according to local communities. Despite the presence of traditional "kastom" marine areas, there are no formal participatory management plans in place.

144. **South Tanna**: Key threatened marine species include **green turtles** (*Chelonia mydas*, Endangered) and **hawksbill turtles** (*Eretmochelys imbricata*, Critically Endangered), which are still harvested for food, especially in Imaki and Isiai. The sacred uplands of Mount Tukosmera provide nesting habitat for the **collared petrel** (*Pterodroma brevipes*, Vulnerable), the **Vanuatu megapode** (*Megapodius layardi*, Endemic), and the **Vanuatu white-eye** (*Zosterops flavifrons*, Endemic).[61]

145. **West Ambrym**: Three informal conservation areas protect the Vanuatu megapode in Horhor, though enforcement and management focused mainly on egg harvesting during brief seasonal windows.[62]

146. **West Santo & Big Bay Inland**: West Santo is home to *Mount Tabwemasana*, a high-altitude refuge for several endemic species, including the **Vanuatu flying fox** (*Pteropus anetianus*, Vulnerable). Big Bay Inland communities report traditional bans on harvesting riverine species, including prawns, eels, and possibly a "scrub duck." However, increasing freshwater degradation is reported, attributed to agricultural runoff and livestock pressure.

147. **South Maewo**: While formal biodiversity surveys are lacking, the island's intact montane forest is likely to host rare and possibly endemic birds, especially in its higher elevations

Table 6 Key endemic species by Project Site

Site	Key Endemic/Threatened Species	Conservation Issues	Management Status
Torres Islands	Dugong (*Vulnerable*), Coconut crab (*declining, no formal protection*)	Overharvesting of coconut crabs, no participatory management plan in Torres	Traditional 'kastom' marine areas, no formal resource plan
South Tanna	Green turtle (*Endangered*), Hawksbill turtle (*Critically Endangered*), Megapode (*Endemic*), Collared petrel (*Vulnerable*), Vanuatu white-eye (*Endemic*)	High turtle harvest levels, erosion, habitat pressure, no formal Protected Area (PA), land disputes	1 formal MPA (Kwamera), traditional tabu areas in others
West Ambrym	Megapode (*Endemic*), informal protection only	Informal protection, no upland conservation plan	Community-wide agreements, informal only
West Santo & Big Bay Inland	Vanuatu flying fox (*Vulnerable*), *Schismatogobius vanuatuensis* (*Endemic, Data Deficient*), freshwater eels and prawns, Mountain Mullet	Unregistered conservation areas, pollution, declining freshwater species	Mixed: traditional rules, no formal registration
South Maewo	Potential endemic birds (survey needed), intact mountain habitat	Lack of biodiversity surveys, steep terrain limiting access	Traditional governance, low documentation

[61] SPREP (2022). Protecting Vanuatu's Marine Species. https://www.sprep.org/news/protecting-vanuatus-marine-species

[62] Constructive Voices (2023). *Biodiversity of Vanuatu*. https://constructive-voices.com/vanuatu-b

4.3.4. Protected areas and biodiversity hotspots

148. Vanuatu recognizes several formal and informal conservation designations for protecting its biodiversity and ecosystems. These include nationally designated **Protected Areas** under the Environmental Protection and Conservation Act (2002, amended 2010), **Key Biodiversity Areas (KBAs)**[63] identified through international criteria, and **Community Conserved Areas (CCAs)** including traditional tabu areas governed under customary law. These spatial conservation tools reflect the country's unique mix of formal regulation and traditional stewardship.

149. Although these categories are not always clearly differentiated in terms of management or legal status, they reflect diverse and locally adapted strategies for conserving ecosystems and species. The national inventory of protected areas remains partially aligned with international frameworks such as the IUCN classification, although over 89% of areas are currently recorded as "Not Reported" in terms of IUCN categories.[64]

150. The **Community Conservation Area (CCA)** model, formalized through the 2010 amendment of the EPCA[65], allows landowners and communities to designate and manage conservation areas based on customary tenure systems. CCAs may include sacred forests, watershed protection zones, and coastal reefs. While some are actively managed with community-developed rules and bylaws, many remain informally protected through **kastom** practices. Enforcement mechanisms vary widely and often depend on social cohesion, traditional leadership, and community monitoring. There are currently 16 designated CCA across Vanuatu, although the level of formal recognition and management varies significantly. [66]

151. The government supports CCA registration and management through the Department of Environmental Protection and Conservation (DEPC), even though implementation faces critical limitations such as limited technical and financial capacity for long-term monitoring, ambiguities in land boundaries and tenure arrangements, not clear integration with national biodiversity strategies and pressures from agriculture, logging and infrastructure development.

152. At least 15 Key Biodiversity Areas (KBAs), which are internationally identified sites of high biodiversity value based on the presence of threatened or endemic species, unique ecosystems or ecological integrity are identified in Vanuatu[67]. Several project target sites overlap with or are adjacent to KBAs. For example:

- **West Santo** lies near the *Santo Mountain Range KBA*, home to critically endangered species such as the *Santo Mountain Starling* (*Aplonis santovestris*);
- **South Tanna** is part of a priority landscape for seabirds including the *Collared Petrel* (*Pterodroma brevipes*), a near-threatened species, and are recognized as high-value conservation landscapes;[2]
- **Torres and Mota** contain important habitats for the vulnerable *Vanuatu Megapode* (*Megapodius layardi*).One of the key species in this area is also the Banks flying fox *(Pteropus fundatus)*, which

[63] **Key Biodiversity Areas (KBAs)** are sites of global significance for the persistence of biodiversity, identified using standardized criteria developed by the KBA Partnership (including IUCN, BirdLife International, and others). These areas support threatened or endemic species, unique ecosystems, or ecological processes essential for biodiversity conservation Key Biodiversity Areas – www.keybiodiversityareas.org.

[64] UNEP-WCMC & IUCN (2023). *World Database on Protected Areas*. Retrieved from https://www.protectedplanet.net

[65] Government of Vanuatu (2010). Environmental Protection and Conservation (Amendment) Act No. 28 of 2010.

[66] Information shared by DEPC/PMU

[67] BirdLife International (2021). *Key Biodiversity Areas of Vanuatu*. Retrieved from https://www.keybiodiversityareas.org

is endemic to the Bank Islands (Mota) in Torba province and listed as Endangered on the IUCN red list.

153. Despite their ecological importance, **KBAs in Vanuatu are not formally integrated** into national land-use planning, and few have legal protection. This presents both a risk and an opportunity for project intervention.

154. Across the proposed VCAP-II sites, there is a strong reliance on customary governance for conservation. In **Torres**, each island has upland and marine tabu areas established through chiefly decrees, with some sites forming ridge-to-reef corridors, but no formal participatory management plans have not yet been developed . In **South Tanna**, villages like **Kwamera** and **Imaki** have created marine tabu areas or MPAs and have expressed interest in expanding these into upland zones, particularly around **Mount Tukosmera**, a sacred and biodiverse mountain ecosystem.

155. Similar interest has been noted in **West Ambrym**, where communities have created informal conservation areas to protect species such as the *Vanuatu megapode (Megapodius layardi)*, though these remain unregistered and focus on seasonal controls rather than broader ecosystem-level management.

156. In **West Santo**, some areas like **Kerepua** report registration of conservation zones, while others (e.g, Wusi, Linduri) rely solely on informal or customary systems. In **Big Bay Inland**, communities maintain **riverine tabu zones** and seasonal harvest bans, although pressure on freshwater ecosystems is increasing due to land use changes,

157. The main legal framework for area-based biodiversity protection in Vanuatu is the Environmental Protection and Conservation Act (EPCA) of 2002, amended in 2010. This law enables the formal declaration of Protected Areas (PAs) and Community Conservation Areas (CCAs), outlining procedures for their registration, management planning, and governance under customary land tenure systems. However, implementation remains constrained by fragmented coordination with other sectors (e.g., forestry, land, tourism), limited technical capacity, and unresolved land boundary issues.

158. A draft Protected Areas Policy (EPC Act, part 4), which aims to clarify governance mechanisms and improve alignment with international standards, has been under review since 2021 but is not yet formally adopted. At the international level, Vanuatu is a signatory to the Convention on Biological Diversity (CBD) and has submitted National Biodiversity Strategy and Action Plans (NBSAPs), which recognize community-based conservation as a key implementation mechanism.

159. To support the implementation of CCAs, MPA's and enhance their integration into national and international conservation frameworks, the VCAP-II project is undertaking the following activities:

- Undertaking Free Prior and Informed Consent Consultations,
- Raising awareness on Protected Areas and Endangered Species,
- Supporting the mapping, registration, and development of management plans for selected CCAs, MPA's;
- Strengthening community capacity in biodiversity monitoring, governance, and conflict resolution;
- Collaborating with the Department of Environmental Protection and Conservation (DEPC), Vanuatu Fisheries Department, Department of Forest to align site-level actions with national biodiversity strategies and reporting obligations;
- Promoting the recognition and integration of overlapping Key Biodiversity Areas (KBAs) into environmental safeguard mechanisms and project planning.

4.4. SOCIOECONOMIC AND CULTURAL ENVIRONMENT

4.4.1. Political and administrative divisions

160. Vanuatu is a unitary republic made up of six administrative provinces: Torba, Sanma, Penama, Malampa, Shefa, and Tafea. Each province includes multiple islands and serves as the primary level of subnational governance. Provinces are further divided into Area Councils, which constitute the lowest level of formal government administration in the country and are central to local development, land-use planning, and community engagement[68].

161. Each province is governed by a Provincial Government Council headed by an elected President, and advised by the Provincial Secretary General, who is a civil servant appointed by the central government. Provincial councils are responsible for preparing and implementing Provincial Development Plans, coordinating public services, and overseeing rural development programs in line with the Decentralization Act and the Local Authorities Act.[69]

162. **Area Councils** comprise a cluster of villages, often aligned with customary land boundaries and traditional social structures. They are led by an **Area Administrator**[70] who has been appointed by the Department of Local Authorities (DLA). Area Administrators are responsible for relaying government information, coordinating local development, supporting census and environmental data collection, and liaising with traditional leaders and civil society actors.[71]

163. Although Area Councils are recognized in law and theoretically integrated into the decentralization framework, in practice they operate with minimal to no direct operational budgets[72] Area Administrators typically work alone, often without offices, transport, or communication tools. Most rely heavily on support from provincial governments, NGOs, or development projects (such as VCAP-II) to perform their functions.

164. Area Administrators are responsible for relaying national and provincial information to communities, coordinating local development projects, supporting data collection and reporting (census, disaster impacts), facilitating communication with traditional leaders and NGOs. They face significant challenges due to limited staffing, lack of operational funding, communication barriers (remote geography and poor connectivity) and heavy reliance on customary authority.

165. In parallel, **customary governance systems** remain central to local decision-making. Chiefs and village councils (nakamals) are legally recognized under the **Customary Land Management Act**[73] and play leading roles in resolving disputes and managing land and resources. These structures are particularly relevant for the governance of tabu areas, Community Conservation Areas (CCAs), and sacred sites.[74]

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[68] Government of Vanuatu. (2020). *Decentralization Policy Framework 2017–2027*. Department of Local Authorities, Ministry of Internal Affairs.

[69] Vanuatu Parliament. (1994). *Local Authorities Act*. Revised 2013.

[70] Locally referred to as “Area Administrator”, though the official designation under Vanuatu law is “Area Secretary” (see Local Authorities Act [Cap. 127], section 18E: ‘“Secretary” means the public servant seconded to a Local Government Council under section 18E’)

[71] Department of Local Authorities. (2022). *Area Council Functional Review and Capacity Assessment*. Internal Report.

[72] VNSO (2016). *Vanuatu National Population and Housing Census*. Port Vila: Vanuatu National Statistics Office.

[73] https://faolex.fao.org/docs/pdf/van150052.pdf

[74] Malvatumauri National Council of Chiefs. (2015). *Custom Governance and Land: Roles of Chiefs in Resource Management*. Port Vila.

166. Each of the project sites falls within one Area Council. Project implementation depends heavily on the mobilization of Area Councils and traditional leaders, who are the first contact for environmental management, community planning and grievance resolution. Engagement with Area Secretaries and chiefs is essential for supporting the establishment of CCAs, MPA's reinforcing environmental regulations and ensuring social and cultural legitimacy.

167. To strengthen local implementation, the project provides targeted support to Area Administrators, in the figure of Community Liaison Officers, including transport and communication tools. VCAP-II also facilitates regular coordination between Area Councils, provincial departments, and traditional leaders, while building on existing kastom governance to foster local ownership, enhance monitoring capacity, and ensure the long-term sustainability of conservation and adaptation efforts.

4.4.2. Predominant livelihoods

168. Livelihoods across the VCAP-II project sites are deeply rooted in **subsistence practices** and **natural resource use**, shaped by local geography, climate, and access to both coastal and upland ecosystems.

169. In **Torres (Torba Province)**, communities rely primarily on **subsistence fishing** and the **harvest of coconut crabs and lobsters**, which also represent the main source of household income. While reef fisheries are considered healthy, locals acknowledge that current levels of crab harvesting are unsustainable. Traditional governance plays a strong role, with **chiefly-managed tabu areas** regulating access to both marine and upland resources.

170. In **South Maewo**, livelihoods are based on **subsistence agriculture and fishing**, with most settlements located along the western coastline. The terrain is mountainous and wet, and communities depend on **cultivated gardens** near rivers and streams. Resource availability is closely tied to the island's dense hydrological network.

171. Communities in **West Santo** depend on both **upland forest resources** and **coastal fisheries**, including access to rivers, streams, and marine environments. Villagers practice agriculture on mountain slopes and utilize traditional governance systems to manage conservation areas. Conflicting views on land registration and concerns about resource access reflect the tension between formal conservation and customary land rights in some areas.

172. In **Big Bay Inland**, livelihoods are almost exclusively linked to **freshwater resources**. Fishing for eels, prawns, and freshwater fish occurs under traditional restrictions, often governed by tabu systems that are respected across villages. However, declines in freshwater biodiversity have been observed, attributed to population growth, livestock pressure, and agricultural runoff.

173. On **West Ambrym**, agricultural livelihoods are shaped by volcanic soils and limited water availability. Communities cultivate coastal and mid-slope areas but face significant constraints from volcanic activity, ash plains, and dry conditions. Some villages engage in the **seasonal harvest of megapode eggs** under customary regulations, though formal resource management remains limited.

174. In **South Tanna**, livelihoods are diverse and interconnected across land and sea. Communities engage in shifting cultivation (mainly taro, yam, peanuts, kava), **fishing**, and **coastal gleaning**. Women play a prominent role in **reef-flat fishing**, and ceremonial "custom fishing" practices persist. However, overfishing, soil erosion, and deforestation pressures are increasing. Turtle harvesting continues despite conservation concerns, while **Kwamera village's MPA and fisheries monitoring systems** stand out as a local success story for sustainable livelihood practices.

175. Across all sites, dependence on natural resources for food and income is high, while cash income opportunities remain limited. Traditional governance structures provide a critical framework for managing access and use of land, forests, rivers, and marine areas. However, growing populations, erosion, habitat loss, and climate impacts threaten the sustainability of these systems. There is strong

community interest in combining kastom-based management with modern resource planning to improve livelihood resilience.[75]

Table 7 Predominant livelihoods by Project Site

Site	Main Livelihood Activities	Key Challenges	Governance / Management Approach
Torres (Torba)	- Subsistence fishing - Coconut crab and lobster harvesting (for income)	- Overharvesting of coconut crab - Lack of alternative income sources	Chiefly-managed *tabu* areas; interest in sustainable management plans
South Maewo	- Subsistence agriculture - Fishing (coastal)	- Isolation - Limited infrastructure/logistics	Customary land management; Area Council structure
West Santo	- Small-scale agriculture - River and reef fishing	- Conflicting views on conservation area registration - Limited awareness of formal procedures	Some villages use formal plans; others prefer traditional governance
Big Bay Inland	- Freshwater fishing (eel, prawns, fish) - Subsistence farming	- Declining freshwater species - Agricultural pollution and livestock pressure	*Tabu* on river stretches; strong customary rules respected
West Ambrym	- Agriculture in coastal/mid-slope areas - Harvest of megapode eggs	- Dry conditions, poor soil retention - Volcanic risk - Lack of water	Informal rules for species-specific protection (e.g., megapode eggs)
South Tanna	- Shifting cultivation (taro, yam, kava) - Reef and offshore fishing - Seasonal ceremonial fishing - Handicrafts and some fish sales	- Overfishing - Turtle overharvest - Soil erosion - Marine habitat loss	Customary and formal *tabu* areas (e.g. Kwamera MPA); interest in expanding MPA system

4.4.3. Social structure, land tenure and local governance

176. Local governance across the VCAP-II project sites is governed primarily through customary systems, which remain central to social identity, stewardship responsibilities, and resource access. As established by the Constitution of Vanuatu, all land belongs to the indigenous customary landowners and their descendants[76]. However, the practical application of land rights is complex and often contested, both within communities and in relation to state processes.

177. At the local level, Council of Chiefs (e.g. Nakamals, Area Chief's Councils) and Councils of Elders often deliberate over community issues. Their legitimacy is rooted in tradition and their authority is

[75] Annex 20 of the ProDoc (2020), "Vulnerabitliy Assessement Report".

[76] Constitution of the Republic of Vanuatu (1980), Articles 73–75

widely respected. This is particularly true in areas where formal government presence is minimal, such as the more remote islands.

178. Although it is often stated that over 98% of land in Vanuatu is held under customary tenure[77], in practice, land boundaries, inheritance rights, and decision-making authority may vary significantly between islands, clans, and even neighboring villages. In many areas, land is not clearly demarcated, and knowledge of land ownership is passed orally through genealogies, narratives, and the authority of elders or chiefs. This can lead to internal disputes, especially where migration, intermarriage, or generational shifts have occurred.

179. **There is a strong cultural reluctance to register land formally, particularly for conservation or development purposes**. In West Santo and West Ambrym, for instance, some communities expressed concern that registration of conservation areas might be interpreted as alienating land or surrendering customary rights. At the same time, others recognize that some level of formal recognition may help protect customary land from external exploitation, especially under increasing pressure from tourism or resource extraction. This underscores the importance of clarifying community intentions before formalizing any conservation land designation.

180. Across many of the sites, decisions over land use and access—whether for gardens, forest resources, or reef areas—are made collectively, often mediated by chiefs, councils of elders, or family heads, following kastom protocols[78]. These systems tend to function with social accountability rather than written rules, and social harmony is often prioritized over individual entitlements.

181. This means that any project involving land (including conservation, infrastructure, or livelihood activities) must be grounded in respectful dialogue with customary owners and consider both formal and informal power dynamics. Customary land tenure in Vanuatu is not static—it evolves with context, experience, and negotiation, and successful engagement depends on recognizing its fluid and relational nature, rather than trying to simplify it into fixed categories.

4.4.4. Infrastructure and basic services

182. Access to infrastructure and basic services across the VCAP-II project sites is generally limited, uneven, and highly dependent on geography and remoteness. Rural and outer island communities often face structural challenges in relation to transport, water access, electricity, communication, health and education services. In many cases, infrastructure constraints directly affect the delivery of public services, economic opportunity, and resilience to climate-related events

183. Road infrastructure is rudimentary or non-existent in many of the sites, particularly in Torres, West Coast Santo, Big Bay Inland, and parts of South Tanna. Steep terrain (e.g., in South Maewo and Ambrym), heavy rainfall, and erosion further limit mobility, with many villages accessible only by footpaths or boats. In some locations, such as Kwamera (South Tanna), roadworks have caused unintended environmental impacts, such as sedimentation of streams and erosion near coastal areas.

184. Boat transport is common for inter-island travel but is highly weather-dependent, unreliable, and unaffordable for many. Limited maritime infrastructure restricts the movement of goods and can isolate communities during adverse conditions.

185. Water access is highly variable. While areas like Maewo benefit from abundant freshwater sources (springs and streams), others—particularly West Ambrym and South Tanna—experience chronic water scarcity, exacerbated by volcanic soils and prolonged dry periods. In upland areas, communities may rely on unprotected water sources or small-scale rainwater harvesting. In some

[77] FAO (2008), *Customary land tenure and registration in Vanuatu: A case study*.

[78] PEBACC/SPREP (2017), *ESRAM – Vanuatu Ecosystem and Socioeconomic Resilience Analysis and Mapping*.

villages (e.g., Imaki), water is shared between people and livestock, raising potential contamination concerns.

186. Sanitation facilities are basic or lacking in most locations, with many households relying on pit latrines or open defecation.

187. Access to electricity is limited or entirely absent in most sites. Where available, it typically comes from solar home systems or small generators provided by NGOs or projects. Grid electricity is not accessible. Households commonly rely on firewood or for cooking, contributing to indoor pollution.

188. Health service access is constrained by distance, staffing shortages, and lack of transport. In most communities, health clinics are located several hours away, often requiring travel by foot or boat. Emergency services are minimal, and medication supplies are often limited.

189. Primary schools exist in several villages but are typically under-resourced, with multi-grade teaching and inadequate learning materials. Secondary schools are rare or distant, posing barriers to girls' education due to travel time and safety concerns.

190. Mobile phone coverage is weak or non-existent in remote and inland communities such as Big Bay Inland, Torres, and parts of Ambrym and West Santo. Internet access is rare and expensive. This restricts early warning dissemination, education, and communication during emergencies[79].

191. Based on the information shown in annex 20 of vulnerability assessment, the following table shows infrastructure characteristics for each of the sites.

Table 8 Site-level infrastructure and basic services overview

Site	Transport Infrastructure	Water & Sanitation	Electricity	Health & Education	Communications
Torres	Boat access between islands, remote from shipping routes, weather dependent	Rainfall abundant; basic sanitation; no formal system	No grid; reliance on solar or none	Limited access; health clinics distant	Poor to no coverage
South Maewo	Rugged terrain; steep ridge; foot access	Abundant streams; better freshwater access	Limited solar access only	Schools exist but with limited infrastructure	Moderate coverage in coastal zones
West Santo	Poor roads; 20 km corridor inland; erosion issues	Some rivers; sanitation varies by village	Very limited; occasional solar	Health & education services distant	Low to intermittent
Big Bay Inland	No coastal access; foot/river-based movement	Freshwater from rivers; shared with livestock	None or private solar units	Clinics and schools very far; outreach rare	Very poor coverage
West Ambrym	Rugged; road infrastructure minimal; dry west	Very dry; volcanic soils; catchments in east only	Limited access; off-grid or none	Low access to services due to remoteness	Weak to no coverage
South Tanna	Some roads (e.g., Kwamera), but erosion from works	Chronic water shortages; shared human-livestock use	Some solar; 1–2 boats with fuel	Schools present; long travel to secondary/clinics	Patchy; some mobile network zones

[79] VCAP-II, annex 20 of ProDoc. Vulnerability assessment reports. Project site profile (2020)

4.4.5. Cultural and spiritual heritage

192. Cultural and spiritual heritage in Vanuatu is deeply embedded in traditional practices, land and sea stewardship systems, and customary governance structures. In the context of the VCAP-II target areas, cultural identity is closely linked to the way people interact with and manage their coastal environments.

193. Communities have long relied on traditional indicators—such as the behavior of animals, tides, and wind patterns—to plan fishing, planting, and protective rituals. This knowledge serves not only practical livelihood functions but also spiritual and cultural purposes, reinforcing respect for nature and ancestral obligations. Traditional practices include temporary marine closures to allow for fish stock recovery, seasonal restrictions on harvesting, designated sacred sites near shorelines and reefs, traditional building technique using coastal vegetation adapted to cyclonic conditions.

194. Consultations under VCAP-II and GESI[80] assessments highlight that the transmission of this knowledge is weakening due to migration, formal education models that exclude local culture, and increased reliance on external climate information systems. Women, despite being custodians of knowledge related to local food systems, medicinal plants, and resource harvesting cycles, are underrepresented in formal consultations.

195. Recognizing the value of this cultural heritage, initiatives like Van-KIRAP have emphasized the role of traditional knowledge in enhancing climate resilience. Government partners, including the Department of Environmental Protection and Conservation and the Department of Women's Affairs, advocate for policies that integrate cultural knowledge into adaptation strategies.

4.4.6. Gender and vulnerable groups

196. VCAP-II operates within a complex socio-cultural context where gender inequality and social exclusion continue to shape vulnerability across all six target sites. Consultations conducted during project preparation, as well as interviews with government departments and field stakeholders, confirm that women, youth, older persons, and people with disabilities face structural barriers to participation, decision-making, and benefit sharing.

197. Gendered division of roles is deeply embedded in community life across Vanuatu. Women are primary actors in food production, forest product harvesting, seed preservation, and water collection, and remain largely underrepresented in formal governance mechanisms such as Community Conservation Area (CCA) committees and Area Councils (ACs). Village development structures are dominated by male traditional leaders, with limited space for inclusive dialogue or power-sharing. Although women's traditional ecological knowledge—particularly related to agriculture, biodiversity, and climate adaptation—is significant, it remains undocumented and undervalued in current planning systems.

198. In interviews, multiple stakeholders highlighted that training and leadership opportunities at community level often disproportionately benefit men. Women face additional barriers including unpaid care responsibilities, safety concerns, limited literacy, and lack of access to cash income—especially in outer islands where male labour migration is common.

199. In areas such as South Epi and West Coast Santo, efforts have begun to establish inclusive Village Development Committees to improve engagement with Area Councils and enable more direct representation of women and youth. In other sites, existing rangers and Vanua-Tai monitors already include women who could be supported to play a more visible role in monitoring and dialogue on conservation and adaptation.

[80] Report on demonstration of identified GESI project activities. Prepared by Michela Lugiai, GESI consultant (May 2024)

200. The situation is compounded by the absence of gender-responsive institutional mechanisms**.** Government staff involved in VCAP-II (e.g., Environment, Forestry, DLA, Climate Change) reported lacking gender focal points, training in gender mainstreaming, and tools for collecting and using disaggregated data. There is currently no standardized framework for gender-responsive budgeting or accountability in local implementation processes.

201. Other vulnerable groups such as people with disabilities, the elderly, and youth also face exclusion. Remote project sites further exacerbate this, as community structures in some areas remain disconnected from provincial systems and lack effective representation.

202. The project context also presents potential adverse social impacts related to gender-based violence (GBV). Consultations highlighted increased exposure to GBV following natural disasters, particularly in remote sites where support systems are limited. There is currently no formal GBV response protocol integrated in the VCAP-II grievance redress mechanism, nor are referral pathways in place at the site level. This limits the project's ability to prevent or respond to potential harm.

203. To address these gaps, VCAP-II is working with partners such as the Department of Women's Affairs, to strengthen institutional coordination and embed a more systematic gender approach. Practical measures included in ProDoc are the documentation of women's traditional ecological knowledge, particularly in agriculture, forest resource use and coastal adaptation—and supporting their integration in conservation and catchment management plans. In some provinces, women leaders have begun contributing to CCA boundary mapping and resource zoning, indicating that community support for inclusive practices exists when backed by facilitation and trust-building.

5. ASSESSMENT OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

5.1. IMPACT ASSESSMENT METHODOLOGY

204. This Environmental and Social Impact Assessment (ESIA) adopts a systematic and structured methodology to identify, assess, and prioritize environmental and social impacts associated with the implementation of the VCAP-II project across six provinces in Vanuatu. The methodology is aligned with the UNDP Social and Environmental Standards (SES, 2021), the Environmental Protection and Conservation Act [CAP 283] of Vanuatu, relevant international good practice standards (e.g., IFC Performance Standards, IAIA guidelines).

205. This ESIA focuses on the identification and assessment of potential environmental and social impacts associated with the Project. The definition of impact-specific indicators associated with baselines and monitoring arrangements is addressed in the site-specific Environmental and Social Management Plans (ESMPs), which translate the impact assessment into operational measures and ensure traceability between impacts, mitigation and monitoring adapted to the characteristics of the impacts and sensitivities of each site.

206. The assessment of potential impacts was informed by the following sources:

- UNDP screening form
- Feedback obtained through stakeholder consultations
- Review of baseline datasets and scoping assessments
- Expert judgement

A precautionary approach was applied throughout the impact assessment process. The significance of each identified potential impact was determined based on the combination of its predicted consequence and likelihood of occurrence as reflected in the following tables. The risk based approach was used to classify impact significance as Low, Moderate, Substantial or High. Impact significance is assessed both prior to the application of mitigation measures and following mitigation.

207. The **consequence** refers to the severity of potential impacts resulting from a given activity, should it occur. This may include effects on biodiversity, ecosystem services, community health and safety, cultural heritage, or livelihoods. The assessment considers the scale, duration, reversibility, and intensity of each potential impact, as well as the sensitivity of the environmental or social receptors involved.

Table 9 Impact consequence[81]

Score	Rating	Impact description
1	Negligible	Negligible or no adverse impacts on communities, individuals, and/or environment.
2	Minor	Minor impacts in terms of their severity and magnitude (e.g., small, affected area, impacting a very low number of people) and duration (short); may be easily avoided, managed, or mitigated.
3	Intermediate	Impacts of medium magnitude, limited in scale (site-specific) and duration (temporary); can be avoided, managed and/or mitigated by relatively uncomplicated, accepted measures.

[81] Guidance Note UNDP Social and Environmental Standards (SES, 2022)

4	Extensive	Adverse impacts on people and/or the environment of considerable magnitude, spatial extent and duration, but more limited than Extreme impacts (e.g. more predictable, mostly temporary, reversible). Impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples.
5	Extreme	Significant adverse impacts on human populations and/or the environment. Adverse impacts of large-magnitude and/or spatial extent (e.g., large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g., long-term, permanent and/or irreversible); areas adversely impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involving significant levels of displacement or resettlement; generating significant quantities of greenhouse gas emissions; impacts may give rise to significant social conflict.

208. The **likelihood** refers to the estimated probability that the identified impact will actually take place, based on existing evidence, expert judgement, or precedent from similar interventions. It may be rated along a scale (e.g. unlikely, possibly, likely) and takes into account site-specific factors, stakeholder feedback and the effectiveness of current controls or preventive measures.

Table 10 Impact likelihood[82]

Score	Rating
1	Not likely
2	Low likelihood
3	Moderately likely
4	Very likely
5	Expected

209. By cross-referencing the level of consequence with its likelihood, a **risk matrix** is used to determine the **magnitude of the risk** (e.g., low, moderate, substantial, or high). This magnitude informs decisions on mitigation measures and guides the development of further site-specific assessments[83].

Table 11 Risk Rating Matrix. Likelihood vs Impact

Impact\ Likelihood	Rare	Unlikely	Possible	Likely	Almost Certain
Negligible	Low	Low	Low	Low	Moderate
Minor	Low	Low	Moderate	Moderate	Substantial
Moderate	Low	Moderate	Moderate	Substantial	High
Major	Moderate	Substantial	Substantial	High	High
Severe	Substantial	High	High	High	High

[82] Guidance Note UNDP Social and Environmental Standards (SES, 2022)

[83] UNDP (2021). Social and Environmental Standards. United Nations Development Programme.

5.1.1. Limitations

210. Despite efforts to conduct a thorough and site-specific risk analysis across all VCAP-II locations, the availability and reliability of baseline information varied significantly between sites: while some benefited from recent data and consultation records, others lacked up-to-date assessments or had only limited documentation. These disparities affected the depth and consistency of the analysis across locations.

211. The ESIA process has been carried out under tight resources and limited staffing considering the complexity of the study. While the stakeholder inputs were considered, deeper community validation was not always feasible. There are still consultations to be conducted to capture further participatory work.

212. Additionally, most sites are located in remote and hard-to reach areas, often requiring long and difficult travelling by boat or road, with limited infrastructure and communication. The logistical constraints make consistent follow-up, monitoring and verification extremely challenging. As a result, some risks may evolve unnoticed, and the effectiveness of mitigation measures could depend heavily on local leadership and coordination, which vary across communities.

5.2. IDENTIFICATION OF PROJECT ACTIVITIES ASSOCIATED WITH POTENTIAL IMPACTS

213. This section assesses the potential environmental and social impacts associated with VCAP-II activities and explains how these impacts may materialise under site-specific conditions. While the ESIA assesses potential impacts and their significand by site, the detailed mapping of activities, site-specific mitigation measures, outputs and responsibilities is presented in the corresponding ESMPs.

214. The following section outlines the project outputs that are anticipated to generate environmental and social impacts. Based on the identified activities, the following section summarises the potential social and environmental impacts and their significance by site. The detailed mapping of activities, site-specific mitigation-measures and responsibilities is presented in the corresponding ESMPs.

215. **Component 1 – Integrated community approaches to natural resource management and climate change adaptation**

Activities under **Component 1** involve direct environmental interventions and community-based implementation affecting ecosystems, land and marine resources, and livelihood practices. These activities constitute the primary sources of the environmental and social impacts assessed in this ESIA.

216. **Outcome 1.1 – Biodiversity conserved to improve the integrity of natural ecosystems towards increased climate resilience.**

Output 1.1.1 – Survey and evaluation of proposed Protected Area sites. This output involves the identification and evaluation of terrestrial and marine sites for potential inclusion in the national protected area system.

Illustrative activities include biodiversity and socio-economic baseline surveys, site assessments, and participatory identification of conservation values.

Through the collection of baseline data and the preliminary identification of conservation areas, this output may result in impacts related to increased interaction with sensitive ecosystems, changes in community perceptions regarding land and marine resource use, and the introduction of conservation planning processes that influence future land-use decisions.

217. **Output 1.1.2 – PA Registration and Management Plans developed.** This output supports the formal registration of Protected Areas and the development of management plans through participatory processes.

Illustrative activities include participatory mapping, stakeholder consultations, development of management rules, and formal endorsement of management plans.

The establishment of management plans may result in impacts related to changes in access to land and marine resources, modification of resource governance arrangements, and shifts in community roles and responsibilities. These impacts relate to biodiversity management, social inclusion, gender participation and accountability in decision-making processes.

218. **Output 1.1.3 – Implementation of key aspects of management plans.** This output focuses on the initial implementation of agreed conservation and management measures.

Illustrative activities include enforcement of management rules, conservation actions targeting key species, and measures to reduce illegal or unsustainable resource use.

The implementation of management measures may result in impacts associated with altered resource use practices, increased enforcement presence, and changes in livelihood activities. These impacts may affect ecosystem integrity, community access to resources and local governance dynamics.

219. **Outcome 1.2 – Sustainable Land Management initiatives supported at the community level. Output 1.2.1 – Degraded areas assessed.** This output involves the assessment of degraded landscapes to identify drivers of land degradation.

Illustrative activities include landscape-level assessments, catchment mapping and community consultations.

These activities may result in impacts related to increased engagement with landholders, identification of environmentally sensitive areas, and the framing of future land-use interventions that influence land management practices.

220. **Output 1.2.2 – Rehabilitation strategies agreed and implemented.** This output supports the development and implementation of strategies to rehabilitate degraded land.

Illustrative activities include participatory planning, restoration works, and application of sustainable land management practices.

The implementation of rehabilitation measures may result in impacts affecting soil and water resources, ecosystem restoration processes, occupational health and safety during field activities, labour arrangements and equitable participation in land management decisions.

221. **Outcome 1.3 – Improved climate resilience of coastal and upland areas through integrated approaches. Output 1.3.1. – Climate-smart model farms established.** This output supports the establishment of climate-smart agricultural practices at community level.

Illustrative activities include establishment of demonstration plots, farmer training and replication of resilient agricultural techniques.

These activities may result in impacts related to changes in agricultural practices, use of inputs, labour requirements and participation of different social groups in livelihood activities.

222. **Output 1.3.2 – Climate-proofing of public infrastructure.** This output involves climate-proofing of selected small-scale public infrastructure.

Illustrative activities include climate-proofing of footpaths, construction of water supply systems, evacuation facilities and construction of public buildings.

These interventions may result in impacts related to construction activities, occupation of land, use of materials, occupational and community health and safety, and labour rights.

223. **Component 3 – Climate Change and Natural Resource Management Governance.** Activities under **Component 3** strengthen planning, policy and institutional frameworks that shape the design, implementation and oversight of site-level interventions under Component 1.

Illustrative activities include participatory vulnerability assessments, planning workshops and integration of adaptation measures into development plans.

These processes may result in social impacts related to decision-making structures, inclusion of vulnerable groups, access to resources and the distribution of adaptation benefits.

224. **Outcome 3.2 – Biodiversity and sustainable land management mainstreamed in policies. Output 3.2.1 – Biodiversity and SLM mainstreamed in national and local policies.**

This output supports the integration of biodiversity conservation and sustainable land management into development policies.

Illustrative activities include policy mainstreaming, gazetting of protected areas and integration of land degradation neutrality strategies.

These activities may influence governance frameworks and decision-making processes affecting environmental management and community engagement.

225. **Outcome 3.3 – Human resources in place to support integrated approaches. Outputs 3.3.1 and 3.3.2 – Capacity building and community empowerment.**

These outputs focus on strengthening institutional and community capacity.

Illustrative activities include training, technical support and participatory adaptation planning.

While these outputs do not result in direct biophysical impacts, they shape social impacts related to governance effectiveness, inclusion, accountability and equitable implementation of project activities**.**

226. Based on the outputs and illustrative activities described above, the environmental and social impacts assessed in the following section are directly derived from the nature, scope and implementation modalities of the project interventions. Given the integrated design of VCAP-II, individual outputs may contribute to multiple impacts, which are assessed by type and by site rather than attributed to single activities.

5.3. ASSESSMENT OF POTENTIAL PHYSICAL AND BIOLOGICAL IMPACTS AND MITIGATION MEASURES

227. The assessment included herein is based on the design information currently available. This ESIA should be updated as necessary once detailed design information is available.

228. The results of this site-specific analysis inform the prioritization of risks in the development of the Environmental and Social Management Plan (ESMP). This ensures that mitigation, management, and monitoring measures are appropriately tailored to local realities and implementation challenges.

5.3.1. Proliferation of Invasive Alien Species (IAS)

229. Proliferation of alien species concerns the control, management, and eradication of Invasive Alien Species (IAS), which, if insufficient or mismanaged, could reduce biodiversity, ecosystem services, and access to natural resources, particularly affecting Indigenous Peoples and women. To ensure effective mitigation, the project must incorporate species-specific measures within CCA Management Plans, including provisions for IAS. These plans are being developed in coordination with the DEPC, using site-level data collected during VCAP-II and the PPG phase.

230. Invasive Alien Species (IAS) represent one of the most serious threats to Vanuatu's native biodiversity. The country's ecosystems – particularly its island forests, coral reefs, and coastal wetlands – host numerous endemic and vulnerable species that evolved in isolation. The introduction and spread of invasive plants, animals, and pathogens often leads to severe disruptions in ecological balance. Common impacts include: displacement of native flora, predation or competition affecting endemic fauna, habitat degradation, changes in fire regimes (e.g. increased frequency or intensity of wildfires), soil erosion, and contamination of freshwater sources.

231. Notable IAS include invasive vines (e.g., *Merremia peltata*), aggressive grasses (*Mimosa diplotricha*), feral pigs and invasive ants (*Anoplolepis gracilipes*), which damage native habitats, hinder forest regeneration, and threaten agricultural productivity. In coastal and marine ecosystems, invasive species can disturb coral reef dynamics and mangrove health, ultimately affecting fisheries and food security.

232. Improper control measures – such as introducing non-native biological control agents, applying herbicides without proper safeguards, or failing to assess ecosystem-wide impacts – may exacerbate environmental damage. Furthermore, such actions risk undermining customary land use, local livelihoods, and community cohesion, especially where traditional knowledge systems are disregarded. Vulnerable groups, including women and Indigenous peoples, may be disproportionately affected by biodiversity loss or by exclusion from decision-making around IAS interventions.

233. This risk has been primarily identified in sites where protected area management plans are under development (Output 1.1.2) or under implementation (Output 1.1.3), such as West Coast Santo, Big Bay Inland, South Maewo, and West Ambrym. It is also present in zones where community-based coastal management or restoration measures are applied, due to the introduction of plant species for erosion control. The following table shows a rapid assessment across the nine VCAP-II intervention sites. The risk rating reflects both the ecological impact and the current level of community preparedness or control measures.

Table 12 Impact level[84] and key observations in the control of Invasive Alien Species (IAS)[85]

Site	Impact Level and Key Observations
1. South Epi	🟡 Moderate: Presence of invasive vines (*Merremia peltata*), wild pigs, fire ants, and tilapia. Impacting gardens, forests, and biodiversity. No structured control or community awareness.
2. West Coast	🟡 Moderate: Feral pigs and invasive vines present. Crop damage and erosion reported, but not systematically addressed. No control training or early detection system.
3. Big Bay	🟡 Moderate: Presence of invasive vines (*Merremia peltata*), fire ants and wild pigs threaten gardens and forests. Communities are aware but lack training or eradication strategies. Risk may escalate without intervention.
4. South Maewo	🟡 Moderate: Widespread IAS including pigs, fire ants, and rats. Affecting food security, water catchments, and forest regeneration. No coordinated response.
5. South Tanna	🟡 Moderate: COTS (crown-of-thorns starfish) reported on coral reefs; terrestrial IAS not highlighted as severe. Communities untrained in IAS identification and management.
6. Futuna	🟡 Moderate: Presence of *Merremia peltata* vines, fire ants, pigs. Strong impact on gardens and native habitats. No formal control or technical support in place.
7. West Ambrym	🟡 Moderate: Fire ants, wild pigs, damaging crops and biodiversity. Megapode nesting sites are at risk. No structured control program.
8. Torres	🟡 Moderate: Invasive rats and wild chickens affect food gardens and biodiversity. No control measures or local capacity to respond.
9. Mota	🟡 Moderate: IAS includes rats, fire ants, wild pigs. Broad ecological and agricultural impacts. No eradication plan or training available.

234. The following mitigation measures have been identified to address the specific risks associated with IAS, particularly in the context of protected area management and community-based restoration restoration activities. These actions are integrated into the site-specific Environmental and Social Management Plans (ESMP). The ESMP assigns responsibilities to local stakeholders, defines timelines, and includes cost estimates and monitoring indicators aligned with UNDP SES guidance. Measures will also be reflected in training plans, awareness materials, and procurement packages, as relevant. Updates to the ESMP will incorporate lessons learned through participatory monitoring processes and feedback from community structures.

Table 13 Mitigation measures in control of Invasive Alien Species (IAS)

Mitigation Area / Lead Stakeholder	Key Actions
Integration into Management Plans /	Incorporate IAS control, management, and eradication into all Protected Area Management Plans. Include specific indicators to

[84] The risk levels assigned to each site are based on qualitative analysis of available baseline data, observed presence of IAS, local perceptions gathered during consultations, and the existence (or absence) of control measures. A precautionary approach was adopted in cases where information was limited, in line with UNDP SES guidance.

[85] The classification of certain species as invasive in this context is based on observed ecological impacts in unmanaged conditions, rather than on their status as domestic or introduced species. The analysis is aligned with UNDP guidance but recognizes the complexity and sensitivity of such classifications in customary land systems.

DEPC, Area Councils, PMU	monitor progress. Ensure these plans are site-specific and align with the National Biodiversity Strategy and Action Plan (NBSAP).
Precautionary Principle in IAS Control / DEPC, DARD, PMU	Before implementing control activities, conduct thorough assessments of ecological, economic, and social impacts. Avoid the use of non-native species or high-risk chemicals unless fully screened.
Promotion of Non-Chemical Methods / DARD, DEPC, Extension Officers	Favor mechanical and biological methods over chemical control. Provide technical guidance aligned with the Ministry of Agriculture's practices. Promote IAS mitigation options that also support livelihoods, consider incentive schemes.
Biosecurity and Surveillance DARD / Customs, Local Committees	Strengthen national Early Detection and Rapid Response (EDRR) systems. Train local surveillance committees with youth and gender representation.
Community Engagement and Livelihoods / PMU, NGOs, Area Councils	Link IAS control to livelihood support through fencing, agroecology, or use of IAS as resources. Offer incentives and training materials in local languages.
Education and awareness / Local Schools, NGOs	Integrate IAS topics into environmental education programs. Use schools and youth clubs to promote stewardship.
Monitoring / PMU and monitoring staff	Conduct participatory monitoring of pilot actions, assess effectiveness, and adapt strategies based on local feedback. Include lessons learned in ESMP updates.

5.3.2. Impacts on ecosystems due to use of herbicides and fertilizers

235. Refers to potential harm caused by the use of herbicides, pesticides, and fertilizers in project activities, especially in the control of Invasive Alien Species (IAS) and the promotion of climate-smart agriculture. If poorly managed, these chemicals can contaminate water sources, damage soils, harm native species, and pose health risks to communities, especially to women and agricultural workers.

236. This impact is most relevant in areas where invasive species are a serious problem and communities lack alternatives. In some project sites, chemicals are already being used informally in gardens or reforestation zones, without clear guidance, proper protective equipment, or awareness of environmental impacts. This has been observed particularly in South Maewo, West Coast Santo, South Epi, and West Ambrym.

237. Climate-smart model farms are planned under Output 1.3.1 across eight Area Councils. These farms may introduce fertilizers or pest control products to increase yields. If safeguards are not in place, this could encourage chemical use more widely—especially if seen as "modern" or effective. Without training, there's a risk that these practices spread without proper oversight.

238. Herbicides may also be used to remove invasive plants (like *Merremia or Mimosa*) in areas under restoration, such as water catchments or erosion-prone hillsides. If applied without ecological assessments, these substances can damage native plants and wildlife and pollute streams and soil.

239. The Ministry of Agriculture encourages organic farming and is moving away from pesticides, for example using biological control against the Coconut Rhinoceros Beetle. The project supports these policies but must consider that, at the local level, practices still vary and many communities lack technical support.

240. The table below summarizes the level of risk in each project site, based on observed chemical use or potential exposure.

Table 14 Impact level and key observations in the use of herbicides and fertilizers

Site	Impact Level and Observations
South Epi	🟡 Moderate: Some chemical use in gardens; no training or control.
West Coast	🟡 Moderate: IAS control underway; chemical risks not addressed.
Big Bay	🟢 Low: Traditional farming; no chemical use reported.
South Maewo	🔴 High: Herbicides observed; catchments at risk.
South Tanna	🟡 Moderate: Access to agrochemical stores; actual use unclear.
Futuna	🟡 Moderate: Possible pesticide use in gardens; no safeguards.
West Ambrym	🟡 Moderate: Chemical use reported; no awareness or protections.
Torres	🟢 Low: Traditional agriculture; no reported chemical inputs.
Mota	🟢 Low: Remote site; chemical use unlikely.

241. This table outlines mitigation areas and key action to address the risk of harm caused by the used of herbicides, pescticies and ferlizers in VCAP-II project context, particularly in IAS control and climate smart agriculture.

Table 15 Mitigation measures use of herbicides, pesticides and fertilizers

Mitigation Area / Lead Stakeholder	Key Actions
Community Risk Awareness / PMU, Area Councils, DARD	- Organize visual, practical workshops to show contamination risks using participatory tools (e.g., mapping) in community gatherings to discuss chemical risks. - Emphasize gender-sensitive and culturally appropriate communication strategies.
Promotion of Non-Chemical Alternatives / DARD, NGOs (e.g., FSA)	- Promote natural pest control: neem sprays, ash, intercropping, composting. Use demonstration plots and community gardens to spread techniques. - Integrate MoAFFLB organic farming guidance at local level.
Local Oversight and Peer Monitoring / Community Committees, PMU Field Staff	- Establish local oversight groups to review application practices. - Include youth and women to enhance accountability and education. - Track reported incidents or misuses.
Traditional Knowledge and Agroecology / Chiefs, Elders, DARD	- Identify traditional methods (e.g., neem, crop rotation). - Document and adapt local practices to reinforce sustainability.

Integrated Planning and Resilience / PMU, DARD, VRDTCA	- Link safe agriculture to climate adaptation and CCAPs. - Use bio-input starter kits (e.g., compost, native seeds). - Promote clean agriculture via vocational and youth programs.

5.3.3. Climate change related impacts

242. Vanuatu is globally recognized as one of the most disaster-prone countries due to its geographical location, topography, and exposure to a wide range of natural hazards. These include tropical cyclones, coastal and urban flooding, landslides, earthquakes, tsunamis, and volcanic eruptions. The VCAP-II project includes numerous activities that are highly sensitive to climate variability and natural hazards. These include:

- Output 1.2: Community-based land management interventions to restore degraded landscapes.
- Output 1.3.2.4: Construction of Area Council offices and small-scale public infrastructure (e.g., evacuation shelters, water conveyance systems).
- Outputs under Component 3: Capacity-building and implementation of Climate Change Adaptation Plans (CCAPs).

243. These interventions face a tangible risk of being delayed, disrupted, or destroyed by climate-driven events. For instance, heavy rains and cyclones may damage civil works (e.g., offices, water systems), landslides may render restored land unusable, and coastal flooding may jeopardize access routes and community facilities. In some cases, interventions may become obsolete or irrelevant if climatic conditions shift dramatically before implementation is complete.

244. The impact is compounded by weak institutional and physical coping capacities in rural and outer island communities. Many sites lack resilient infrastructure, early warning systems, or sufficient emergency preparedness. Construction of critical infrastructure (e.g., Area Council offices) without robust technical feasibility and climate screening could result in asset loss, safety concerns, or misuse of resources.

245. Project implementation will also be affected by real-time emergency events. Given Vanuatu's high probability of experiencing one or more major disasters during the project cycle, there is a need to anticipate delays, reallocation of resources, and potential redirection of priorities toward recovery and humanitarian response.

246. Although mitigation measures will be detailed in the following section, this risk analysis highlights the need for a flexible, adaptive approach across all VCAP-II components. Engagement with the Vanuatu Meteorology and Geo-Hazards Department and the National Disaster Management Office is essential to monitor emerging hazards and plan interventions during low-risk periods. Adaptive management and resilience planning must be embedded in all phases of design and delivery.

247. This impact is classified as substantial in all project sites due to the high level of exposure, particularly to coastal erosion, saltwater intrusion, and cyclone intensity.

248. To address this risk, the project adopts a layered set of mitigation strategies that integrate risk-aware planning, design adaptation and local-resilience building. These measures are designed to be preventive and responsive, ensuring that implementation considers site-specific vulnerabilities, engages local knowledge and builds capacity to adapt climate risks. The table below outlines the core mitigation areas and key actions.

Table 16 Mitigation measures climate change and disaster hazards

Mitigation Area / Lead Stakeholder	**Key Actions**

Climate-Sensitive Site Selection / PMU, Area Councils, DoCC	Prioritize locations with lower exposure to erosion, flooding, or cyclones when planning infrastructure such as water tanks, roads, or gardens. Use past exposure data and community knowledge. For example, in VCAP-I, demonstration plots were relocated in Malekula to higher ground.
Risk-Sensitive Technical Design / DoPWD, Local Builders, PMU Engineers	Adapt infrastructure (e.g., roads, drains, tanks) to manage risks from heavy rainfall or erosion without major costs. Use low-cost engineering like stone-filled trenches, as piloted in Tanna under CCCPIR.
Climate Vulnerability Integration in Planning / PMU, Provincial Teams	Ensure climate risks (e.g., saltwater intrusion, floods) are documented in activity site plans to inform implementation and supervision. In Epi, site-specific notes under the IRCCNH project guided activity timing.
Community-Led Maintenance and Monitoring / Local Committees, DLA	Train local teams to inspect and maintain infrastructure after extreme events. Encourage practical steps like drain clearing or erosion repair. REDI program in Pentecost is a good reference.
Real-Time Climate Event Tracking / PMU, VMGD, NDMO	Incorporate weather disruptions and delays into project reporting and management. GEF Small Grants Programme in Santo used such systems to guide implementation adjustments.
Traditional Knowledge in Micro-Planning / Chiefs, Community Elders, PMU Facilitators	Consult traditional leaders on historical flood zones and safe zones. In Torres, chiefs helped identify flood-prone gardens, leading to revised activity siting under LoCAL.

5.4. ASSESSMENT OF SOCIOECONOMIC AND CULTURAL IMPACTS AND MITIGATION MEASURES

5.4.1. Land use restrictions and access conflicts due to CCA designation

249. This impact concerns the possibility that the project's zoning and land use planning may restrict access to land and natural resources, with the potential to cause economic displacement, restrict traditional practices, and generate conflicts—particularly for Indigenous Peoples and vulnerable communities. Customary governance is strong in Vanuatu, and project activities must not override existing traditional systems without broad community support. This risk has been evaluated as Substantial.

250. Several project activities under Output 1.1.3 may create this impact. These include the implementation of Community Conservation Area (CCA) management plans, the formalization of conservation zones, and the regulation of forest or marine resource use. In the absence of meaningful engagement and consent, such activities may affect customary tenure systems, disrupt traditional access to subsistence areas, or undermine Indigenous rights.

251. The project recognizes this sensitivity and plans to operationalize Free, Prior and Informed Consent (FPIC) protocols throughout implementation. FPIC is mandatory for all activities affecting Indigenous Peoples' land, territories, or resources. The FPIC focal point must ensure processes are gender-responsive and culturally appropriate.

252. The project will operate in six provinces and up to nine different island sites, each with distinct land tenure systems and levels of vulnerability to this risk:

South Epi: Coastal and inland communities rely heavily on reef and forest resources. Community leaders have expressed concerns that formal designation of protected areas could limit access to fishing zones and seasonal forest product collection.

West Coast Santo: Customary ownership is particularly complex in this area, and land disputes have occurred in the past over tourism and conservation-related initiatives. Any new zoning or land-use planning will require consensus building with multiple chiefly lineages.

Big Bay: Several conservation initiatives have previously been implemented in this area. However, shifts in boundaries or new use restrictions could impact smallholder agriculture and wild yam harvesting.

South Maewo: Although local chiefs support conservation in principle, the population relies on highland forest areas for water catchment protection and medicinal plants. Restricting access could inadvertently affect health and traditional knowledge systems.

South Tanna: The area includes sacred sites, and changes in land use without FPIC could threaten cultural identity and provoke local resistance.

Futuna: With limited land availability and high dependence on subsistence agriculture and reef fishing, resource restrictions are likely to have an immediate economic impact.

West Ambrym: The volcanic terrain makes land scarce and valuable; previous attempts at setting conservation zones faced pushback due to concerns over exclusion from productive plots.

Torres and Mota: These northern islands have strong traditional governance, but logistical remoteness makes meaningful consultation more challenging. Zoning decisions here must take into account both customary marine tenure and the risk of perceived external imposition.

253. Additional safeguards include the development of six Indigenous Peoples Plans (IPPs), one per province. These will detail measures to protect customary rights, preserve traditional practices, and ensure equitable benefit-sharing. The project will also strengthen the capacity of Area Councils to coordinate bottom-up land-use planning and integrate FPIC into all relevant activities under Outcomes 1 and 3.

254. Additional mitigation measures are listed in the table below. Key mitigation measures to address the risk of land use restrictions and economic displacement, aim to ensure that project activities are grounded in meaningful participation, cultural respect and social equity.

Table 17 Mitigation measures land use restrictions

Mitigation Area / Lead Stakeholder	Key Actions
Free, Prior and Informed Consent (FPIC) / PMU, FPIC Focal Point, Customary Authorities	Operationalize full, gender-responsive FPIC processes in all communities where project activities may impact land access or resource use. Engage customary landowners and leaders from the earliest stages of planning. Use participatory mapping to identify culturally significant areas, and co-design the boundaries and rules of Community Conservation Areas (CCAs). Ensure FPIC is obtained for all outputs under Outcome 1 and 3, and that records are maintained in line with SES Standard 5.

Livelihood Alternatives / PMU, DEPC, NGOs, Local Cooperatives	Pair any land use restrictions with viable livelihood support. Introduce agroforestry, reef-friendly fishing methods, value-added processing, or ecotourism opportunities where traditional activities may be limited. Develop transparent benefit-sharing mechanisms to ensure tangible returns for participating communities, prioritizing women and marginalized groups.
Documentation of Customary Systems / PMU, Chiefs, Community Committees	Map and document traditional land rules, sacred sites, and seasonal resource use patterns. Integrate these into CCAs and land use planning processes to prevent overlaps or violations of cultural norms. Ensure recognition of 'tabu areas' within formal conservation frameworks.
Inclusive Governance / Area Councils, Community Representatives, Women and Youth Groups	Create or strengthen local land and resource management committees with balanced representation, including women, youth, and vulnerable households. Define roles for both customary leaders and statutory authorities in co-enforcement of conservation zones or access regulations.
Grievance Redress Mechanism (GRM) / PMU, Community Focal Points	Build on traditional dispute resolution practices—such as Nakamals and Chiefly Councils—to establish trusted, local-level channels for resolving grievances linked to land access or conservation boundaries. Link these with the formal GRM of the project for tracking and escalation.
Community Awareness and Education / DEPC, Ministry of Education, NGOs	Implement communication campaigns and school programs that raise awareness of land rights, conservation benefits, and project safeguards. Use theatre, storytelling, and visual materials in local languages to reach wider community members.
Monitoring and Peer Learning / PMU, DEPC, Community Committees	Train community members in monitoring land use changes and compliance with FPIC and conservation agreements. Facilitate exchanges with other islands (e.g., Epi or Futuna) to showcase successful conflict-free land management models and adaptive governance strategies.

5.4.2. Exclusion of women from project benefits and decision-making

255. It concerns the potential exclusion of women from decision-making processes in project activities, particularly those related to access to land, genetic resources, and environmental governance. Traditional gender roles, low representation of women in community structures, and limited mobility or literacy can restrict women's engagement in consultations, planning, and benefit-sharing mechanisms. This exclusion may reinforce gender-based discrimination, reduce the effectiveness of project safeguards, and diminish women's resilience to climate change impacts.

256. Women's groups and previous assessments have flagged these dynamics as a serious concern. In particular, climate-smart agriculture, Community Conservation Area (CCA) governance, and catchment management plans must explicitly address gender gaps. If unaddressed, the project could reproduce existing inequalities and miss opportunities to leverage women's knowledge and leadership in environmental stewardship.

257. While gender-specific risks vary by site, a consistent pattern of limited participation, marginal consultation, and lack of representation persist particularly in relation to land and marine governance structures. The following measures aim to promote inclusive governance, strengthen women's leadership, and ensure that all activities under the project are implemented in a gender-responsive and empowering manner. This risk has been assessed as Moderate.

Table 18 Mitigation measures gender inequality and women's exclusion from Environmental Governance

Mitigation Area / Lead Stakeholder	Key Actions
Inclusive Governance / PMU, Area Councils, Community Committees, Women's Associations	Establish or strengthen inclusive committees to oversee project planning and resource governance, ensuring women hold decision-making roles, not just consultative ones. Facilitate gender-balanced representation in Community Conservation Area (CCA) governance bodies.
Capacity Building / Department of Women's Affairs, NGOs, Local Trainers	Deliver localized training programs on leadership, negotiation, and environmental management for women. Use visual, oral, and participatory methods adapted to rural literacy levels. Engage male champions to support shifts in gender norms.
Safeguards Integration / PMU, Gender Specialist, UNDP	Embed gender-responsive indicators in the ESMPs and FPIC processes. Require documentation of how women were consulted and how their input shaped the activity. Conduct gender audits periodically.
Targeted Livelihood Support / PMU, Cooperatives, Women's Groups	Provide women with targeted access to agroecology training, small equipment, and value-chain support. Identify and reduce barriers such as mobility, land tenure, and time constraints. Promote shared decision-making in household-based activities.
Monitoring and Learning / PMU, DEPC, Women's Representatives	Ensure that women participate in community monitoring teams for environmental and social safeguards. Include their perspectives in post-activity evaluations and adaptive management discussions. Facilitate peer learning between communities led by women.

5.4.3 Occupational health and safety (OHS)[86]

258. Impact 6 refers to the possibility of work-related accidents, injuries, or health hazards occurring during the implementation of physical project activities, particularly those involving small-scale construction and manual labor. This includes the rehabilitation of land, the construction of Area Council Offices (Output 1.3.2.4), the establishment of nurseries and model farms (Output 1.3.1), the installation of water supply infrastructure and community-based hydrometeorological stations

[86] International Labour Organization (ILO) Convention 155 – Occupational Safety and Health.

UNDP Social and Environmental Standards (SES), Standard 3: Community Health, Safety and Working Conditions.

ILO Convention 121 – Benefits in the Case of Employment Injury.

Vanuatu National Building Code (2013) and guidelines for cyclone-resilient structures.

Lessons learned from GEF Small Grants Programme in Vanuatu (2020), particularly community-based infrastructure and risk management.

(Output 1.3.2.1), and other field-level interventions related to climate-resilient infrastructure and land management (Outputs 1.2 and 1.3.2).

259. These activities will be implemented in remote and geographically challenging sites—such as South Maewo, West Coast Santo, West Ambrym and Futuna—where steep slopes, limited access roads, unstable soil, and variable weather conditions can increase exposure to hazards such as landslides, slips, falls, heavy lifting, and tool-related injuries. Informal paths, the use of machetes or digging tools, the transport of materials over rough terrain, or the manual mixing of concrete present tangible risks even in the absence of large-scale machinery.

260. In most cases, project implementation will rely on community labor or local committees without formal contractors. These arrangements, while empowering at the local level, can result in uneven application of safety standards, particularly in the absence of formal training or provision of personal protective equipment. Risks include:

- lack of risk assessment before site clearance or digging,
- inadequate lifting techniques during material handling,
- no standard procedures for safe tool usage or safe storage,
- exposure to sharp or heavy objects without gloves, boots or helmets,
- unmarked and unsupervised constructions zones near community areas.

261. The risk is compounded when labor is organized informally, safety roles are not designated, and responsibilities for supervision and incident reporting are unclear. Women, youth, and older workers may face increased exposure if safety measures are not adapted to their specific roles or physical capacities. The absence of first-aid plans, emergency protocols, or designated safety focal points further increases the potential severity of minor incidents.

262. Project implementation may also require field visits by project or consultant staff, exposing them to similar risks. Challenges include difficult access to remote sites by foot or boat, carrying equipment or documents through rough terrain, and lack of emergency response capacity if an incident occurs during site work.

263. Occupational Health and Safety (OHS) measures into all labor-intensive components of the project must be embedded into the site-specific ESMP. This includes setting clear minimum safety standards, identifying site-specific hazards, and ensuring that preventive actions (e.g., signage, PPE, training, supervision) are incorporated into the design, implementation, and monitoring of all relevant activities. This risk has been assessed as Substantial.

Table 19 Mitigation measures OHS

Mitigation Area / Lead Stakeholder	Key Actions	Implementation Context / Documentation Measures
Site-Level Safety Planning (PMU, Provincial Technical Officers, Community Focal Points)	Develop simplified health and safety plans for each site. Identify key hazards (terrain, weather, equipment use) and required precautions. Include maps, work schedules, and designated safe areas.	Document who is working at each site, their role, and who is supervising. Ensure every work plan has a site logbook or checklist with named responsibilities.
Training and Protective Measures (PMU, Local Health Workers, NGO Partners)	Provide hands-on safety briefings before any activity starts. Use role play or demo for PPE use, first aid, and hazard identification.	Keep attendance lists with names, roles, and topics covered. Assign safety monitors during high-risk tasks (construction, transport, etc.).

Construction Oversight and Technical Review (DEPC, Area Council, Public Works)	Review all infrastructure layouts for slope, drainage, and access risks. Approve only designs that minimize exposure (e.g. anchor points, drainage paths, walkways).	Store reviewed design drawings with a summary note and name of reviewer. Field validation by PMU or DEPC before materials are delivered.
Community Labour Records and Task Assignment (PMU, Community Committees)	Assign roles transparently: who digs, who carries, who installs. Avoid informal participation where roles are unclear.	Use a daily task sheet: name, task, hours worked. Keep copies at PMU and site level. Names of supervisors included.
Incident Response and Accountability (PMU, Area Council, Health Posts)	Develop a short protocol on what to do if someone is injured. Identify referral pathways, and ensure all participants know the first point of contact.	Log all incidents, even minor ones. Assign responsibility for completing incident forms. Follow up on lessons learned and preventive action.
Grievance Redress Mechanism (GRM) / PMU, Community Focal Points	Establish and publicize a site-level grievance redress mechanism distinct from community complaint systems. Ensure all project workers and community members have access to confidential reporting channels for safety concerns, harassment, or violations of occupational health and safety guidelines.	Train local grievance focal points to document and escalate cases. Link GRM data to adaptive management and safeguards reporting.

5.4.4. Exclusion of traditional governance structures and vulnerable groups

264. This risk concerns the possibility that kastom practices and/or vulnerable socially or economically marginalized groups may not be adequately engaged or involved in project planning and implementation processes, particularly in relation to community-based adaptation measures, sustainable agriculture activities, and ecosystem management. If these groups are excluded from decision-making or benefit-sharing processes, the project may inadvertently reinforce existing inequalities and fail to meet its social inclusion objectives.

265. In the context of Vanuatu, where customary systems strongly govern access to land and resources, marginalized groups—such as single-headed households, landless individuals, recent migrants, or ethnic minorities—may lack representation in traditional decision-making arenas. Women, youth, and people living with disabilities also face barriers to full participation, especially in remote communities. The risk is particularly relevant for Outputs 1.2 (Sustainable land management), 1.3.1 (Climate-smart model farms), and 3.1 (Climate Change Adaptation Plans), where benefits and responsibilities need to be equitably distributed at the community level.

266. Language diversity may also be a challenge in ensuring that all minorities are informed and engaged: while the great majority of the population is Melanesian (known as ni-Vanuatu), other smaller groups of indigenous peoples include Wallisians and Futunans and i-Kiribati, and there are also Chinese, European and Vietnamese minorities. During the condominium years, Wallisians and Futunans migrated to Vanuatu to take up plantation employment and their population was around 1,000 at the time of independence. Since then the number has declined because of the difficulty of obtaining work permits. From the early 1960s there was also migration of Gilbertese (i-Kiribati) and there were several hundred there in the 1980s. Like Wallisians and Futunans, they have experienced considerable difficulty in obtaining work permits and Vanuatu citizenship, despite having renounced Kiribati citizenship and having been in Vanuatu for several decades. For its population size, it has a greater linguistic diversity than any other country in the world. The Constitution declares the national

language to be Bislama (a pidgin English), with the official languages also including English and French, but diversity is manifest in geographical, cultural and linguistic divisions.

5.4.5. Erosion or misappropriation of traditional indigenous knowledge

267. This impact refers to the introduction of new agricultural, conservation, or climate adaptation techniques through VCAP-II may unintentionally displace or erode traditional knowledge held by Indigenous communities. These knowledge systems – developed over generations – include practices related to forest regeneration, pest control, weather prediction, marine resource governance, and customary land use. They are deeply embedded in social structures, language, and rituals, and often differ between men and women.

268. In particular, “modern” or externally introduced techniques (e.g. climate-smart model farms, new planting materials, external conservation rules) may replace existing practices without first understanding or valuing their local relevance. As project activities are rolled out, especially under Output 1.1.3 (implementation of Protected Area management plans), Output 1.2 (land restoration), and Output 1.3.1 (climate-smart farming), there is a need to ensure that local ecological knowledge is not sidelined in favor of "standard" technical approaches.

269. In fact, traditional knowledge systems are an essential foundation for the design and sustainability of adaptation measures under VCAP-II. Rather than treating Indigenous Knowledge as a background context, the project is aligned for the integration as a core operational principle.

270. Examples of integration are customary marine management including seasonal bans on reef harvesting “tabu areas”. These traditional clotures should be recognized and incorporated into CCA rules, rather than replaced by externally defined buffer zones. In South Maewo, traditional knowledge about intercropping and soil conservation on steep slopes (e.g. planting taro with tree cover) should inform reforestation plans, rather than introducing monoculture nurseries. In West Ambrym, ashfall-resilient sequences and crop rotation practices developed by local farmers can guide site-specific agriculture planning. In Tanna, elders’ knowledge of cyclone-resistant house construction using local timber species could inform the design of community infrastructure and nurseries. Across all sites, oral histories, customary weather indicators, and traditional knowledge of pest cycles (e.g., insect signs or bird behavior) should be documented and used in farmer training and land-use planning.

271. Separate consultations with women and vulnerable groups will be planned to ensure gendered knowledge is not overlooked. Furthermore, ESMP should have a protocol to not only document this knowledge but also define how il will be maintained applied, and passes on, including through schools, youth programs and intergeneracional activities.

Table 20 Mitigation measures Indigenous Knowledge[87]

Mitigation Area / Lead Stakeholder	Key Actions

[87] 1. Vanuatu Cultural Research Policy (2018), Vanuatu Cultural Centre.

2. UNDP SES Standard 6 – Indigenous Peoples.

3. Lessons from the Traditional Resource Management Program – Vanuatu Cultural Centre.

4. Pacific Community (SPC) – Toolkit on Traditional Knowledge and Climate Resilience.

5. FAO (2019) Indigenous Peoples' Knowledge and Climate Change in the Pacific.

Participatory Documentation / PMU, FPIC Focal Point, Chiefs, Women's Groups	Undertake separate consultations with elders, women, and youth to map and record traditional knowledge on farming, fishing, resource governance, and climate coping strategies. Ensure gender-sensitive facilitation and use of culturally appropriate methods (e.g., storytelling, drawings, oral histories).
Integration in Management Plans / PMU, DEPC, NGOs	Ensure that site-level Management Plans for CCAs, nurseries, and farms explicitly reference and incorporate traditional practices (e.g., tabu reef closures, intercropping methods, indigenous weather forecasting). Include co-management clauses that recognize customary rules.
Partnerships with Local Research Centers / PMU, VARTC, Academic Institutions	Collaborate with local institutions like the Vanuatu Agricultural Research and Technical Centre (VARTC) to validate and promote traditional pest control, nutrient cycling, and reforestation techniques.
Intergenerational Learning / Ministry of Education, Community Committees	Facilitate programs in schools and communities that promote traditional knowledge transfer through joint activities (e.g., storytelling days, youth-elder planting events, reef walks).
Safeguards for Knowledge Misuse / PMU, Legal Advisors	Ensure Free, Prior and Informed Consent (FPIC) before recording, publishing, or disseminating traditional knowledge. Respect confidentiality of sacred or restricted practices. Define how data will be stored and who retains ownership.
Monitoring and Feedback / PMU, Community Focal Points	Establish community-led mechanisms to review how traditional knowledge is being used in project activities. Adjust practices based on feedback from knowledge holders.

5.4.6. Violation of Labor Standards and Child Rights

272. This impact concerns the possibility that VCAP-II project activities – especially those implemented through community-based labor schemes- may violate international and national labour standards, including through unsafe working conditions, informal or unpaid labour, and the involvement of children in hazardous tasks. This risk is particularly relevant in remote areas where oversight is limited and labour practices and governed by informal arrangements.

273. The project includes construction and physical works (e.g. Area Council buildings, nurseries, water infrastructure, restoration works) that will rely heavily on community labor and, in some cases, subcontractors. The works are often implemented under social mobilization approaches without clear contracts or formal labour protections. In such contexts, there is a high likelihood of relying on informal labour, without adequate training, protective equipment or defined roles and responsibilities.

274. Women and youth are often overrepresented in informal labour in Vanuatu and may bear disproportionate risk, particularly if tasks are assigned without consideration for occupational health and safety. The lack of documentation or labour registers can further obscure issues of exploitation, underage work, or coercion—especially when works are implemented under time pressure or with unclear expectations regarding compensation.

275. Across all sites, the risk of labor rights violations is consistently moderate due to the informal nature of many employment arrangements. Subcontracting without adequate controls can result in unsafe working conditions, delayed or insufficient pay, and lack of recourse for grievances. Particular care is needed in remote areas (e.g., Mota, Torres, Big Bay) where oversight mechanisms may not be

in place. Women and youth are especially vulnerable to underpaid and unregulated labor roles in these contexts.

276. Women and youth are often overrepresented in informal labour in Vanuatu and may bear disproportionate risk, particularly if tasks are assigned without consideration for occupational health and safety. The lack of documentation or labour registers can further obscure issues of exploitation, underage work, or coercion—especially when works are implemented under time pressure or with unclear expectations regarding compensation.

277. The use of children to support land clearing, tree planting, nursery preparation, and other light construction or agricultural activities is not uncommon in rural settings, and may occur under the assumption of "family help." However, such participation may violate international child labour standards, particularly if children are exposed to hazards such as sharp tools, agrochemicals, or excessive workloads.

278. The project operates in areas where administrative labour inspection is not feasible, and where communities themselves may lack awareness of occupational safety rights or age-appropriate tasks. Therefore, labour-related risks must be addressed through proactive safeguards, clear protocols, and inclusive local oversight mechanisms.

279. The table below provides an initial screening of potential exposure to labour risks across VCAP-II sites, based on the intensity of community works, remoteness, and baseline socioeconomic indicators. This risk has been assessed as Substantial.

Table 21 Preventive framework labor rights violations[88]

Mitigation Area / Lead Stakeholder	Key Actions
Participatory Documentation / PMU, FPIC Focal Point, Chiefs, Women's Groups	Define in advance whether specific community tasks are voluntary, capacity-building, or labor contributions. Ensure mutual understanding of expectations regarding time, responsibilities, and any form of compensation or recognition, where appropriate.[89]
Safeguards for Community Contributions PMU, Ministry of Labour	For activities involving sustained or physically demanding tasks, establish minimum standards for duration, safety, and participation. Even when community-led, such work should be guided by principles of dignity, fairness, and consent.
Transparent and Inclusive Agreements *PMU, Area Councils, Customary Leaders*	Use locally adapted agreements that clarify roles, timeframes, and community inputs. Ensure discussions take place in inclusive public settings and that agreements are shared in local languages.
Monitoring of Workload and Participation *Community Focal Points, PMU*	Encourage communities to nominate focal persons to support the fair distribution of labor and identify emerging issues. Participation records (informal or formal) may be useful to promote transparency and prevent overburdening specific groups.

[88] Vanuatu Employment Act (Cap. 160). Available at dol.gov.vu

[89] Department of Public Works. Community-Based Contracting Operations Manual and Task and Safety Guide. Available at pwd.gov.vu, Community-based Contracting Operations Manual

Gender and Inclusion Considerations *PMU, Gender Advisor, Women's Groups*	Ensure that women, youth, and other groups are not disproportionately involved in unpaid or informal labor. Promote equal access to decision-making, capacity-building, and livelihood benefits across all community groups.
Basic Occupational Safety Awareness *PMU, DEPC*	Where communities engage in physical work (e.g., site preparation, planting, transport), offer practical safety guidance adapted to local realities. This includes awareness of manual handling risks, use of basic protective gear, and early planning to avoid exposure to hazardous conditions.
Accessible Grievance Redress Mechanism (GRM) *PMU, Community Representatives*	Ensure that any concerns related to workload, participation, or fairness can be raised confidentially through the GRM. Link to traditional structures when appropriate, while also aligning with formal UNDP grievance procedures.
Local Authority Capacity Building *Ministry of Internal Affairs*	Offer awareness sessions to Area Councils on responsibilities under UNDP's Working Conditions Standard (Standard 3). Support proactive planning and equitable distribution of community efforts across all activities.
Prevention of Child Labour *PMU, Ministry of Education and Labour, Community Leaders*	Establish and communicate clear age-appropriate participation rules. Activities requiring physical labor must **explicitly exclude** children under 18 years old, and monitoring systems should flag any signs of youth involvement in hazardous tasks. Community awareness should be raised to prevent the normalization of child labor in collective work efforts.

5.4.7. Exacerbation of Gender-Based Violence (GBV)

280. Gender-Based Violence (GBV) is a persistent and structurally embedded issue across rural Vanuatu. While levels of risk differ by location, the potential for GBV to be reproduced or exacerbated through project activities is considered **cross-cutting**. In sites where women's participation is being actively promoted through livelihood activities or leadership roles—such as through the establishment of women's groups or their inclusion in community development committees, there is a tangible risk that such changes may disturb local power balances and provoke tension, resistance, or even violence at the household or community level.

281. In several project sites, community development committees have been established with the explicit aim of promoting inclusive and equitable participation. However, these committees often lack training on GBV prevention and response, and referral systems are either absent or non-functional. In most cases, no formal institutional structures exist to report or address GBV, and cultural norms frequently discourage disclosure or external intervention.

282. Site-specific assessments highlight that in locations with high social cohesion but strong traditional gender roles, the empowerment of women may be perceived as threatening, especially if not accompanied by inclusive dialogue with male community members. Moreover, project staff and community facilitators often lack adequate training to identify GBV risks or respond appropriately. The risk is heightened in remote sites with minimal presence of government or NGO actors. This risk has been assessed as Substantial

Table 22 Preventive framework GBV

Mitigation Area / Lead Stakeholder	Key Action
UNDP PMU / Contractors	Develop and disseminate a GBV-sensitive Code of Conduct and ensure its training among project teams and subcontractors[90].
UNDP / Local Women's Organizations	Identify and collaborate with local women's organizations and gender focal points who can act as GBV responders or confidants.
GRM Focal Point / PMU	Establish anonymous and confidential grievance mechanisms with referral pathways for GBV cases.
Department of Women's Affairs / PMU	Build on the Vanuatu National Gender Equality Policy (2020–2030), which prioritizes community-based responses to GBV and mainstreams gender in development planning[91].
Community Development Committees	Use the CARE Vanuatu 'Leftemap Sista' and 'Women and Girls Safe Spaces' models as frameworks to create safe consultation platforms and peer support networks[92].

5.4.8. Reinforcement of gender-based discrimination

283. The project carries a moderate risk of reinforcing gender-based discrimination through the design and implementation of its community-based interventions. VCAP-II includes a wide range of participatory mechanisms—such as village-level planning, the establishment of Village Development Committees, implementation of ecosystem-based works, site selection, and resource management planning. If these processes do not include structured safeguards to ensure equitable participation and benefit-sharing, they may systematically exclude women and reinforce existing power imbalances.

284. In most target areas, local decision-making structures are male-dominated due to deeply rooted customary and religious norms. Community meetings, committee appointments, and the identification of priority activities are often conducted in settings where women are underrepresented, not consulted meaningfully, or unable to influence outcomes**.** Without explicit requirements for inclusive participation and accountability mechanisms, the project may inadvertently validate and institutionalize these exclusionary practices.

285. This risk is particularly pronounced in sites such as **South Maewo and South Tanna**, where gender roles are strictly defined and where traditional governance systems rarely recognize women as landowners or decision-makers. In sites like **West Coast Santo, Big Bay, and Mota**, consultations have occurred, but women's inputs have had limited bearing on final decisions. Across the board, there is little evidence that women's unpaid labor contributions, needs, or constraints are factored into planning or benefit-sharing arrangements.

286. While the project integrates a GESI strategy and has outlined gender-responsive indicators, it currently lacks clear operational mechanisms—such as participation quotas, targeted outreach strategies, GESI focal points at the community level, and gender audits—to prevent exclusion and

[90] Better balance strategy

https://www.vanuatutvet.org.vu/wp-content/uploads/2019/11/Better-Balance-Strategy.pdf

[91] National Gender Equality Policy 2020-2030

[92] Adapt strategies from the Vanuatu Skills Partnership, which has integrated gender and GBV response elements in rural training and economic activities, increasing women's resilience and social capital. Consult the Ministry of Justice & Community Services for GBV referral and coordination systems, including trained response officers in Tafea and Penama provinces.

ensure women's meaningful involvement. Without these, project activities may default to prevailing patriarchal norms, thereby reinforcing the structural barriers that limit women's access to decision-making, resources, and leadership roles.

287. This risk extends to labor recruitment may favor men and leave women with limited opportunities for income, training, or oversight roles. Furthermore, without gender-sensitive grievance mechanisms, women may lack safe and trusted channels to report exclusion or discrimination. This risk has been assessed as Moderate.

Table 23 Mitigation measures gender discrimination

Mitigation Area / Lead Stakeholder	Key Action
UNDP PMU / Community Committees	Set and enforce minimum quotas (e.g., 40%) for women's participation in local committees, planning groups, and benefit-sharing bodies.
GESI Focal Points / Local Chiefs / Project Field Teams	Ensure that all site selection, planning, and implementation meetings include targeted outreach and culturally appropriate invitations to women participants.
GESI Focal Points / UNDP Safeguards Officer	Assign community-level GESI focal points to monitor gender dynamics and flag exclusion risks during implementation.
CARE Vanuatu / Women's Networks / Project Trainers	Conduct gender leadership training and create safe spaces for women to express concerns, organize, and build confidence.
PMU	Audit labor opportunities linked to community-based works (e.g., nurseries, catchment systems) to prevent male-dominated recruitment patterns.
GRM Focal Points / Safeguards Officer	Establish grievance redress mechanisms that include safe, confidential, and gender-sensitive options for reporting exclusion or discrimination.
UNDP Legal / Local Authorities / Implementing Partners	Formally integrate gender considerations into the TORs of Development Committees, Area Councils, and implementing partners.
UNDP M&E Team / Gender Specialist	Ensure that women's unpaid labor contributions and time burdens are factored into planning, scheduling, and compensation frameworks.

5.4.9. Governance, transparency and equitable participation in project decision-making

288. This impact refers to the accountability of accountability breakdowns, stemming from institutional and human resource limitations that could affect its capacity to coordinate, monitor, and engage stakeholders effectively. This risk is particularly relevant in the context of introducing new adaptation measures and promoting integrated natural resource management across diverse governance levels—local, provincial, and national—where past experience with safeguards, stakeholder engagement, and transparency is limited or uneven.

289. At the community level, mechanisms for participation and feedback are either absent or informal, and often dominated by traditional male leadership. In many target sites, including Torres, Mota, Big Bay, and West Coast Santo, remoteness, limited infrastructure, and weak administrative presence further complicate communication and access to redress. In such contexts, the absence of dedicated

grievance channels and low awareness of procedural rights may prevent affected people—especially women, youth, and vulnerable groups—from expressing concerns or influencing project decisions. Previous experiences in South Maewo and South Tanna have shown that when grievances are not followed up, trust in institutions deteriorates quickly.

290. Beyond the community scale, national and provincial institutions responsible for project oversight face constraints that go beyond safeguards: gaps in staff capacity, unclear roles in climate and resource governance, and poor horizontal and vertical coordination are likely to affect project performance. Delays in procurement, limited outreach, and inconsistent monitoring and reporting may result from these constraints, undermining not only project efficiency but also the legitimacy of its interventions.

291. To address these risks, the project integrates capacity development as a core strategy across outcomes. The following measures are design to ensure that project actors are accountable, that community voices are heard and respected, and that adaptation measures are both technically sound and socially legitimate.

Table 24 Mitigation measures Accountability

Mitigation Area / Lead Stakeholder	Key Action
UNDP CO / Government Line Ministries / Institutional Consultant	Conduct institutional capacity assessments at national, provincial, and Area Council levels to identify specific gaps in safeguards management, reporting, and coordination.
UNDP PMU / Training Providers / Gender & Safeguards Experts	Implement a structured training program for duty-bearers on safeguards, gender equity, FPIC, and stakeholder engagement, in line with the ESMF, GAP, and SEP.
Area Councils / UNDP Safeguards Officer / GESI Team	Appoint and train GESI and Safeguards focal points within Area Councils to support local application of project standards and provide continuous technical assistance.
UNDP PMU / Project Manager / M&E Specialist	Integrate administrative and social expertise within the Project Management Unit to support day-to-day coordination, monitoring, and adaptive learning.
Local NGOs / Community Committees / M&E Team	Deploy community-based mechanisms (e.g., village scorecards, mobile feedback units) to improve real-time engagement, transparency, and responsiveness.
UNDP Legal Advisor / Procurement Specialist / Implementing Partners	Ensure that all implementing partners and contractors include clear accountability clauses in their TORs, with procedures for reporting, documentation, and follow-up.
PMU / M&E and Learning Consultants	Embed adaptive management tools in the PMU's workflow to ensure that institutional challenges are monitored and addressed in a timely manner.

5.5 INDICATIVE BUDGET FOR SAFEGUARDS IMPLEMENTATION

292. The Environmental and Social Management Plan (ESMP) budget provides a consolidated view of the resources required to operationalize safeguard measures across all project sites. Its purpose is to translate risk mitigation, monitoring, and stakeholder engagement measures into actionable financial terms, ensuring that safeguard compliance is both feasible and adequately supported throughout implementation.

293. This budget framework was developed in line with the following guiding principles:

Alignment with Prodoc Outputs - Each line item was cross-checked against the Prodoc Outputs and Activities (primarily Components 1 and 3) to confirm whether measures are already funded, partially supported, or not covered.

Typology of Expenditures - Costs are organized by functional type (training, facilitation, monitoring tools) rather than by risk or site, which enhances efficiency and allows integration into broader procurement and contracting.

Coverage Status - Each line is classified as Covered, Partially Covered, or Not Covered, clarifying the degree of financial integration within the existing Prodoc.

Cost Estimation - Values are benchmarked against similar UNDP projects in Vanuatu and the Pacific. Estimates are conservative but reflect realistic scenarios across nine geographically dispersed sites.

Financing Needs - The budget identifies whether supplementary funds, reallocations, or new allocations are required, supporting planning for co-financing, partner contributions, or adaptive management.

Management Responsibility - Each expenditure line indicates the entity responsible for operational and financial administration (e.g., PMU, Area Councils, government departments).

294. This budget is considered a living tool that will be refined as site-specific ESMPs are finalized, ensuring coherence between safeguard planning, project delivery, and resource allocation.

Table 25 ESMP budget overview

Type of Cost	Description / Linked Measures	Coverage Status	Notes on Coverage	Managing Entity	Est. Cost (USD)	Financing Need
Capacitation / Community Training	IAS control (R1), agrochemical awareness (R4), OHS training (R6), gender/GBV sensitization (R3, R10, R11)	Partially Covered	General training under Outputs 1.3.1/3.1.1; site-specific modules may need top-up	PMU; Dept. of Agriculture; DoWA; NGOs	25,000	Top-up Required
Local Facilitation / Focal Points	GESI focal points (R3, R7, R11), FPIC facilitators (R2, R8), safeguard monitors (R6, R9)	Not Fully Covered	No dedicated funds for site-level focal points; essential for safeguarding and monitoring	PMU; Area Councils	35,000	New Allocation Needed
PPE and Basic Safety Gear	Helmets, gloves, boots for community labor (R6, R9)	Not Covered	PPE not covered under infrastructure outputs for community-based works	PMU; site-level procurement	18,000	New Allocation Needed
Monitoring Tools / Community-Based Mechanisms	Village monitoring (R1, R4), scorecards, GRM boxes (R7, R13)	Not Covered	Monitoring plan exists but lacks funding for tools or community-level mechanisms	PMU; Area Councils; Local Committees	12,000	New Allocation Needed
Materials / Communication Aids	Visual tools for non-literate groups (R3, R4, R7), FPIC/GBV translations (R2, R10)	Partially Covered	Some materials included in training packages but not systematically per site/safeguard need	PMU; DoWA; NGOs	10,000	Top-up Required
Livelihood Safeguards / Support Activities	Land-use alternatives (R2), women's income-generation (R3, R11)	Partially Covered	Overlaps with Outputs 1.2/1.3.1, but requires explicit, safeguards-focused line item	PMU; Dept. of Agriculture; NGOs	30,000	Top-up Required
Emergency & Contingency Funds	Repairs post-disaster (R5), local mobilization after events	Not Covered	No contingency line currently exists	PMU; NDMO	15,000	New Allocation Needed
GRM Operationalization	GRM focal points, forms, awareness, response tracking (R7, R10, R13)	Not Fully Covered	Conceptually included in project but underfunded at the community level	PMU; Area Councils; Safeguards Officer	20,000	Top-up Required

Total estimation of ESMP overview	165,000 USD

6. STAKEHOLDER ENGAGEMENT

295. Stakeholder engagement is a core pillar of the VCAP-II project and has been embedded from the design stage through implementation planning. The project builds upon extensive consultations carried out during the PPG phase—including participatory vulnerability assessments, and thematic focus groups with women, youth, and landowners—across all nine target Area Councils. These engagements shaped site selection, risk identification, and project design.

296. During ESIA preparation, limited but targeted consultations were conducted to evaluate impacts and mitigation priorities based on the existing stakeholder landscape. Given that the project already integrates FPIC and participatory mechanisms across its components, this ESIA relies on and complements these structures rather than creating a parallel process.

297. The ESIA identifies safeguards not as external requirements, but as embedded within ongoing community engagement processes, including CCA management, land use decisions, and infrastructure planning. This ensures alignment with the UNDP Social and Environmental Standards (SES), Vanuatu's policy framework, and the project's Gender Equality and Social Inclusion (GESI) strategy.

298. The VCAP-II Project Document outlines a structured and inclusive consultation process that must be applied across all components and phases of implementation. Key requirements include:

Requirement for FPIC prior to initiating any activity that may impact land, natural resources, or community governance systems, particularly in relation to Protected Areas and infrastructure development.

Inclusive representation in all consultations, ensuring participation of traditional leaders, women, youth, and persons with disabilities, in line with the project's Gender Equality and Social Inclusion (GESI).

Use of participatory tools such as Community Profiling, Vulnerability Needs Assessments (VNAs), and management planning sessions, all of which require direct community engagement and validation.

299. Future stakeholder engagement, including FPIC, grievance redress, and participatory monitoring, will be delivered through existing local structures such as Area Councils, Community Liaison Assistants and technical staff of DEC, DoF, DEPC and DLA. These structures will play a central role in ensuring that risk management and mitigation efforts are informed consistently with the contents of this ESIA.

6.1 CONSULTATIONS CONDUCTED DURING ESIA PREPARATION

300. As part of the ESIA process, a series of targeted interviews were conducted in March 2025 with technical staff, institutional focal points, and implementation partners involved in VCAP-II. These discussions were designed to validate risk categories, clarify institutional roles, and assess the effectiveness of safeguard-related procedures such as FPIC, grievance redress, and community engagement. Rather than replicate broader consultations already held, the ESIA interviews focused on strategic and implementation-level insights from those directly responsible for site delivery, monitoring, and policy alignment.

301. Key stakeholders consulted included staff involved in VCAP-II from the DEPC, DEC, DoF, DoWA, the Project Management Unit (PMU), and representatives from ECARE and FAO. These actors provided critical information regarding coordination mechanisms, local implementation challenges, and the integration of environmental and social safeguards. For example, DEPC officials confirmed that only a small number of CCAs are formally registered, and that traditional 'tabu areas' still lack legal recognition—an issue which underpins local reluctance to formalize conservation zones and has implications for land tenure risks.

302. Interviews with DEPC, PMU, and the Department of Local Authorities also highlighted inconsistencies in the application of FPIC and the need for clearer documentation standards. Project staff acknowledged the difficulties of conducting repeated consultations during FPIC process in very remote areas, and that the definition of right-holders remains context-specific and contested. These insights supported the structure of the FPIC protocol presented in Section 6.3 and informed recommendations for ongoing community engagement. Likewise, coordination challenges between CCA committees and Area Councils were identified as key constraints for grievance management, information disclosure, and monitoring—areas that require enhanced resourcing and communication flow.

303. Interviewees also contributed to a more realistic framing of mitigation planning under the ESMP. For instance, forestry officials emphasized the urgent need to address invasive species through site-specific action plans and community training. The contributions from FAO and ECARE helped clarify institutional overlaps and reinforce the necessity for unified planning frameworks and capacity-building support. The ESIA integrates these findings into its risk assessment and mitigation design, ensuring that site-level realities are accounted for in safeguards implementation.

304. In addition to institutional interviews, a key community-level consultation was held on 17 March 2025 in Wusi (West Coast Santo), gathering over 40 representatives from Wusi, Elia, Kerepua, Tasmate, Vasalea, and Linduri. This session was designed to present the ESIA safeguards framework and collect community feedback on key risks, particularly those related to CCAs, climate change impacts, traditional knowledge, and exclusion of vulnerable groups. Structured discussions were held with chiefs, landowners, women, and youth groups, using breakout sessions to ensure inclusive participation.

305. Concerns raised included access restrictions due to CCAs, unclear land boundaries, and the risk of undermining traditional practices. Women emphasized the need for leadership roles and gender-responsive grievance mechanisms, while youth highlighted the importance of capacity building, monitoring participation, and cultural protection. The consultation served as both an awareness event and a validation platform for risks identified in the ESIA. It also reinforced the clarification on the FPIC process, inclusive monitoring systems, and community-based mechanisms for follow-up.

6.2 OBSERVED GAPS AND NEXT STEPS

306. Several limitations have been identified in the consultation processes carried out to date:

- **Absence of a unified protocol**, resulting in varied approaches and levels of information disclosure across sites.
- **Limited clarity of right-holder identification**, especially in areas with overlapping land and resource claims.
- **Underrepresentation of women** in some decision-making spaces, due to customary norms.
- **No formal coordination mechanism** for consultation planning, oversight, or documentation across project stakeholders.

307. To address these gaps, the following section develops a **context-specific FPIC protocol** that defines clear steps, tools, and documentation standards. This protocol will be applied systematically across all project sites during implementation. It will also be integrated with the project's grievance mechanism.

6.3 FREE, PRIOR AND INFORMED CONSENT (FPIC)

308. In accordance with UNDP Social and Environmental Standards (SES) and the legal framework in Vanuatu, the VCAP-II project has committed to ensuring that all communities affected by project activities are meaningfully engaged through a process of Free, Prior and Informed Consent (FPIC). While international guidelines typically apply FPIC to Indigenous Peoples, in the context of Vanuatu—where customary governance systems are prevalent across all communities—the FPIC principle is applied broadly to ensure inclusive and culturally appropriate participation.

309. FPIC is not a one-time signature – it is an ongoing process of dialogue and trust-building. For projects with potential impacts on IP or customary land and resource use, FPIC must be fully documented and integrated into project planning, implementation and monitoring.

310. The FPIC process under VCAP-II is guided by the following principles:

 Free: Participation must be voluntary and free from coercion, intimidation or manipulation.

 Prior: Consent must be sought sufficiently in advance of any activities being authorized or implemented.

 Informed: Communities must receive timely and comprehensive information about the project, including objectives, planned activities, timelines, potential impacts, and mitigation measures.

 Consent: Consent should reflect the collective decision-making process of each community, in accordance with their customary governance structures, while ensuring the inclusion of women, youth, and vulnerable groups.

311. In practice, FPIC means working through existing community structures and allowing enough time for internal decision-making. It also requires ensuring that women, youth, and vulnerable groups are meaningfully involved.

6.3.1. Practical Application of FPIC

312. Several challenges affect the effective implementation of the FPIC process. First, the identification of legitimate right-holders is often unclear, particularly in areas where customary land boundaries are not formally registered. In addition, project teams face logistical and budgetary constraints that limit the frequency of field visits, reducing opportunities for sustained dialogue with communities. Traditional governance structures also tend to underrepresent women, posing risks to inclusive participation and gender-responsive decision-making. Lastly, the absence of a designated focal point for FPIC coordination leads to inconsistencies in consultation practices and gaps in documentation and follow-up.

313. The following protocol facilitates that FPIC is achieved in a clear, traceable and inclusive way, even in remote and complex implementation settings. It is structured around three operational stages, applicable at the community level and covering all the activities of the project.

314. **Stage 1: Community preparation and rights-holder mapping**. The objective is to ensure that all customary right-holders are identified, and the community is fully aware of all proposed project activities. During this first stage, the project will initiate participatory mapping exercises to document how land, water, and natural resources (such as forests, sacred sites, gardens, or water sources) are used by the community. This will be followed by the identification of customary rights-holders, including clans, families, women's groups, youth, and local user groups such as fishermen or forest users. The consultation meetings will present the full scope of project activities covering all components, not just individual interventions. As part of this process, any land disputes, overlapping claims, or concerns raised by community members will be documented for follow-up and resolution.

Key documents to produce:

Document 1: Verified list of right-holders (with names, group and status)

Document 2: Community sketch map showing land/resource uses

Document 3: Record of invitations and community notification method.

315. **Stage 2: Consultation and collective decision-making**. The objective is to enable the community to make a collective, well-informed decision regarding all planned project activities. In this stage, the project team will present the proposed activities in a culturally appropriate and accessible way, covering key aspects such as timelines, expected impacts, benefits, and planned safeguards. Consultations will be designed to be inclusive and, where appropriate, may include separate sessions with women, youth, or other underrepresented groups. The process will also confirm who has the authority to represent the community in the decision-making process—such as chiefs, customary landowners, or elected representatives. If a consensus is reached, **a single Community Consent Agreement will be signed**, detailing the approved activities, any conditions or reservations expressed by the community, and the agreed mechanisms for monitoring and follow-up.

Key documents to produce

Document 4: Minutes of main community consultation + summary of additional group-specific meetings

Document 5: Unified Community Consent Agreement (with annexes as needed)

Document 6: List of conditions, limitations, or special requests from the community

316. **Stage 3: Ongoing communication, monitoring and consent sustainability.** The objective is to ensure that consent is ongoing, reversible and monitored through open communication and community ownership. The final stage ensures that consent remains dynamic and can be revised as project activities evolve. Open communication channels will be established, for example, through a designated contact person, WhatsApp group, or Area Council liaison. One or two FPIC focal points will be appointed within each community to facilitate this exchange. An annex system will allow for the addition or removal of specific activities, so that changes can be approved without the need to sign a new agreement. The entire process will be linked to the project's grievance redress mechanism and traditional conflict resolution systems to support transparency and community ownership.

Key documents to produce

Document 7: Community contact sheet and communication plan

Document 8: Consent annex template for any new activities or adjustments

Document 9: Complaint and follow-up log (including cases where consent is revised or withdrawn).

6.4. GRIEVANCE REDRESS MECHANISM (GRM)

317. The VCAP-II project will establish a project-level Grievance Redress Mechanism (GRM) to address concerns and complaints related to potential or actual environmental and social harms caused or contributed to by project activities. The GRM will serve as a formal but accessible channel through which community members, customary leaders, women, youth, and other stakeholders can raise concerns, request information, or seek redress. It will complement ongoing stakeholder engagement and risk management processes and contribute to transparency and accountability throughout implementation.

318. The GRM will be managed at the project level, coordinated by the Project Manager and field teams, with the support of local focal points and Area Council representatives. Communities will be informed of how to submit complaints through verbal or written means, including community meetings, mobile phones, messaging apps, and—where feasible—suggestion boxes. Complaints may be made in local languages and do not need to follow a formal format. Particular efforts will be made

to ensure the mechanism is accessible to women, youth, and persons with disabilities, and that it reflects local communication norms and cultural practices.

319. A core principle of the GRM will be the confidentiality and protection of complainants. Individuals may request that their identity be kept confidential, and no anonymous grievances will be accepted. Complaints related to sexual exploitation, abuse, or harassment (SEA/GBV) will be handled with the utmost care and in a survivor-centered manner. Such cases will be referred to qualified service providers in line with national GBV response protocols and UNDP's standards for protection and confidentiality.

320. Once a complaint is received, it will be acknowledged within five working days. The project team will then seek direct engagement with the complainant to clarify the issue, explore options for resolution, and agree on corrective actions where relevant. The aim will be to resolve complaints within 60 days, although complex cases may require more time. All grievances will be logged and tracked using a central register maintained by the Project Management Unit, and quarterly updates will be provided to the Project Board through UNDP's Project Assurance function.

321. Given the remote and often dispersed nature of project sites, additional measures will be adopted to ensure effective implementation of the GRM. Local contact persons will be trained in each site to act as entry points for grievances. Communication materials on how to access the GRM will be developed in Bislama and other relevant languages and shared using appropriate channels. In communities where women's participation is limited, the project will promote safe spaces and trusted female facilitators to ensure that women can raise concerns freely and securely.

322. If a complaint cannot be resolved at the project level, the complainant will have the option to escalate it to the UNDP Project Assurance function or, if necessary, to the UNDP Accountability Mechanism. In all cases, the project will aim to treat grievances as opportunities to strengthen safeguards, improve implementation, and promote inclusive and responsive governance.

7. ANALYSIS OF ALTERNATIVES

323. This chapter outlines the alternatives considered in the design and implementation of VCAP-II. The analysis focuses on the justification of the selected project sites and activities, in relation to environmental and social risks, climate vulnerability, and local development needs. Alternatives include the "no project" scenario, variations in geographic targeting, and different modalities for delivering infrastructure and ecosystem-based adaptation measures. While financial, institutional, and logistical considerations informed final design decisions, this section highlights how safeguard considerations—such as Indigenous land rights, ecosystem sensitivity, and gender inclusion—shaped the selection of project interventions.

7.1.1. No project alternative

324. Under the no-project scenario, the VCAP-II intervention would not take place. This would mean that the identified communities, many of which are in highly vulnerable and remote areas, would continue to face increasing climate-related and environmental pressures without additional external support. Ecosystem degradation, water scarcity, food insecurity, and loss of biodiversity would likely worsen. Traditional governance systems, although strong in some locations, are often under strain due to population growth and lack of technical support.

325. The absence of the project would also represent a missed opportunity to scale up positive lessons from VCAP-I, which demonstrated that community-driven approaches to ecosystem-based adaptation (EbA) can be effective in improving resilience and restoring critical landscapes. Additionally, Vanuatu's commitments under the UNFCCC, the Convention on Biological Diversity, and its Nationally Determined Contributions (NDCs) would be more difficult to achieve without external investment in adaptation and biodiversity protection.

7.1.2. Site selection alternatives

326. The selection of the nine AC implementation sites—South Epi, West Coast Santo, Big Bay Inland, South Maewo, West Ambrym, South Tanna/Futuna, Torres, and Mota—was the result of a detailed prioritization process carried out during project design and PPG phases. Criteria included exposure to climate risks, dependence on natural resources, presence of vulnerable groups (especially women and indigenous peoples), degraded ecosystems with potential for restoration, and the presence of enabling governance structures.

327. Other sites were considered, but either did not meet the risk threshold, lacked community readiness, or had overlapping investments from other donors. In some cases, land tenure disputes or unresolved customary conflicts discouraged immediate intervention. The final selection thus reflects a combination of vulnerability, opportunity for sustainable impact, and practical implementation feasibility.

7.1.3. Implementation Modalities

233. During project design, multiple implementation modalities were reviewed. A fully contractor-led model was rejected as incompatible with the project's emphasis on local ownership and the use of customary governance systems. Similarly, a purely government-led model was deemed unfeasible due to capacity constraints, particularly in remote provinces.

234. The selected hybrid model builds on lessons from VCAP-I and supports capacity strengthening of local institutions and Area Councils while ensuring community-based organisations play a central role in implementation. This approach also facilitates compliance with Free, Prior and Informed Consent

(FPIC) principles and supports knowledge transfer and inclusive governance. Technical support will be provided by the PMU and DEPC, complemented by relevant national institutions.

7.1.4. Technology and practice alternatives

328. The project deliberately selected nature-based and culturally compatible approaches over large-scale infrastructure or externally imposed solutions. For example, in addressing water shortages, the project supports rainwater harvesting and spring protection rather than costly and technically complex piped systems, which have proven difficult to maintain in remote contexts.

329. Similarly, climate-smart agriculture is promoted through agroforestry, composting, and erosion control techniques that can be implemented using local materials and traditional knowledge. While chemical fertilisers and hybrid seeds were considered, they were excluded due to environmental risks and lack of long-term accessibility for communities.

330. The selection of low-emission, ecosystem-friendly approaches is also aligned with Vanuatu's environmental policies and contributes to co-benefits in carbon sequestration, biodiversity protection, and reduced disaster risk. These choices are reinforced by ongoing community engagement processes, allowing for feedback and adaptation.

331. In conclusion, the alternatives selected for VCAP-II—both in design and implementation—reflect a deliberate and inclusive approach aimed at maximizing sustainability, ownership, and feasibility. Nevertheless, the dynamic nature of environmental and social conditions in Vanuatu calls for continued review of these alternatives during implementation. The ESMPs to be developed at the site level will include options for adaptive management, including modification of activities or methods where needed.

8. CONCLUSIONS AND RECOMMENDATIONS

332. The Environmental and Social Impact Assessment (ESIA) for VCAP-II has identified and assessed the main impacts associated with project implementation across Vanuatu's diverse ecological and socio-cultural contexts. While the overall safeguards classification of the project remains **Substantial**, impacts vary significantly by site and are shaped by factors such as land use patterns, remoteness, customary governance, and institutional capacity. The following technical conclusions and priority recommendations are proposed.

333. **Cross-component coordination** is essential to ensure that safeguards are embedded coherently in activities such as SLM, resilient infrastructure, and CCA management. Technical and social teams must collaborate during planning and implementation to avoid fragmented mitigation and ensure coherence with UNDP SES.

334. The **FPIC process**, while initiated in multiple sites, requires strong operationalization, particularly in identifying right-holders, documenting decisions, and maintaining dialogue throughout project phases. The FPIC protocol should be systematically applied and continuously improved based on community feedback and implementation experience.

335. **Land and natural resource-related risks** remain central, especially in remote and erosion-prone areas. These include potential access restrictions, economic displacement, and land tenure conflicts. Planning must be grounded in participatory tenure verification and adapted to each site's physical and social realities.

336. The **Grievance Redress Mechanism (GRM)** must be strengthened as a proactive accountability tool. This includes expanding outreach in remote areas, training local focal points, and linking GRM processes to existing community structures such as Area Councils and CCA Committees. Special provisions must ensure accessibility for women, youth, and other vulnerable groups.

337. The ESMP provides **a clear monitoring framework**, disaggregated by site, that tracks implementation of mitigation measures, FPIC progress, grievances resolved, and inclusion metrics. This should be embedded in the monitoring process of VCAP-II and coordinated by dedicated safeguards personnel in the Project Management Unit (PMU), in collaboration with implementing partners and local authorities.

338. The project should find **a flexible and realistic safeguards budget**, allowing for follow-up visits, on-site verification of mitigation actions, monitoring tool development, and local capacity building. Sustained effort is needed to build institutional ownership and capacity for safeguards implementation at provincial and community levels, and training on ESMP and GRM use.

339. In conclusion, the ESIA establishes a comprehensive analytical basis for safeguards planning and site-specific risk management. However, the effectiveness of safeguards implementation under VCAP-II will depend on the degree to which mitigation measures are **operationalized through well-coordinated, adequately resourced, and systematically monitored processes**. To ensure compliance with UNDP Social and Environmental Standards and alignment with national priorities, safeguards must be treated as an integral part of project delivery—not as an add-on. Particular emphasis must be placed on **monitoring frameworks, field-level validation of mitigation actions, and institutional accountability mechanisms**, including GRM and FPIC systems. The capacity of the PMU and implementing partners to lead and adaptively manage these processes will be critical to achieving socially inclusive and environmentally sustainable outcomes across the nine geographically and institutionally diverse intervention sites.

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10. ANNEX ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

(separate document)