

Increasing Resilience to Climate Change and Natural Hazards

Environment and Social Management Framework

**Vanuatu Metrology and Geo-hazards Dept, Government of Vanuatu
World Bank Project P112611**

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1 Introduction

The Increasing Resilience to Climate Change and Natural Hazards Project (IRCCNH) is a program of works for Vanuatu to improve the resilience of smallholders and communities to the impact of climate variability and change on food, household water security and livelihoods. The project has been effective since April 2013, but in February 2017 the Government of Vanuatu (GoV) requested a restructure to simplify the project and focus on community-level investments following Tropical Cyclone (TC) Pam.

The revised Project Development Objective is to strengthen disaster risk management systems and pilot investments in select villages in the Recipient's territory to increase resilience to the impacts of natural hazards and climate variability and change. The proposed support will focus on resilient livelihoods through increased access to fresh water and improved agricultural methods, and will be implemented by the Project Management Unit in the Vanuatu Metrology and Geo-hazards Department (VMGD).

This Environment and Social Management Framework (ESMF) sets out the principles and procedures for managing the environmental and social aspects of the restructured project, and supersedes the previous ESMF dated 20 March 2012. The rationale of applying a framework is that specific details of the project activities will only be known during project implementation. The purpose of a framework is to guide the VMGD on how to screen the activities and manage any issues during implementation.

The EMSF report outlines the IRCCNH project, its components, the possible environmental and social impacts, institutional arrangements and the appropriate mitigation measures. The ESMF is consistent with the laws of Vanuatu and World Bank Safeguard Policies. A Land Acquisition Framework, dated May 2017, covers aspects of the Project in relation to OP4.12 Involuntary Resettlement.

This document is **final version** and will form part of the legal agreements between GoV and the World Bank. It will be officially disclosed by both partners, and may be amended from time to time as agreed between the partners.

2 Project Description

2.1 Background

Geographically Vanuatu is located in the "ring of fire" and at the centre of the Pacific "cyclone belt". This results in a relatively high frequency of volcanic eruptions, cyclones, earthquakes, tsunamis, storm surges, coastal and river flooding and landslides.

The impacts of climate change, including increased intensity of extreme events and changes to agricultural productivity and water availability, are already being felt across Vanuatu, and are projected to increase in the future. The results of climate scenario models suggest that average maximum temperature will increase, precipitation will most likely increase (or only slightly decrease), extreme temperatures will increase in frequency, extreme precipitation will increase in frequency, number of dry days will increase, sea level will rise and coral reefs will become marginal (leading to further coastal erosion).

Between March 12 and 14, 2015, Tropical Cyclone Pam (TC Pam) struck 22 islands of Vanuatu as an extremely destructive category 5 cyclone. The total economic damage and losses as a result of the cyclone was estimated to be approximately US\$450 million, which equates to approximately 64 percent of the country's GDP.

The impact of TC Pam on Vanuatu included severe and widespread damage, which was worst in Shefa and Tafea provinces, in particular on the larger islands of Tanna, Erromango and Efate and the smaller Shepard islands. Eleven fatalities were recorded in Tafea and Shefa provinces. As many as 65,000 people were displaced from their homes, around 17,000 buildings were damaged or destroyed, and the livelihoods of at least 80 percent of Vanuatu's rural population was compromised due to large scale destruction of crops.¹

The project has been effective since April 2013. The Project Management Unit (PMU) is operating at full capacity with all positions filled; construction of two Provincial Disaster Centers was completed in May 2016; a customized curriculum for Provincial Disaster Officers has been developed and the National Disaster Act reviewed; the construction of the housing to accommodate seismic sensors has been completed and seismic sensors procured; they are scheduled to be tested and installed by May 2017.

Under Component 2 (Increasing Community Resilience on Active Volcanic Islands and in Coastal Areas) (the proposed new Component name is 'Increasing Community Resilience in Areas Affected by Tropical Cyclone Pam') Government agencies have developed planning processes and methodologies for disaster risk management and climate adaptation. Micro-project identification and implementation has begun, including a draft micro-project manual.

¹ Vanuatu Post Disaster Needs Assessment, Tropical Cyclone Pam, March 2015 (GoV).

Under Component 3 (Promotion of Improved Technologies for Food Crop Production and Resilience to Climate Change) VARTC has established field plantings on its main site on Santo (to represent the climate of the north of Vanuatu) and collaborated with a research institution for testing and multiplication near Port Vila (to represent the climate for the south of Vanuatu). In addition, improved food crop varieties have been tested and multiplied for distribution to farmers in various islands.

Under Component 4 (Rural Water Security: Increased Access to Secure Water Supply) water inventories for Torba and Penama provinces have been completed and 20 water tanks have been placed in identified sites in Efate. Further activities under the water component would be integrate with the micro-projects under Component 2.

2.2 Implementation Arrangements

The executing agency is the Ministry of Finance and Economic Management (MoFEM), and the fiduciary implementing agency is the VMGD, part of the Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Disaster Management, Environment and Energy. Implementation is carried out by the Project Management Unit (PMU) within the department.

2.3 Project Components

2.3.1 Component 1 Institutional Strengthening for Climate Change Adaptation and Disaster Risk Management.

Sub-Component 1.1: Strengthening of the NAB Project Management Unit (PMU) by building capacity in project management, procurement, financial management and monitoring and evaluation through: (i) the effective implementation of the Project and of the Japan Human Resources Development (PHRD) Grant², (ii) training for new or additional staff upon their assignment to the PMU, and (iii) the development of Operational Manuals to guide overall PMU operation, Subproject selection, formulation, and implementation.

Sub-Component 1.2: Strengthening the National Disaster Management Office by (i) reviewing the Recipient's National Disaster Management Act; (ii) developing a strategic plan and organizational structure; (iii) developing the capacity of newly recruited staff; (iv) facilitating learning and twinning with the national disaster management offices of the Solomon Islands and other Pacific Islands countries; (v) establishing fully equipped provincial disaster coordination centers and provincial disaster risk management and climate change adaptation plans in the provinces of Tafea and Torba; and (vi) developing volcano contingency plans for Tanna, Gaua and other high risk volcanic islands.

Sub-component 1.3: Strengthened Early Warning Systems by (i) establishing real-time data communication network linking the existing volcano, seismic and weather observing stations with the national data and warning center; (ii) strengthening multi-hazard standard operating procedures, and (iii)

² A complimentary project supported through the trust fund entitled "Disaster Risk Reduction Project".

strengthen the capacity of the national multi-hazard warning and emergency operations center to manage and respond to disasters, especially from climate-related events.

2.3.2 Component 2: Increasing Community Resilience in Areas Affected by Tropical Cyclone Pam

This component will look at increasing the ability of national, regional and community-level stakeholders to work together to enhance disaster and climate resilience in rural communities by;

Subcomponent 2.1: Strengthened Methods, Processes and Protocols for Climate Change Adaptation and DRM to develop the ability of stakeholders at all levels. The component will include support on the development, preparation, delivery and monitoring and evaluation of micro-projects. Micro-projects are community level activities to be identified and implemented by the communities and/or provincial government, monitored and evaluated by VMGD in cooperation with villages and provincial governments

Subcomponent 2.2: Enhancing Community and Ecosystem-based Adaptation and Disaster Risk Management in Coastal Areas and on Active Volcanic Islands by implementing the methods, processes and protocols developed under Component 2.1 through the carrying out of Micro-Projects for communities affected by TC Pam.

2.4 Typologies of Micro-Projects

What types of activities are eligible for funding?

Eligible activities are those which help the community to reduce the risk of climate change and natural hazards. Only activities which have been identified through baseline surveys conducted by VMGD/PMU partners and endorsed by the Provincial Technical Advisory Commission (PTAC) and Provincial Secretary General will be eligible for funding. Micro-projects must also be consistent with the safeguards instruments of the project. Existing and relevant community plans endorsed by the local Area Council and Provincial Secretary General may also be utilized to emphasise activities as identified by the baseline surveys.

Examples of appropriate community plans are:

- Provincial Disaster Plan (produced under the original IRCCNH – Component 1.2).
- Area Council Development Plan (produced under the original IRCCNH – Component 2.2).
- Community Risk Assessment and Action Plan (produced under the original IRCCNH – Component 2.2).
- Water Master Plan (produced under the original IRCCNH – Component 4).

Classification of Activities

The types of activities that can be funded can be classified under two broad categories:

1. Climate Change Adaptation Activities – Defined as those activities that reduce the vulnerability of communities or ecosystems to the impacts of climate change and climate-related risks.

Example:

- a. Installation of alternative water supply sources to minimise the risk of droughts,
 - b. Cultivation or distribution of more resilient food crops to increasing temperatures.
2. Disaster Risk Reduction Activities – Defined as those activities that reduce the risk (i.e. likelihood or consequence) of natural disasters, other than those caused by climate change.

Example:

- a. Establishment of a ‘community safe house’ for use during disasters,
- b. Preparation and implementation of disaster response and contingency plans.

Alignment of Activities with Government Sectors

Activities must align with one or more government sectors. Key sectors are outlined in the National Adaptation Programme of Action (NAPA), Disaster Risk Reduction and Disaster Management National Action Plan (NAP) and the National Climate Change & Disaster Risk Reduction Policy.

Climate change and disaster risk activities in Vanuatu can generally be grouped into the following areas that align with existing government sectors. Examples include:

| Activity | Government of Vanuatu Department (Sector) |
|---|--|
| Forecasting and monitoring of climate and geo-hazard information, awareness and early warnings. | Vanuatu Meteorological and Geo-Hazards Department (VMGD) |
| Disaster preparedness, response and recovery | National Disaster Management Office (NDMO) |
| Agriculture and food security | Department of Agriculture and Rural Development (DARD) |
| Water management | Department of Geology, Mines and Water Resources (DGMWR) |
| Transport | Public Works Department |

Alignment with Government of Vanuatu Policies and Plans

This micro project scheme has been set up to help the Government of Vanuatu achieve its strategic development priorities, as set out in the National Sustainable Development Strategy (Priorities and Action Agenda, 2006 – 2015).

In particular, micro projects should address the priorities set out in the Priorities and Action Agenda, 2006 – 2015, National Adaptation Programme of Action (NAPA), Disaster Risk Reduction and Disaster Management National Action Plan (NAP), and the National Climate Change & Disaster Risk Reduction Policy. All micro projects must align with existing Government of Vanuatu policies and plans, provincial and area strategic development plans. For example:

- ‘Planning Long, Acting Short’
- Ministry Corporate Plans
- Department Corporate Business Plans
- Provincial Council Corporate Business Plans
- Area Council Strategic Development Plans
- Other relevant government planning documents.

What is the maximum level of funding for a micro project?

The maximum level of funding for any one micro project is Vt 5 million. Additional funding could be made available if the initial investment falls significantly under the maximum ceiling, however additional activities must be consistent with priorities identified by the baseline surveys or as per eligibility criteria defined above.

2.5 Project Typologies

The initial consultations, baseline surveys and needs assessments following Cyclone Pam (from the studies and plans listed above) have identified the most likely typologies that will be funded:

1. Rainwater catchments – Structures to collect rainwater and tanks to store rainwater. Tap stands.
2. Gravity fed water supply systems – renovations of damaged schemes, scheme upgrades and extensions new systems. Water abstractions from streams or springs, gravity fed through pipelines to the villages, and the installation or replacement of water tanks. Tap stands and pipelines within the village. This may also include irrigation systems.
3. Feeder roads – small sections of existing unsealed tracks renovated with concrete to allow for all weather access to villages.
4. Climate-resilient crops and agricultural practices – farming support, including new varieties of crops and different farming techniques. Irrigation systems may be included.

3 Potential Environmental and Social Issues

Overall, the project is expected to have socially positive impacts benefiting local communities, especially those who are particularly vulnerable to climate risks and are rebuilding after Cyclone Pam. The planned activities will aim to strengthen social cohesion and capital in targeted communities, contribute to local empowerment and enhance process sustainability and intended results. By giving the opportunity to communities to improve their climate resilience through collective action, the project will also increase their capacity to make informed decisions regarding their well-being. The project will also have an important function of bringing various stakeholders together around the adaptation agenda and linking community-based experiences with local, provincial and national level institutions through exposure and capacity building.

The participatory approach to the original project preparation, which included all major stakeholders (heads of national government agencies and their technical staff, leaders of non-government organizations, farmers groups and local residents), helped in designing the project in a way that responds to the their vulnerability and strengthening their adaptive capacity.

The project is also not expected to result to increase in usage of pesticides, which is almost non-existent in Vanuatu agriculture. The project will instead promote the use and adoption of pest resistant varieties and cultivars as part of adaptation measure.

Below is a list of potential issues that will need to be managed as part of project implementation:

3.1 Agricultural Assistance

The investments include sustainable soil and land management, adoption of sustainable agricultural technologies, and introduction of improved plant material. The soil and land management activities include appropriate tillage, erosion control, use of natural or traditional fertilizers, integrated pest management (IPM), use of permaculture, small scale irrigation and efficient water harvesting techniques.

Given the small-scale nature of subprojects, with focus on the adoption of better crop varieties and sustainable soil and land management, the environmental and social aspects of the subprojects are mostly localized and manageable. Implementation of projects will have numerous positive benefits such as introduction of crops and small-scale irrigation schemes to be more resilient to drought, intensification of cropping to improve yield and improving sustainable farming practices such as permaculture. The investments may also contribute to negative impacts resulting from increased the use of marginal land for agriculture (i.e. slopes). The increased use of pesticides is not expected because the emphasis is supporting traditional farming methods and selecting resilient crop varieties, without promoting additional farming inputs.

Developments will be consistent with the Vanuatu Agriculture Sector Policy and the Forest Sector Policy, both of which support and promote sustainable resource management and climate resilience.

- **Vanuatu Agricultural Sector Policy Statement 2015 - 2030**

- **Guiding Principles**

- For this policy to be successfully implemented a significant level of effective collaboration with other sectoral policies and implementing agencies is essential;
- Stakeholder participation and commitment in all levels of the society to the implementation of this policy is a primary necessity for ensuring that the objectives in this policy are achieved;
- The agriculture sector is encompassing in that it requires the effective and sustainable management of Vanuatu resources, the maximum utilization of its inherent opportunities and the equitable distribution of its benefits;
- The protection and sustainable use of Vanuatu's prime agriculture land is the duty of all citizens of the Republic of Vanuatu and therefore requires full participation and sense of responsibility and ownership from relevant stakeholders;
- The encompassing nature of Vanuatu's agriculture sector is such that its development and sustainability entails an integrative, holistic and generative approach;
- Agriculture being the mainstay of the majority of Vanuatu's population requires considerable attention and support from the government;
- As an agricultural based economy Vanuatu farmers must be informed of the consequences resulting from unwise and unsustainable agricultural and farming practices;
- In the face of changing and varying climatic conditions, farming and agricultural practices must be undertaken with due consideration to adaptation, mitigation and risk reducing strategies;
- The implementation of the Agriculture Sector Policy is expected to lead to economic growth, social wellbeing, environmental stability and cultural prosperity.

Vanuatu National Forestry Policy Statement 2013 – 2023

Guiding Principles

- To be successful, the National Forest Policy must be linked to and harmonized with Vanuatu's other policies.
- Participation, as well as the responsible and committed contribution of all stakeholders, are pre-requisites for the sustainable management and use of Vanuatu's forest resources.
- Sustainable forest management encompasses the management of natural forests and planted forests.
- Sustainable forest management abides to the principles set out in the seven elements of the Non – Legally Binding Instrument on all Types of Forests¹ (UNFF, 2007).
- Effective protection and management of the nation's significant conservation sites require full participation of Ni-Vanuatu landowners and communities.
- Forest-based rural development contributes to the well-being and livelihood of Ni-Vanuatu people.
- Efficient, viable, value-adding downstream processing of forest products contributes to economic growth.

- Knowledge and awareness of Vanuatu’s forest resources, ecosystems, biological diversity and the silviculture of the indigenous species form the basis for sustainable forest development.
- The implementation of Vanuatu’s National Forest Policy benefits and contributes to regional and international forest-related programs and processes.
- The implementation of the National Forest Policy facilitates the role of the forest sector in climate change mitigation and adaptation.

Potential agricultural impacts:

- Land degradation leading to soil loss from agricultural land, marginal land, soil infertility. In most cases, the degradation is caused by soil erosion combined with inappropriate (too intensive) land use, or poor farming techniques.

Measures to avoid this will include: matching land use to land capability, promoting resilient plant crops that are suitable to local growing conditions and traditional (low tillage) farming methods, applying soil and water conservation measures, crop rotation, permaculture, intercropping with legumes to protect fallow soil. Avoiding reliance on pesticides and imported fertilizers will also assist.

- Erosion and siltation result from unsustainable tillage practices, badly managed open-furrow agriculture, and other such practices which cause loss of fertile topsoil and downstream siltation.

Measures could include application of water conservation measures, terracing steep slopes (or avoiding steep slopes), avoiding forested areas, avoiding tillage near river banks, avoiding reliance on pesticides and imported fertilizers will also assist.

- Disturbances to vegetated areas which may have some natural, albeit modified, habitat values. This may result in some loss of individual trees or small areas of agro-forestry (typically <1ha, as vegetation clearance will be manual – machetes or chainsaws).

Measures will include good land use planning to prevent conversion of forest and natural habitat to farm land, identifying suitable crops, identifying land suitable for agriculture that does not require conversion, and introducing new, non-native species with care and diligence. Other measures such as use of nitrogen-fixing crops, use of no-till or low-till farming and other measures to intensify existing agricultural plots without the need to clear land. Permaculture methods will be used to intercrop between trees. This is traditionally done and will be enhanced through these investments. This can be done in existing agricultural/cropping areas; conversion of new areas will be avoided where possible. Confirmation of land ownership will be checked as part of project screening, to avoid any disputes with neighboring custom land owners.

- Disturbance of sites that are considered physical cultural resources, either intentionally or accidentally.

Measures to avoid this will include: screening for physical cultural resources, consulting land owners and other stakeholders prior to work starting, selecting farming locations that avoid identified sites, and otherwise following the chance find procedure (Annex L).

3.2 Small Scale Irrigation

Small-scale Irrigation investment typically includes surface water gravity-flow irrigation using surface water diversion, groundwater or seasonal rain-fed systems.

The major adverse effects of irrigation systems result from:

- Diversion systems using natural river or stream flows to divert water. Water pipes or unlined canals are used to deliver water from catchment area to farmlands below. Intensified irrigation can cause waterlogging, result in reduced soil fertility, reduce freshwater resources for other purposes (such as drinking / domestic use) and deterioration in water quality.

Measures. The impacts can be mitigated by implementing water conservation practices, installing adequate surface and subsurface drainage where necessary, using water pipes rather than canals, and ensuring that the water supply is sufficient for irrigation in the driest part of the year. .

- Conveyance of water from and across other custom land. This is a typical source of conflict between villages / land owners.

Measures. Extensive engagement with land owners at the site of water source and along the conveyance route. Signed agreements between parties.

- Discharge water from irrigated fields is not anticipated to be a significant issue due to the small scale and lack of pesticides and imported fertilisers.

The primary measure will be to avoid excess irrigation through training and the set up of the irrigation system.

- Disturbance of sites that are considered physical cultural resources, either intentionally or accidentally.

Measures to avoid this will include: screening for physical cultural resources, consulting land owners and other stakeholders prior to work starting, diverting irrigation schemes around identified sites, and otherwise following the chance find procedure (Annex L).

3.3 Water Supply Projects

Water supply projects are intended to improve public health and reduce the burden of water carrying on women and youth. The significant benefit for the Tanna and Shepherd Islands communities is the resilience to natural hazards and ensuring that water supplies will be maintained following an event.

However, they may also cause adverse impacts when managed ineffectively, and can offset or eliminate these intended benefits.

Impacts may involve:

- Depletion of surface water and groundwater resources resulting from low estimation of water demand, overestimation of available water resource, over pumping, excessive use of water, and waste and leakage. This could lead to reduced instream habitat. This could also lead to disputes with downstream water users.
- Disputes of water / river ownership, and or disputes over access across neighbouring land to access water.
- Creation of stagnant water pools from poorly designed drainage and leakage from pipes, which can harbor disease vectors such as mosquitos.
- Location of rain harvesting systems and associated shelters, sourcing aggregates and management of waste.

Measures would include: Using reliable estimation techniques (local knowledge and scientific calculations) for available water supply, and good estimation of likely current and future water supply requirements. Extensive consultations, confirmation of ownership of water and land and voluntary agreements documented before construction starts. Establish water committees or similar to manage the access to water and maintenance of leaks etc. The siting of the water well or surface water intake should be upstream, and at least 30m away, from sanitation facilities. The water well would be located at the highest point in the village or uphill from sanitation facilities.

Ensure that the sand or gravel for concrete is sourced from an agreed borrow pit location on village land (avoiding sensitive areas, agricultural land etc.), or from a local quarry or borrow pit with a quarry permit and, for large scale sites, an environmental permit issued by the Department of Environmental Protection and Conservation (DEPC). Waste should be reused in the village or transported to the local landfill.

- Disturbance of sites that are considered physical cultural resources, either intentionally or accidentally.

Measures to avoid this will include: screening for physical cultural resources, consulting land owners and other stakeholders prior to work starting, avoiding developing identified sites, and otherwise following the chance find procedure (Annex L).

- Conflict with owners of land at the location of the water abstraction and / or along pipeline routes.

Measures to avoid this will include: Confirmation of land ownership and permission for land use by infrastructure. Permission will be gained via voluntary negotiation and will be documented by the PMU, using the voluntary land donation procedures in the LAF and ESMF, prior to works beginning.

3.4 Construction and Renovation of Buildings

The construction and renovation of buildings can cause pollution and nuisances (noise, dust), however they will have a large social benefit, for example in the coordination of disaster forecasting and localized responses to disasters. The potential impacts are:

- Disputes over land ownership.

This will be avoided by engaging land owners and confirming land ownership before plans are finalized and prioritizing Government-leased land.

- Sourcing aggregates from beach mining or other unsustainable methods.

This will be avoided by identifying borrow pit locations away from coastlines and streams, and with custom land owner approval, and ensure that all borrow pits and quarries are licensed by the Dept of Geology and Mines and permitted by the DEPC.

- Construction waste can be dumped in places causing hazards, pollution and unsightly mess.

Construction waste should be reused where possible, and otherwise transported to local landfills.

- Disturbance of sites that are considered physical cultural resources, either intentionally or accidentally.

Measures to avoid this will include: screening for physical cultural resources, consulting land owners and other stakeholders prior to work starting, avoiding developing identified sites, and otherwise following the chance find procedure (Annex L).

3.5 Feeder Roads

The surfacing of short lengths of feeder roads with concrete may increase demands for beach sand causing off site erosion issues. It may also lead to vegetation removal, and could invoke land owner conflict.

- Sourcing aggregates from beach mining or other unsustainable methods.

This will be avoided by identifying borrow pit locations away from coastlines and streams, and with custom land owner approval, and ensure that all borrow pits and quarries are licensed by the Dept of Geology and Mines and permitted by the DEPC.

- Disturbance of sites that are considered physical cultural resources, either intentionally or accidentally.

Measures to avoid this will include: screening for physical cultural resources, consulting land owners and other stakeholders prior to work starting, avoiding developing identified sites, and otherwise following the chance find procedure (Annex L).

- Vegetation clearance and land contouring / excavations could affect crops and natural habitats.

Measures to manage this will include: Identification of land clearance requirements and community agreement prior to clearance. Identification of, and compensation for, crops and trees that are used for subsistence or income completed before land clearance begins. Assessment of potential biodiversity or natural habitat values and an Environmental Management Plan prepared before land clearances (where relevant – such as near waterways, wetlands, nesting sites etc.).

- Conflict with owners of land.

Measures to avoid this will include: Confirmation of land ownership and permission for land use by infrastructure prior to works beginning. It is anticipated that beneficiaries will be the land owners so this issue may not arise. Permission, where necessary, will be gained via voluntary negotiation and will be documented by the PMU, using the voluntary land donation procedures in the LAF and ESMF, prior to works beginning.

3.6 Mitigation Measures

Table 1 Improved Agricultural Resilience - Summary of proposed activities / subprojects, potential impacts and mitigation measures

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|---|---|---|---|--|
| <p>Collection of root crop cultivars from both Vanuatu and internationally. Screen cultivars for resistance to pests, diseases and climate change impacts. Assessment of cultivar Performance.</p> | <p>Potential for root crop cultivars from overseas to become an invasive weed.</p> | <p>Consideration needs to be given to the types of root crop cultivars collected to ensure that the species chosen are not culturally insensitive to the communities.</p> | <p>The root crop cultivars collected will be species already grown and viable in Vanuatu and will not be culturally insensitive to communities.</p> | <p>Supervisory checks VMGD-PMU</p> |
| <p>Establish on-farm demonstration sites for climate resistant crops</p> | <p>No significant environmental impacts are expected for this activity. These demonstration sites will be on land currently used for agriculture (i.e. no clearing will take place)</p> | <p>Given that farming practices are largely the domain of males in the community, there is the potential for gender inequity in the absence of other activities aimed at female members of the community. Consideration also needs to be given to the types of vegetables grown in the demonstration plot to ensure that the species chosen are not culturally insensitive for the surrounding community.</p> | <p>The activities chosen will be inclusive of all social groups and gender within the community. This is not a social issue that needs to be addressed, but individuals involved in this project need to be culturally sensitive that males in the community will most likely have control of the decision-making around farming practices and community consultation should reflect this. However, females should not be excluded in participating in community consultation and it will be up to the village chief to determine who should be involved in the project and their roles. The communities will participate in decision making around location of plots and crop types.</p> | <p>Supervisory checks by VMGD-PMU</p> |
| <p>Establish the plant distribution centres for the dissemination of climate-resistant crops, such as the agricultural college,</p> | <p>No significant environmental impacts are expected for this activity.</p> | <p>No significant social impacts are expected for this activity. Consideration needs to be given to the location of the plant distribution centres to ensure</p> | <p>The location of the plant distribution centres will include a consultation process with relevant stakeholders and prioritise locations that will not</p> | <ul style="list-style-type: none"> - Location of the plant distribution centres - Number of farmers accessing the plant distribution centres |

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|---|--|--|---|-----------------------------|
| churches, high schools and other suitable locations | | the maximum amount of farmers can have access to the climate-resistant crops. | involve any building construction. Any construction to ensure that aggregates are sourced from licensed / permitted quarries or borrow pits, and waste is disposed to authorized municipal dumps / landfills. | Supervisory checks VMGD-PMU |
| Develop and roll out a farmer training to ensure the success of the dissemination of climate resistant crops | There are no negative environmental impacts expected with this activity. Training will focus on sustainable land management and agricultural practices. | There are no negative social impacts expected with this activity. Training will be inclusive. | N/A | Supervisory checks VMGD-PMU |
| Distribution of cultivar planting material to farmers | No significant environmental impacts are expected for this activity. There is a possibility that farmers may extend plots into forested areas in the medium to long term. Farmer training will include sustainable land management and agricultural practices, including avoiding conversion of natural habitats and forest. | Given that farming practices are largely the domain of males in the community, there is the potential for gender inequity in the absence of other activities aimed at female members of the community. | The activities chosen will be inclusive of all social and gender groups within the community. Project implementation and farming support will include discussion about prioritizing existing cleared land for agriculture, and minimizing the clearance of new land, and the benefits of forests and natural habitats to community and agriculture. | Supervisory checks VMGD PMU |

Table 2 Rural Water Security - Summary of proposed activities / subprojects, potential impacts and mitigation measures

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|---|--|---|--|---|
| <p>Install rural water supply systems</p> <p>Tanks and structures for rainwater harvesting</p> | <p>There are not expected to be negative environmental impacts expected with this activity, however there could be site specific impacts which need to be identified prior to installation.</p> | <p>If rainwater tanks are not properly maintained there is the risk that the tanks will become a breeding area for mosquitoes. There is also the potential for health impacts from water contamination if rainwater tanks are not maintained.</p> | <p>An education and community awareness campaign on rainwater tank maintenance will be used to educate the users and other members of the community on the appropriate maintenance to prevent health issues relating to water contamination and vector and water borne diseases. Prior to the installation of rainwater tanks, a detailed environmental and social screening should be carried out for each location. Water supply standards and guidelines will require rainwater tanks will be fitted with first flush devices and roofs and gutters will be clean before the tank is connected.</p> <p>Any construction to ensure that aggregates are sourced from licensed / permitted quarries or borrow pits, and waste is disposed to authorized municipal dumps / landfills.</p> | <p>Compliance and supervisory checks VMGD PMU.</p> |
| <p>Install rural water supply system</p> <p>- Small pumping systems for groundwater.</p> | <p>Groundwater extraction may cause the water table to be lowered (if the rate of extraction exceeds the amount of water entering the groundwater system). The associated impacts from a reduced water table level include reduced quantity of water availability, reduced base flows to streams, possible</p> | <p>No negative social impacts are expected for this activity (except for indirect impacts from the environmental impacts as described).</p> | <p>Assess the thickness and width of the freshwater lens to establish an extraction rate and ensure the estimated groundwater extraction is less than the sustainable extraction rate.</p> | <p>Compliance and supervisory checks VMGD PMU..</p> |

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|--|---|---|---|--|
| | permanent loss of groundwater storage capacity, potential salt water intrusion, subsidence of surrounding land and destruction of groundwater dependent ecosystems. | | | |
| Install rural water supply system - Stream and spring abstractions | Surface water abstractions reduce the amount of water available and may result in a decreased amount of habitat available for aquatic species, degradation of downstream estuarine habitat, changes in fish passage preventing life cycle stages for migrating species, potential impact on productivity of marine life in surrounding waters and change in composition of aquatic communities. | Stream diversions could dry up downstream water supplies for other communities reliant on the water source. | An environmental screening of the potential environmental and social impacts should be carried out prior to the installation of a stream diversion. Estimate a maximum take of 70% of the water source during dry periods (depending on other uses downstream). Confirm the ownership of the water. Confirm any agreements to convey water across neighbouring custom land. | Compliance and supervisory checks by VMGD PMU. |

Table 3 Increasing Community Resilience - Summary of possible / proposed activities / subprojects, potential impacts and mitigation measures

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|--|---|--|---------------------|----------------------|
| - Food preservation and storage, such as solar dryers | No negative environmental impacts are expected. | No negative social impacts are expected. | NA | NA |
| - Improved reef/fisheries management to sustain fish supply. | No negative environmental impacts are expected. | No negative social impacts are expected. | NA | NA |
| - Improved livestock techniques, such as feed fermentation or animal husbandry | No negative environmental impacts are expected. | No negative social impacts are expected. | NA | NA |

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|---|---|---|--|--|
| - Construction of composting pit latrine(s). | Contamination to the surrounding water sources and aquifers if seepage occurs from the composting pit latrine. | No negative social impacts are expected except indirectly from environmental impacts. | The location of the composting pit latrine should be located 30m away from aquifers and other water sources. | Compliance and supervisory checks by VMGD PMU. |
| Flood or erosion control, including planting of vegetation or the construction of small-scale retaining walls | There is the potential for changes to the beach ecology and marine habitats as a result of the construction of hard infrastructure such as seawalls. Changes to marine habitats as a result of the construction of small-scale retaining walls on the coastline. | Potential relocation of communities due to land acquisition or prohibited reconstruction of property damaged by storms. Impacts on community livelihood as a result of land use restrictions, this could include the creation of buffer zones or a change in land use from agriculture to aquaculture. Potential for changes in agricultural practices as a result of saltwater intrusion i.e. cultivation of saltwater tolerant crops. | Environmental and social screening should be undertaken prior to any renovation, demolition or construction. The Land Acquisition Framework may need to be applied to this project. A detailed ESMP should be prepared prior to the construction of any hard infrastructure. It should be noted that the negative list currently prohibits the construction of any hard infrastructure, and implementation may require approval from the World Bank. It is assumed that community consultation and assessment of social impacts is included in the development of the community-based adaptation plan, and that social impacts have been minimized. | ESMP will provide monitoring requirements. |
| - Copra drying shed | No negative environmental impacts are expected. | No negative social impacts are expected. | Environmental and social screening should be undertaken prior to any renovation, demolition or construction. | Number of copra drying sheds supported by the project |
| - Solar mobile phone charging stations | No negative environmental impacts are expected. | No negative social impacts are expected. | Environmental and social screening should be undertaken prior to any renovation, demolition or construction. | Number of solar mobile phone charging stations supported by the project. |

Table 4 Buildings, Roads, Water Supplies - Summary of proposed activities / subprojects, potential impacts and mitigation measures

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|---|---|---|--|--|
| Design of water supply and sanitation. | Reduction of water resource for other users. Inadequate treatment and disposal of wastewater, leading to health impacts and water pollution. | Inadequate access for disabled / elderly and inadequate privacy and safety for women and girls. | Consult and get agreement from land owners. Design wastewater / sewage treatment and disposal according to national and international design standards for the ground conditions and the anticipated peak loads. Design to ensure all people can access facilities safely and securely. Provide gender-segregated facilities. | Compliance and supervisory checks by VMGD PMU. |
| Source of sand and gravel for resurfacing and creating concrete foundations and structures. | Uncontrolled sand and gravel mining leading to coastal erosion Clearance of vegetation, nesting areas, feeding areas for wildlife. | Disputes over access to land or access to resources. Occupational health and safety of quarrying / mining. | Reuse crushed concrete. Procure sand and gravel in 'bulk' from licensed quarries. If licensed quarries are not available and it is not feasible to transport aggregate from other areas: <ul style="list-style-type: none"> • Identify borrow pits / excavations that could be used for small sources. • Avoid beach mining in areas where erosion or inundation could be exacerbated. • Undertake a screening assessment to identify potential environmental and social risks, and submit an environmental license application form to the DEPC. • Apply to Dept of Geology and Mines for an 'Occasional Permit'. • Obtain licenses and permits from Dept. of Geology and Mines, and DEPC prior to operation. • Negotiate access to resources, including a fair price, from rightful resource owners. <ul style="list-style-type: none"> • Ensure occupational health and safety procedures, training and equipment for all operations. | Compliance and supervisory checks by VGMD PMU. |

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|--|--|---|--|--|
| Construction / land clearances | Damage to rare vegetation or habitats such as nesting areas, feeding areas for wildlife. | Removal of structures (fences, animal pens) income-generating assets such as trees or crops. Damage to physical cultural resources, including graves. | Consultation with owners and compensation for lost asset or income. Survey the site and consult with land owners prior to finalizing design. Realign to avoid PCR or otherwise move or protect PCR as required by land owners and GoV. Follow chance find procedure. Survey the site and consult with land owners prior to finalizing design. Realign to avoid critical natural habitats and otherwise mitigate through replanting. | Numbers of physical cultural resources incidents. Number of incidences involving damage to natural habitat. Compliance and supervisory checks by VGMD PMU. |
| Construction and Demolition Waste. | Waste is discharged to land or water ways or coastal areas, creating pollution and an eyesore. | Waste is stockpiled, burnt or buried in a way that creates a health and safety hazard. Materials are wasted when they could be reused. | Stockpile reusable materials for use by the community. Separate out recyclables that can be taken to Port Vila for recycling. Take non-recyclable, non-reusable materials to the landfill in White Sands, Tanna. Take hazardous waste to the landfill in Port Vila. Avoid discharge of wet concrete or cement powder into water ways or coastal areas. Repurpose left over wet concrete for other uses. Pour left over wet concrete onto the ground to harden. Dispose of hardened concrete. | Compliance and supervisory checks by VGMD PMU. |
| Earthworks creating stockpiles of sediment. | Discharges of sediment to water ways or coastal areas. | No negative social impacts are expected. | Avoid dumping of sediment into water ways or coastal areas. Stockpile excess sediment at least 20m from water ways and high tide, for reuse by locals. Spread and stabilize (by planting) excess sediment to avoid erosion. | Compliance and supervisory checks by VGMD PMU. |
| Use of oil, petrol, diesel and chemicals. | Discharges of waste oil or hazardous spills into ground or waterways. | Health risks from contact with contaminated water or soil. | Safe storage of hazardous materials. Contain waste oil for recycling. Refuel machinery at least 20m from waterways and coastal areas. Dispose of all containers and waste materials at an approved landfill. | Compliance and supervisory checks by VGMD PMU. |
| Community health and safety during construction. | | Safety incident due to students or community members entering the work site. | Use warning signs and demarcate construction areas that are 'no go' for non-workers. Induction training for community members. | Number of incidents involving the public. |

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Safeguard Monitoring |
|--------------------|---------------------------------|--|--|--|
| | | | | <p>Observations of signage and barriers for public safety.</p> <p>Compliance and supervisory checks by VGMD PMU.</p> |
| Use of local labor | | <p>Gender inequity. Unsafe work practices.</p> | <p>Consult with the land owners and broader community about contribution of labour or project management, for working hours/days and for equal opportunity for tasks.</p> <p>Employment should be consistent with Vanuatu labor laws and no children (under 16 years old) shall be involved (or be on the work).</p> <p>Women and men shall have equal opportunity. Fair representation and consultation with entire community during project planning. Work is shared based on skill and ability.</p> <p>Provide suitable training to locals to do the work safely and provide all relevant safety equipment.</p> | <p>Records of labor employed – number of local people, by gender and age.</p> |

4 Legal Framework

4.1 Environmental Protection and Conservation Act (EPCA) and EIA Regulations 2011

Under the EPCA, the Department of Environmental Protection and Conservation (DEPC) requires an environmental permit for any activity that is likely to impact on the environment and any activity that requires any license, permit or approval under any law (e.g. a Quarry Permit or Foreshore Development Consent).

The process requires the completion and submission of an environmental permit application form to the DEPC, accompanied by plans, other supporting information, and a fee. Applications must include an identification of impacts and mitigation measures. The DEPC will review the application form, and, if necessary, undertake a Preliminary Environmental Assessment (PEA).

Three outcomes occur from the application process:

- For projects listed on the minor project schedule, an environmental permit will be issued without a PEA. The permit may or may not have conditions.
- For projects listed on the PEA schedule, or otherwise has potentially significant impacts, a PEA will be produced by the DEPC. As a result:
 - for projects with minor or readily mitigatable impacts, an environmental permit will be issued, with conditions; or
 - for projects likely to cause significant environmental, social and / or custom impacts an Environmental Impact Assessment (EIA) and accompanying Environmental Management and Monitoring Plan (EMMP) are required and will be assessed before an environmental permit is issued.

Potential sub-projects funded under this Project that may require a PEA include:

- Any quarrying, excavations and extractions.
- Any activity impacting a water source.

4.2 World Bank Safeguard Requirements

Policies applicable to this project are summarized below³.

4.2.1 Environmental Assessment (OP/BP 4.01)

This policy provides the requirements, and procedures, for the environmental assessment of the World Bank's lending operations. Inter alia, it requires (i) detailed qualitative and quantitative analysis to determine project impacts, (ii) determination of tangible measures to prevent, minimize, mitigate or compensate for these adverse impacts, (iii) public consultation and disclosure as part of the

³ The entire Operational Manual with details of all policies is available online at [Ext Opmanual - Operational Manual - World Bank](#)

Environmental Assessment (EA)⁴ process and (iv) requires an EMP to address set of mitigation, monitoring and institutional measures to be implemented during design, construction, operation of maintenance phases of the project.

For projects such as this, where not all of the environmental and social impacts are known at the time of preparation or restructuring, an ESMF is prepared. ESMF provide a framework and instructions to apply OP/BP4.01 (and other safeguard policies) to projects as they are defined during project implementation.

Project screening has identified that this project remains a Category B under the categorization process of this policy. No Category A activities are within the scope of the Project.

4.2.2 Natural Habitats (OP4.04)

This policy requires the conservation of natural habitats and specifically prohibits the support of projects that involve significant conversion or degradation of critical natural habitats, as defined by the policy. The policy requires the EA to identify impacts on biodiversity and species and to determine endemism, endangered species and whether the project impacts on these species. If the EA determines that a project impacts or degrades natural habitat, the project must include mitigation and monitoring measures acceptable to the Bank.

The project selection checklists will screen for potential risks relating to this policy, and relevant mitigation measures are included in this document to avoid or mitigate adverse impacts on natural habitats, consistent with this policy.

4.2.3 Physical Cultural Resources (OP4.11)

This policy seeks to avoid the disturbance and or destruction of Physical Cultural Resources (PCR). PCR includes places of worship, sacred sites, buried artifacts, cemeteries and archeological assets, etc. The policy requires EA to undertake an exhaustive desk review and/or site investigation to pre-identify and locate PCRs in the project influence area, propose management measures and include chance find clauses in civil works contracts during construction and maintenance stages.

The project selection checklists will screen for potential risks relating to this policy, and a chance find procedure on PCR is included in the ESMF, consistent with this policy. The likelihood of impacting PCR is very low, since the development is mostly village led and the PCR will be owned / treasured by the village.

4.3 Gap Analysis

4.3.1 Environmental Assessment

There are few gaps between the EPCA process and the requirements of OP4.01 Environmental Assessment. Mitigation requirements are the same under the environmental permit process and the ESMF.

For example under the EPC ACT there is the requirement for an environmental permit for developments that may impact the environment and an ESIA for significant impacts. There is often no

⁴ Includes social assessment

requirement for ESMP for activities with minor or moderate impacts as these are controlled by EPC ACT permit conditions however ESMPs can and have been used to demonstrate how environmental and social risks are to be managed.

Some small scale activities such as water supplies and sanitation do not come to the attention of the DEPC and do not get screened through the PEA process under the EPC ACT. In this project, each subproject will complete an application for an environmental permit to ensure that the EPC ACT is correctly applied. Other permits, licenses and approvals as required for different project activities will be applied for and conditions followed.

The processes will be harmonized so that the requirements of both the Government of Vanuatu and the World Bank will be met with any safeguard instrument that is prepared.

4.3.2 Land Acquisition

| Vanuatu Laws | World Bank Safeguard Policies | Gap-Filling Measures |
|---|--|---|
| There are no provisions to prepare Resettlement Plan based on meaningful consultations with affected people, including the poor, the landless, elderly, women, and other vulnerable groups. | OP 4.12 requires that Resettlement Plans must be prepared based on consultations with affected people, and that poorer and vulnerable people are also consulted and informed of their entitlements and resettlement options. | Abbreviated Resettlement Action Plans (ARAP) will be prepared in consultation with affected people, including vulnerable groups, and disclosed by the PMU; translated or summary versions will be available at the provincial, district and local level. Local Nakamal leaders whose members are affected will also receive a copy of the ARAP. |
| There are no provisions to improve or at least restore the livelihoods of all affected people. | It is necessary to improve or at least restore livelihoods of affected people by a range of strategies targeted at affected people. Nobody is to be worse off as a result of the development project. | Where such impacts will be experienced, ARAPs will include measures for improvement or at least restoration in living standards of affected people to pre-project levels. |
| Very limited provisions to provide assistance/compensation to APs who lose access to non land assets. | Requires that affected people are compensated for all losses, including non-land assets, at full replacement cost. | The project will follow the principle of replacement cost for compensation of affected assets. |
| There is no requirement for the monitoring and assessment of resettlement outcomes. | OP 4.12 requires that resettlement outcomes be monitored and assessed. | ARAPs will include indicators and baseline data to monitor impacts on living standards of affected people. The monitoring reports will also be disclosed including to affected people. |

4.4 Applicable Safeguard Instruments

Table 5 identifies the safeguard instruments compared to the relevant Safeguard Policy.

Table 5 Safeguard Instruments

| Safeguard Policy | Type of Subproject | Applicable Instrument |
|---------------------------------------|--|---|
| OP4.01 Environmental Assessment | All subprojects or activities | Safeguard Screening Form (Annex C) |
| | Category B (Geographically limited, readily identified impacts that and can be mitigated) | An Environmental Management Plan (EMP), or a Mitigation Matrix, depending on the nature and scale of potential impacts. (Refer to the policies below for more information). Environmental permit. |
| | Category C (Negligible or minimal potential impacts that are easily mitigated) | Category C projects do not require any safeguard instrument but a Mitigation Matrix may be used to assist mainstreaming mitigation into project design. Environmental permits may still be required. |
| OP4.11 Physical Cultural Resources | All subprojects or activities | Chance Finds Procedure (CFP) relevant for all sub-projects. EMP will be prepare with a PCR plan component if required, based on screening. |
| Natural Habitats OP/BP 4.04 | All subprojects or activities | Screening checklist to identify and avoid natural habitats. EMP required where mitigation is required. PEA required for disturbances to forest areas above 10ha. |
| OP4.12 Involuntary Resettlement | Land access provided by private or customary landowner/s | Negotiated settlement (lease or Voluntary Land Donation) is a formal agreement with landowners to secure land for project-specific purposes (refer Land Acquisition Framework). |
| | Involuntary land access (temporary or permanent) | Abbreviated Resettlement Action Plan required (refer Land Acquisition Framework). |

5 Processes for Sub-Project Screening and Mitigation

5.1 Safeguards Processes – Water Supplies

A Defining Subprojects

- VGMD PMU and Area Councils will prepare sub-projects, including the villages, water supply sources (rainwater, groundwater/spring, surface water).
- VGMD PMU and Area Councils will undertake screening as per the checklists in Annex A, C and D, and check the Vanuatu environmental legislation.
- Investments including an activity in Annex A cannot be accepted for funding.
- Investments with potential risks that score 3 or 4 in the screening Checklist in Annex C, a mitigation matrix will be required to accompany the application (sample found in Annex J). Where investments have potential risks that score 5, and / or the investment is screened Category B, an EMP will be required to be prepared before the investments can be approved.
- Where an EMP is required, the VGMD will prepare the EMP consistent with the ESMF. The EMP will be cleared by the World Bank prior to investment implementation.
- Community consultation will be carried out and recorded using Annex H.
- Train Area Councils and Civil Society Organisation Consortium on the EMSF requirements.

B Implementing Water Supply Subprojects

- Civil Society Organisation Consortium, Area Councils, and any contractors, will support the Villages to implement the safeguards requirements as part of project implementation (mitigation matrix, EMP).
- The Nakamal leaders and Area Councils will manage grievances and keep records in the first instance (until / unless elevated to the VGMD PMU). Records will be submitted to VGMD PMU.
- VGMD PMU will do monitoring visits and will prioritise monitoring the Category B investments and investments with EMP.
- Incidents, successes, grievances and outcomes will be reported by VGMD PMU in project reports for the World Bank.

5.2 Safeguards Processes - Buildings / Structures, Feeder Roads and other Construction

Safeguards steps integrated into the cycle of an IRCCNHH activity are as follows:

A Preparation stage

- Options identification and feasibility checking, including ensuring the activity can be funded – through the funding criteria, list of prohibited activities etc.
- Consultation with officials, communities and individuals once an activity has been identified and found financially and technically feasible. This consultation will identify any local issues with the preferred location, and will guide the screening that follows.

- Screening. Environmental and social screening checklists are in Annexes A, C and D. Screening will lead to identification of any measures required to manage adverse impacts. These measures will be included in the implementation plan.
- For minor environmental impacts, simple mitigation and monitoring measures can be provided in the implementation plan (as documented in Section 3). A mitigation matrix can be used to manage impacts (refer Annex J). For moderate or significant environmental impact a sub-project specific ESMP is required. Check for requirements under Vanuatu Legislation (Annex K).
- For impacts that affect livelihoods, any mitigation measures (such as replacement of affected crops) should be accomplished before assets are affected or individuals or communities have suffered any loss. It will also be necessary to ensure that any MOUs, voluntary donations of land or other assets (Refer Land Acquisition Framework) are formally recorded prior to commencement of works.
- The Implementation Plan including safeguards measures will be disclosed to stakeholders by announcement on radio and in the local press, and by facilitating consultation of the document by members of the public if desired at their Provincial Centre.
- The relevant line agency will notify the mechanism for notifying and handling incidents, complaints or grievances along with the implementation plan.

B Implementation

- The responsibility for implementing mitigation measures during implementation is the line agency, however it could be delegated to a contractor or third party. The responsibilities should be clear prior to work starting, and any briefings or training provided as necessary.
- The line agency staff and the M&E staff from PMU will monitor the implementation of mitigation measures, and record progress / outcomes.
- The contractor, the client or its agent and local stakeholders will meet to discuss progress and resolve any incidents or complaints arising from the project. The implementing agency will log all complaints to ensure resolution (see Annex I).
- Finally, at handover of the facility to its owner/operators, any impact monitoring and reporting procedures will be agreed, and the appropriate institutional responsibilities confirmed (see Annex G). If these are community assets then the forms in Annex E, F and H should be used.

5.3 Safeguards Actions - other subprojects / activities

For subprojects / activities that do not require land or physical assets, but will involve decision making that could produce environmental or social impacts, Section 3 should be consulted. The Tables contains mitigation measures that are considered appropriate during the decision making process.

Notes should be placed on file of the decisions made and confirmation that mitigation measures were followed. Monitoring procedures should be put into the M&E framework. This may be based on the

table above, with a column added to record the mitigative actions taken- See Annex J for a pro forma recording matrix.

Notes should also be made of any incidences of non-compliance, and / or of any complaints or social or environmental issues that arise from the subprojects / activities. Complaints processes should follow those described in the section above. Monitoring records shall be kept in the M&E database.

Summary information should be provided in the quarterly reports to the PMU and the World Bank under the safeguards section: Subproject / activity, mitigation measures, monitoring plan and results for the quarter, complaints or incidences and follow up actions.

EG:

Collection of crop cultivars: Decisions have been made to collect x, y and z cultivars, all of which are already present and / or endemic to Vanuatu and will not cause weed problems. There is no need for monitoring of this activity. If any complaints are received they will be recorded and actioned through the grievance process.

5.4 IRCCNH Activity Records

Each activity under Components that will have physical impacts⁵ that follow the processes in Sections above will require the VGMD to set up a file or dossier that contains the following data of relevance to safeguards:

A. Planning Stage

Before the project commences the following should be on file (where required, depending on the type of project):

1. IRCCNH Work Plan/Budget line item reference (indicating internal and PMU approval of the activity)
2. General Location Map
3. Site plan or sketch showing GPS coordinates where possible
4. Technical drawings/plans, standard approved design *or* duly signed off by the appropriate quality control officer
5. Completed Safeguards screening checklist, duly signed off
6. Proof of agreement to use the site where necessary (Community consultation records, completed voluntary land donation form or equivalent Line Agency document)
7. Building permit from Provincial Building Officer
8. Preliminary Environmental Assessment, EMP, etc.
9. Bid documents
10. Tender documents
11. Village investment application documentation.

⁵ Establishment of Provincial Disaster Centres under Subcomponent 1.2 (iii); small grants to communities for resilience activities specified under Subcomponent 2.2; setting up plant distribution centres under Subcomponent 3.2; installation of rainwater catchments under Subcomponent 4.2.

B Implementation Stage

When physical work commences, the following records will be held:

13. Contract documents including:
 - a. Work Plan and timetable
 - b. Budget
 - c. Payment schedule
 - d. Insurance and liability provisos
 - e. Procedure for handling incidents, complaints or grievances
 - f. Reporting schedule (including safeguards)
 - g. Specific mitigation measures
14. Quarterly Progress Reports including
 - a. Any environmental incidents or grievances notified - see pro forma tracking sheet at Annex I.
 - b. M&E reports (requirements will be in TORS/contract)
15. Record of handover to the community where appropriate (see pro forma Annex G)

6 Grievance Redress Mechanism

This section provides guidance for complaints management for World Bank-funded projects being implemented by the PMU. The purpose is to provide a centralized 'grievance redress mechanism' (GRM) for the Project which can also be applied to meet the Bank's safeguard requirements.

The GRM outlines a process for documenting and addressing project grievances (complaints) that may be raised by affected persons or community members regarding specific project activities, environmental and social performance, the engagement process, and/or unanticipated social impacts resulting from project activities. It describes the scope and procedural steps and specifies roles and responsibilities of the parties involved. The GRM is subject to revision based on experience and feedback from stakeholders.

The grievance process is based upon the premise that stakeholders are free to raise their concerns to relevant representatives at no cost or threat of any negative repercussions; that concerns arising from project implementation are adequately addressed in a timely and respectful manner; and that participation in the grievance process does not preclude pursuit of legal remedies under the laws of the country.

The VGMD PMU will manage the GRM, utilizing formal, informal and traditional grievance procedures suitable to the Vanuatu context. Generally, complaints and disputes will be resolved at the community level as much as possible. Grievances may be firstly referred to customary conflict mediation arrangements where appropriate, so long as they are not directly affiliated with leaders who are party. If the issue cannot be resolved at this level, it will be raised to the next level and so on (Figure 1).

VGMD PMU will aim to address all complaints received, regardless of whether they arise from real or perceived issues. Any stakeholder who considers themselves affected by the project activities will have access to this procedure at no cost or threat of any negative repercussions. The statutory rights of the Complainant to undertake legal proceedings remain unaffected by participation in this process.

Limitations

The GRM does not deal with grievances relating to internal communication or disputes between the project team, Implementing Agency, other agencies; nor intra/inter-community conflicts that are not project-related.

Objectives

The GRM has the following objectives:

1. Establish a prompt, easy to understand, consistent and respectful mechanism to support VGMD PMU in receiving, investigating and responding to complaints from community stakeholders;
2. Ensure proper documentation of complaints and any corrective actions taken; and
3. Contribute to continuous improvement in performance through the analysis of trends and lessons learned.

Institutional Arrangements

The VGMD PMU will be responsible for managing grievances including updating the grievance database to track the progress of formal grievances for the duration of projects. This involves coordinating between key agencies on a regular basis (i.e. weekly or fortnightly). The PMU is responsible for final oversight of community consultation and grievance management. Local and Area Councils will be briefed on issues and engaged to support convening community meetings as required.

The PMU will administer the grievance database. Nominated staff will regularly update the grievance database in consultation with key agencies where complaints are raised. All project-related grievances should be captured in the database regardless of the agency they were raised with. The PMU should be involved in the resolution of all project-related grievances that sit within their key functions, and shall support other key agencies with adequate resources and staffing as necessary to ensure grievances are effectively resolved.

Awareness of GRM

The PMU will inform the Local Councils, Area Councils, communities project teams, contractors and key agencies on the GRM.

Communities and affected persons should be advised of the GRM in the early stages of engagement, and be made aware of:

- How they can access the GRM (i.e. key people and complaint forms);
- Who to speak to and lodge a formal complaint;
- The timeframes for each stage of the process;
- The GRM being confidential, responsive and transparent; and
- Alternative avenues of dispute resolution where conflicts of interest exist.

III. Grievances Procedure

The grievance resolution process includes four key stages – (i) Receive; (ii) Investigate/Enquire; (iii) Respond and (iv) Follow up/Close Out as illustrated in Figure 1.

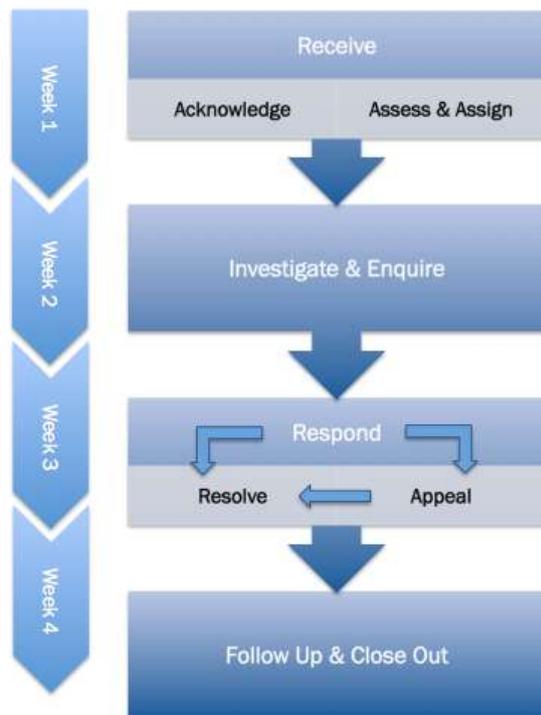
Affected people are, in the first place, to discuss their complaint directly with the Nakamal leader. If the Nakamal leader supports the complaint both persons take the complaint to the PMU, or the Ministry during the project planning and design stage, or the contractors site office or directly to the PMU during construction. For those who wish to remain anonymous, a register of their complaint or issue can be made on a register held with the Nakamal leader. This register will be provided to the contractor as per the above.

Relevant personnel will be required to accept formal grievances and ensure avenues for lodging grievances are accessible to the public and affected persons. This may be in verbal or written form. The grievance should be formally documented on the grievance form, assessed on its level of urgency/severity and assigned to the appropriate person who then acknowledges within two days to

the Complainant, that the grievance has been received and is under review. Attachment 1 provides a template for lodging grievances.

The severity of each grievance and subsequent course of action shall be determined by the PMU. If the issue is easily resolvable, the responsible party should endeavor to address the issue directly on site, and record the details for filing into the Grievance database managed by the PMU. If the grievance is a more complex issue, it may require additional meetings and further investigation. A formal response should be provided within a two-week timeframe or a timeframe that has been agreed to with the Complainant. If additional time is needed, the Complainant will be advised of this in advance.

Figure 1 Stages in the Grievance Resolution Process



Grievances should be closed out within 30 days (Table 1). The response should communicate findings of the investigation and resolution, and seek approval from the Complainant. The Complainant will either accept or appeal the outcome. If the Complainant is satisfied with the outcome then the grievance is closed out and they provide their signature (or fingerprint) on the grievance form as confirmation.

Table 1 below outlines the timeframes for each stage of the grievance process.

Table 6 Grievance timeframes

| Timeframe | Stage |
|-----------|--|
| 1 day | <ul style="list-style-type: none"> Grievance reported and referred to nominated person / project representative |

| | |
|----------------|--|
| 2 days | <ul style="list-style-type: none"> • Determine severity of grievance • Acknowledge receipt of grievance to Complainant • Resolve immediately if possible • Grievance report sent to PMU and logged in database |
| 14 days | <ul style="list-style-type: none"> • Meeting with relevant parties, village leaders etc. • Confirm resolution with Complainant and seek their approval. |
| 30 days | <ul style="list-style-type: none"> • Grievance closed out • Database updated |

If an agreement is not reached between the Complainant and VGMD PMU, the grievance will be escalated to the Minister of Climate Change for review and a final decision. If necessary, further action will be taken to resolve the issue. If the Complainant is still dissatisfied with the outcome, they may be referred to the legal process, however, courts should be the last avenue for addressing grievances.

A grievance is closed out when no further action can be or needs to be taken. Closure status will be entered into the Grievance database as follows:

- Resolved – resolution has been agreed and implemented and signed documentation is evidence of this.
- Unresolved – it has not been possible to reach an agreed resolution and the case has been authorised for close out by the Minister of Climate Change.
- Abandoned – cases where the attempts to contact the Complainant have not been successful for two months following receipt of formal grievance.

7 Consultation and Disclosure

ESMF Consultation

Prior to restructuring, a draft version of the ESMF was circulated to, discussed with, and reviewed by DEPC, Dept of Water and DLA. DEPC has provided feedback on their EPCA processes and list of activities requiring PEA and minor projects not requiring PEA. Discussions included how to ensure that environmental permits were not overlooked. Discussions with the DLA covered the grievance redress mechanism, including how grievances are managed at the village level and between land owners, the role of the Area Councils to coordinate investments and conduct stakeholder engagement for village-led investments (Component 1), how community labour will be trained and managed in health and safety.

A draft version dated April 2016 was disclosed on the NAB websites for comment. No comments were received.

The PMU M&E Officer has been working with the TAC and Area Councils on Tanna to train them on the M&E system for the project. The ESMF has been part of those discussions, focusing on the checklist process to screen subprojects and manage impacts, and how to manage grievances. The main conflict that is of concern to the communities is how to manage access to water supplies where they are located on land not owned by the community. The processes in the ESMF (identification of land owners, agreement to access (VLD form or lease arrangement) and grievance redress, were discussed.

This final version (April 2017) of the ESMF has been publicly disclosed in Vanuatu on the Climate Change National Advisory Board website and on the World Bank website.

On-going consultation

Community engagement and empowerment is the cornerstone of the approach to the subproject development and implementation. This has been done to date, and will continue to be done, by the Implementation partners, supported and supervised by the PMU. The outcomes of the subprojects are to improve resilience in the communities, and therefore their engagement in the project design and decision making is an integrated part of the approach.

Consultation with communities and institutions involved in project implementation includes, and will continue to include, information on the ESMF and how it will relate to their investment. Each village group / institution will be made aware of the ESMF, and the obligations for screening risks and mitigating potential impacts. They will be made aware of the 'prohibited' list of activities that cannot be funded under the IRCCNH because of the safeguards risks, and key mitigation measures prescribed in the ESMF. They will also be informed of the GRM.

8 Institutional Arrangements, Responsibilities and Capacity Building

The VGMD PMU is responsible for implementation of the ESMF as the Project Implementing Agency, and is responsible for ensuring that the Implementing Partners (Civil Society Organisation Consortium, VARTC, Dept of Local Authorities (provincial and area secretaries), Area Councils, Dept of Water) are familiar with the safeguards management measures and requirements for project implementation.

At the sub-project / activity level the Implementing Partners are responsible for following the screening steps and assisting the villagers and contractors to implement the mitigation measures etc. The PMU will support the Implementing Partners through raining on the ESMF processes, standards and checklists, and will review and monitor progress.

If an EMP is required it is the PMU's responsibility to ensure this is completed and provided to the Bank for review and clearance prior to implementation.

Table 7 Summary of Roles and Responsibilities

| Organization | Roles and Responsibilities |
|--|--|
| VGMD PMU | <p>Prepare the ESMF, disclose and conduct consultation.</p> <p>Incorporate the ESMF into the Project Operations Manual.</p> <p>Train implementation partners how to implement the ESMF.</p> <p>Ensure the ESMF is put into the contracts of any Contractor/NGO Consortium or other third party.</p> <p>Implement the ESMF for all activities it is directly responsible for (i.e. Provincial Disaster Centres).</p> <p>Supervise and monitor the partner organisation's implementation of the ESMF.</p> <p>Prepare EMP if required, and submit to the World Bank for review and clearance.</p> <p>Address project-related complaints not resolved by partner organisations.</p> <p>Review and update the ESMF and Project Operations Manual where necessary.</p> <p>Report on progress and outcomes of the ESMF to the World Bank.</p> |
| Partner Organisations: Area Councils, Civil Society Organisation Consortiums, Contractors, Dept Water, VARTC etc. | <p>Use the checklists and screen risks as per the ESMF, for all projects they are responsible for.</p> <p>Develop and implement mitigation matrices, in partnership with beneficiaries.</p> <p>Implement EMP, in partnership with beneficiaries.</p> <p>Address grievances where possible, and otherwise elevate them to VGMD PMU.</p> <p>Report implementation progress to VGMD PMU on a monthly basis.</p> |

| Organization | Roles and Responsibilities |
|-------------------|--|
| World Bank | <p>The Bank will provide support to the VGMD PMU through its internal safeguards as required, including supervision of the implementation of the ESMF. The World Bank task team, including safeguards specialists, will make a supervision mission at least once a year. Opportunities for capacity building, training and other support and mentoring tasks will be created during missions to support the PMU to implement and supervise the ESMF.</p> <p>The World Bank task team will review safeguards reporting the Project Reports.</p> |

The PMU has been implementing an ESMF since the project inception, in 2013. Training was provided to the PMU and stakeholders on two occasions by the World Bank task team safeguards specialists. The safeguards specialists held a workshop during the project launch, to go through the ESMF and the Bank policies. This was followed up by a training field visit, where the Bank team, PMU team and stakeholders used the checklists to screen proposed sub-projects and then followed up with the relevant mitigation actions. The ESMF was integrated into the Project Operations Manual soon after this second training.

The PMU has allocated the responsibility of safeguards implementation to the monitoring and evaluation (M&E) team. The full time, Port Vila based, M&E officer is responsible for overseeing the screening the subprojects (done either by herself or the implementation partner) and preparing any EMP and obtaining environmental permits from the DEPC. She keeps all records and prepares reports for the World Bank.

30 screening checklists have been completed since 2013, 10 by the PMU and 20 by the implementation partners. The PMU has updated the screening checklist over time to address the different types of subprojects and issues that arise. They are confident with the screening process as a way of determining the potential impacts and mitigation options.

The World Bank safeguards specialists will continue to support the PMU during implementation supervision missions, and will review capacity and provide specific training on an as-required basis. A specific task will be to support the PMU to train the implementation partners regarding processes for the new subprojects, within three months of project restructuring.

Annex A Activities that will not be funded under IRCCNH

The following activities will not be funded under the IRCCNH project:

- Construction of large-scale infrastructure such as dams, seawalls, large-scale irrigation channels, sealed roads and bridges
- Purchase of large amount of pesticides, insecticides, herbicides and other hazardous chemicals. Use or storage of hazardous materials or toxic chemicals
- Introduction of non-native species, unless these are already present in the vicinity and are known to be non-invasive.
- Direct involuntary land acquisition.
- Relocation and/or structural demolition of any houses. (Renovations of government or community assets will be funded if part of a resilience or disaster response project (e.g. rainwater water harvesting structures).
- New settlements or expansion of existing settlements inside natural habitats and existing or proposed protected areas
- Activities within or near any natural areas protected by local tradition or by government (national park, world heritage site).
- Activities that require extensive land or forest clearing or tree felling (>1ha at any one location).
- Land reclamation or beach sand mining.
- Sourcing materials (sand, gravel) from quarries or borrow pits that are not permitted by DEPC and licensed by Dept of Geology and Mines.
- Activities that Screen Category A in Section B of the Screening Checklist in Annex C.

Annex B Grievance Report Form

GRIEVANCE REPORT FORM

Received by: _____

Date Received: _____

Reported by: _____

Database ID: _____

Responsible Agency: _____

Staff Name: _____

Location: _____

| | Village | First Name, Last Name | Contact Details |
|----------------|---------|-----------------------|-----------------|
| Complainant(s) | | | |
| Suco Chief | | | |

Acknowledged by: _____

Date Acknowledged: _____

Description of Concern:

.....

Category:

Compensation / Land Access / Inadequate Notification/ Disruption to Business or Property / Property Damage / Irrigation / Boundary Dispute / Environmental Damage / Construction Activities / Safety Risk /Traffic / Other

Proposed Resolution or Feedback:

.....

Complainant satisfied with process? Yes No Why not?.....

Complainant satisfied with outcome? Yes No Why not?

Print Name (Complainant): _____

Signed (Complainant): _____

Date: _____

Signed (Recipient): _____

Date: _____

Copied to: _____

Annex C Environmental and Social Safeguards Screening Form

INCREASING RESILIENCE TO CLIMATE CHANGE AND NATURAL HAZARDS (IRCCNH) PROJECT

Environmental and Social Safeguard Screening Form

Department/ Division:

Project Name & Component:

Subproject Name:

Subproject Location (include map/sketch):

Type of Activity:

Proposed Date of Commencement of Work:

A. Site Selection:

When considering the location of a sub-project, rate the sensitivity of the proposed site in the following table. Higher ratings do not necessarily mean that the site is unsuitable. They do indicate a real risk of causing undesirable adverse environmental and social impacts, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential impacts.

| Issues | Site Sensitivity | | | Rating |
|---|--|---|--|--------|
| | Low | Medium | High | |
| Natural Habitats | No natural habitats present of any kind | No critical natural habitats; other natural habitats occur | Critical natural habitats present | |
| Water quality and water resource availability and use | Water flows exceed demand; low intensity of water use; potential water use conflicts expected to be low; no potential water quality issues | Medium intensity of water use; multiple water users; water quality issues are important | Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important | |
| Natural hazards vulnerability, floods, soil stability/erosion | Flat terrain; no potential stability/erosion problems; no known volcanic/seismic/ flood risks | Medium slopes; some erosion potential; medium risks from volcanic/seismic/ flood/hurricanes | Mountainous terrain; steep slopes; unstable soils; high erosion potential; volcanic, seismic or flood risks | |

| | | | | |
|--------------------------|---|---|--|--|
| Cultural property | No known or suspected cultural heritage sites | Suspected cultural heritage sites; known heritage sites in broader area of influence | Known heritage sites in project area | |
| Involuntary resettlement | Low population density; dispersed population; legal tenure is well defined; well defined water rights | Medium population density; mixed ownership and land tenure; well-defined water rights | High population density; major towns and villages; low income families and/or illegal ownership of land; communal properties; unclear water rights | |

B. Completeness of Subproject Application:

Does the subproject application document contain, as appropriate, the following information?

| Information | Yes | No | N/A |
|---|-----|----|-----|
| Description of the proposed project and where it is located | | | |
| Reasons for proposing the project | | | |
| The estimated cost of construction and operation | | | |
| Information about how the site was chosen, and what alternatives were considered | | | |
| A map or drawing showing the location and boundary of the project including any land required temporarily during construction | | | |
| The plan for any physical works (e.g. layout, buildings, other structures, construction materials) | | | |
| Any new access arrangements or changes to existing road layouts | | | |
| Any land that needs to be acquired, as well as who owns it, lines on it or has rights to use it | | | |
| A work program for construction and operation (e.g. materials, water, energy) | | | |
| Information about measures included in the subproject plan to avoid or minimize adverse environmental and social impacts | | | |
| Details of any permits required for the project | | | |

C. Environmental and Social Checklist

The following tables provide a series of recommendations to determine potential environmental and social impacts associated with each subproject and the potential need to develop subproject specific Environmental and Social Management Plans (ESMP).

| A Type of activity – will the subproject: | | Yes | No |
|---|---|-----|----|
| 1 | Support animal husbandry or processing? | | |

| | | | |
|--|---|------------|-----------|
| 2 | Involve the construction or rehabilitation of any small dams, weirs or reservoirs? | | |
| 3 | Support irrigation schemes? | | |
| 4 | Support rural water supply and sanitation? | | |
| 5 | Build or rehabilitate any rural roads? | | |
| 6 | Involve solid waste management? | | |
| 7 | Involve small scale aquaculture? | | |
| 8 | Involve food processing? | | |
| 9 | Build or rehabilitate any structures or buildings? | | |
| 10 | Support agricultural activities? | | |
| 11 | Be located in or near an area where there is an important historical, archaeological or cultural heritage site? | | |
| 12 | Be located within or adjacent to any areas that are or maybe protected government (e.g. national park, world heritage site) or local tradition, or that might be a natural habitat? | | |
| 13 | Depend on water supply from an existing dam, weir or other water diversion habitat? | | |
| B Environment – will the subproject: | | Yes | No |
| 14 | Risk causing the contamination of drinking water | | |
| 15 | Cause poor water drainage and increase the risk of water related diseases such as malaria? | | |
| 16 | Harvest or exploit a significant amount of natural resources such as trees, fuel wood or water? | | |
| 17 | Be located within or nearby environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species? | | |
| 18 | Create a risk of increased soil degradation or erosion? | | |
| 19 | Create a risk of increasing soil salinity? | | |
| 20 | Produce or increase the production of solid or liquid wastes (e.g. water, medical, domestic or construction wastes)? | | |
| 21 | Affect the quantity or quality of surface waters (e.g. rivers, streams, wetlands) or groundwater (e.g. wells)? | | |
| 22 | Result in the production of solid or liquid waste, or result in an increase in waste production, during construction or operation? | | |
| 23 | Negatively impact on existing ecosystems or habitats? | | |
| <i>If the answer to any of questions 14 – 23 is yes, an Environmental Management Plan (EMP) should be prepared for the subproject.</i> | | | |
| C Land Acquisition and access to resources – will the subproject: | | Yes | No |
| 24 | Require that land (public or private) be acquired (temporarily or permanently) for its development? | | |
| 25 | Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests) ? | | |
| 26 | Displace individuals, families or businesses? | | |

| | | | |
|---|--|------------|-----------|
| 27 | Result in the temporary or permanent loss of crops, fruit trees or household infrastructure such as granaries, outside toilets and kitchens? | | |
| 28 | Result in the involuntary restriction of access by people to legally designated parks and protected areas? | | |
| <i>If the answer to any of questions 24 – 28 is yes, please consult the Land Acquisition and Resettlement Framework and if needed, prepare a Resettlement Action Plan (RAP) for the subproject.</i> | | | |
| D Pesticides and agricultural chemicals – will the subproject: | | Yes | No |
| 29 | Involve the use of pesticides or other agricultural chemicals or increase existing use? | | |
| <i>If the answer to questions 29 is yes, please consult the ESMF and if needed, prepare a Pest Management Plan (PMP)</i> | | | |
| E Dam safety – will the subproject: | | Yes | No |
| 30 | Involve the construction of a dam or weir? | | |
| 31 | Depend on water supplied from an existing dam or weir? | | |
| <i>If the answers to questions 30 – 31 are yes, please consult the ESMF and if needed, prepare a Dam Safety Report (DSR)</i> | | | |

D. Certification

We certify that we have thoroughly examined all the potential adverse effects of this subproject. To the best of our knowledge, the subproject plan as described in the application and associated planning reports (e.g. EMP, RAP, PMP), if any, will be adequate to avoid or minimize all adverse environmental and social impacts.

Community representatives (signatures);

Representative (1): _____ Date:

Representative (2): _____ Date:

Representative (3): _____ Date:

Local Authority representative (signature): _____

Date: _____

Project/Department representative (signature): _____

Date: _____

Annex D Land Use and Impacts Checklist⁶

| <i>Information about Affected Persons (APs)</i> | | No | Yes | <i>Describe impact and mitigation action planned</i> |
|---|---|----|---------|--|
| 1 | a) Is the location of the land to be used known? If yes, Location/Address/Legal description/GPS coordinates b) Is the ownership status of land to be used known? (Give name/s and contact details of owners/ lessees as appropriate; attach evidence if available) | | | |
| 2 | Is the current usage of the land known? If yes, describe land use. If no, observe and note during survey. | | | |
| 3 | Are the owners/users of land wanted for the project willing to donate it voluntarily? (see Annex C for requirements for voluntary donation). If no, consider another site. | | | |
| 4 | Will there be physical displacement of people from the land to be used? | | | |
| 5 | Will more than 200 people be affected, or lose more than 10% of their livelihood assets? | | | |
| 6 | Will there be loss of shelter or other structures due to the project? | | | |
| 7 | Will there be loss of agricultural and other productive assets due to the project? | | | |
| 8 | Will there be losses of crops, trees, and fixed assets due to the project? | | | |
| 9 | Will there be loss of businesses or enterprises due to the project? | | | |
| 10 | Will there be loss of income sources and means of livelihoods due to the project? | | | |
| 11 | Will people lose access to natural resources, communal facilities or services? | | | |
| 12 | If land use is changed, will it have an adverse impact on social and economic activities? | | | |
| 13 | Will access to land and resources owned or used communally or by the state be restricted? | | | |
| 14 | Are any affected households: (numbers or percentage) Poor sole parent households supporting children under five, elderly, disabled, chronically ill or vulnerable? | | Nº or % | |
| <i>Host community impacts – fill out if the activity requires physical relocation of people</i> | | | | |
| 15 | Have any potential hosts been a) consulted and b) indicated no objection? | | | |

⁶ The IRCCNH activities are small scale and are not expected to entail involuntary land acquisition. This list is included for reference if future activities require land to be acquired.

| | | | | |
|---|---|----------------|------|--|
| 16 | Have host community facilities been reviewed for adequacy to service existing and new residents? | | | |
| 17 | Has planning been undertaken and budgeted for any necessary activities to restore facilities (e.g. physical and social infrastructure) available to hosts and new community members to prior condition or better? | | | |
| <i>Impact Summary</i> | | | | |
| 18 | Does the activity have broad community support? If yes, what is the evidence for the answer? (attach documents) | | | |
| 19 | Estimate of the number of persons likely to be adversely affected by the Project, or attach a census of Affected Persons (APs). | M | F | |
| 20 | Estimate loss of assets due to the project, or attach an inventory: Land area Trees Crops Buildings Income Other categories of activity-related loss | N ^o | Type | |
| Summary of land use permissions and resettlement actions to be taken and /or Plans to be developed (see Resettlement Action Framework); include in the Activity summary, p.1. | | | | |

Annex E Community Managed Asset Summary Record

Most of this information will be supplied by the community – see Annex H – and will be held on file.

| | |
|--|---|
| Subproject/Activity reference and description | |
| Location (Village, Province, Island; GPS coordinates if available) | |
| Community Management Group formed (date, consultation record indicating community support) | |
| Contact name/address for Community Management Group | |
| Safeguards screening signed off (date) | |
| Agreement for land use signed (date) | |
| Intended Beneficiaries of project (Number of males, females, households) | M F H/h |
| Life-expectancy of subproject asset (years) | |
| Name of Farmer(s)/Operator(s) to be trained | |
| Training completed (date) | |
| Community Maintenance Plan approved (date) | |
| Community Financial Management Plan approved (date) | |
| Any beneficiary maintenance levy agreed (Vatu/yr) | |
| Indicators to be monitored by Community Group (e.g. water/soil quality, changes in resource, environment, beneficiaries' health, community disputes etc) | |
| Quality inspection completed (date) | |
| Handover to Community Management Group (date, attach form Annex H) | |
| Provincial Government contact for assistance | |
| Departmental Contact for assistance | |

Annex F Content of Community Asset Management Plan

Before physical installation of a community assets provided under the IRCCNH, the community will provide the following basic information to the line agency representative:

1. Name of village
2. Location of village
3. Proposed location of the asset (GPS co-ordinates if available)
4. Records of community consultations(s) with signed attendance list(s) indicating broad support for the project activity, formation of an asset management group (e.g. Farmers' or Water Management Committee), and management plan
5. Documentation of land/asset donation or lease arrangements if required (see Annex D)
6. Management plan including:
 - a. Description of the beneficiaries of the asset
 - b. Who will manage the asset
 - c. Who will maintain the asset
 - d. Any maintenance levies agreed
7. Name of contact person
8. Contact details

Annex G Handover of Asset to Community

1. Name of village
2. Location of village
3. Location of the asset (Description, GPS co-ordinates)
4. Description of the asset being given and received:
5. Management Plan agreed (date)..... (append)

We, the undersigned, being the representatives of the community receiving the asset described above, gratefully acknowledge that we have participated in consultations and training in management of this asset, and that it has been handed over in good order and condition. We undertake to diligently manage and maintain the asset for the whole community's benefit, and to participate in such evaluation and monitoring of the asset's performance and impacts as may from time to time be required by the Donor/Department.

Name of and position of contact person(s) for community asset:

Contact details:

Date:

I/we the undersigned being the appointed representative of the (Donor/Department).....
..... acknowledge that the community receiving the asset described above has freely participated in provision of a site for this facility, has received training in management of the asset, has adopted a Plan (appended) for its continued management and maintenance for the benefit of the whole community, and is hereby handed over the asset in trust to manage henceforth for the beneficiaries.

Name and position of contact person(s) for Donor/Department:

Contact details:

Date:

Annex H Pro Forma Record of Community Consultation⁷

The following pro forma list below may be provided to guide consultations for community groups about assets to be installed under the IRCCNH.

Record of Community Consultation

1. Village
2. Location, date, time
3. Agenda for meeting as appropriate, e.g:
 - a. To discuss IRCCNH activity
 - b. To agree on location
 - c. To agree on beneficiaries
 - d. To agree on Management Committee
 - e. To agree on trainees, operators
 - f. To agree on maintenance responsibilities
 - g. To agree on financial contributions for maintenance
 - h. To discuss and resolve any complaints or grievances about the activity
 - i. To discuss participation in monitoring the impacts of the activity
4. Summary of discussions for and against, conclusions and agreements, actions and responsibilities.

Signed (Chairperson):

Date:

In the presence of (see next page):

⁷ May be used as a guide if communities are not experienced in recording proceedings of public meetings

Annex J Sample Matrix for Recording / Filing Safeguards Monitoring Actions

| Activity | Potential Environmental Impacts | Potential Social Impacts | Mitigation Measures | Monitoring | Actions taken/outcome |
|--|--|--|--|--|---|
| Collection of root crop cultivars from both Vanuatu and internationally | Potential for root crop cultivars from overseas to become an invasive weed | Consideration needs to be given to the types of root crop cultivars collected to ensure that the species chosen are not culturally insensitive to the communities. | The root crop cultivars collected will be species already grown and viable in Vanuatu and will not be culturally insensitive to communities. | - Type of root crop cultivars collected - Indicators to be determined - coordinated by M&E desk | Invasive weed inspection performed (location, date, personnel). No new invasive weeds identified. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Annex K Legislation for Environmental Assessment

The Environment Management and Conservation Act No.12 of 2002 is a piece of environment legislation that provides for the conservation, sustainable development and management of the environment of Vanuatu, and the regulation of related activities.

It covers four main areas:

- Administration
- Environment Impact Assessment (EIA) - An EIA consists of reports being made that always include an assessment on important plant and animal species that are found in the project area and recommend important measures to protect them in a project area of interest.
- Biodiversity
- Bioprospecting Laws and Community Conservation Areas (CCAs) - This gives direction to Vanuatu communities if they consider registering their conservation areas at the national level.

An Environmental Impact Assessment (EIA) is an assessment of the possible impacts, positive or negative, that a proposed project may have on the environment taking into consideration natural, social and economic aspects. The purpose of an Environmental Impact Assessment is to ensure the decision makers consider the environmental impacts to decide whether to proceed with the project. Developments that require EIA includes tourism developments close to coastal area, logging along river bank or village, livestock farming, and bioprospecting activities close to Community Conservation Area.

The EIA process is illustrated in Figure 2 below. A Preliminary Environmental Impact Assessment (PEA) is done by the DEPC for any application for any project, proposal or development activity (except projects listed as minor), to determine:

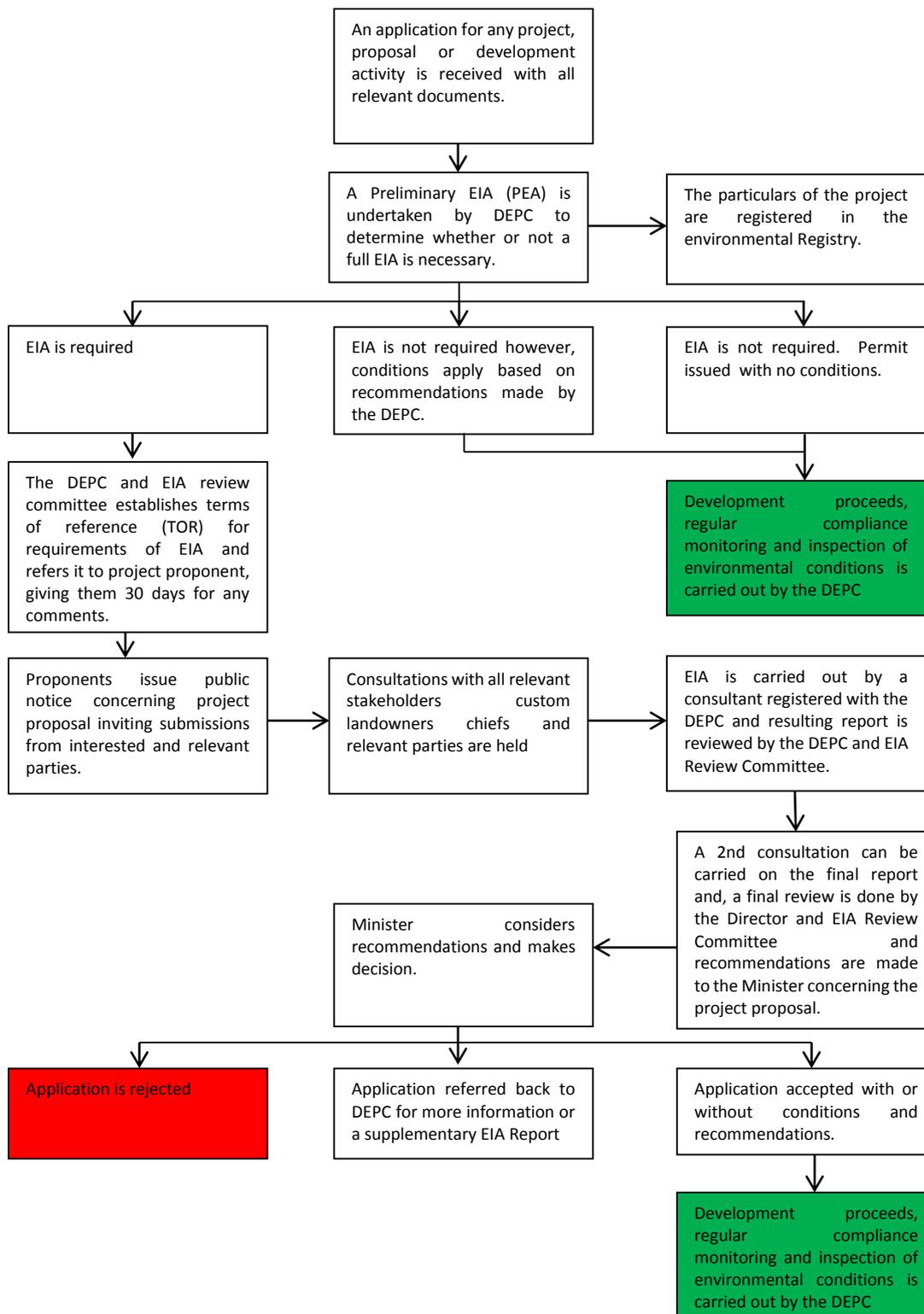
- Whether the project, proposal or development activity is likely to cause any environmental, social or cultural impact.
- The significance of any identified impact.
- Whether any proposed actions are likely to effectively mitigate, minimize, reduce or eliminate any identified significant impact.

Upon receiving information that a project needs full EIA report the DEPC Director then develop a Terms of Reference (TOR) that will direct the EIA study. The Director will make sure that the TOR covers all party concerned.

Upon the finalization of an EIA report, if the study does not address an important subject, the director may in writing notify the developer and request for full coverage of the study. If the report covers all important issues the director may in writing write to agree to the project.

Should the EIA report shows major damages to the environment the Director of Environment may decline the project in writing to notify the developer with clear details stating reasons for declining. Should the director agree to the report (s)he may in writing inform the Minister to sign for the development to proceed.

Figure K1: PEA and EIA Process in Vanuatu



Annex L Chance Find Procedure

Cultural property include monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves.

The following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed (and included in standard bidding documents where relevant).

Chance find procedures will be used as follows:

- (a) Stop the earthworks, construction or land clearing activities in the area of the chance find;
- (b) Delineate the discovered site or area;
- (c) Secure the site to prevent any damage or loss of removable objects.
- (d) Notify project representative and village head, who in turn will notify the responsible local authorities;
- (e) Department of Local Authorities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures.
- (f) Decisions on how to handle the finding shall be taken by the Department of Local Authorities and the relevant Ministry. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage.
- (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Department of Local Authorities.
- (h) Construction work could resume only after permission is given from the responsible local authorities and the Department of Local Authorities concerning safeguard of the heritage.

During project supervision, the PMU shall monitor the above regulations relating to the treatment of any chance find encountered are observed. Records will be reported to World Bank. Relevant findings will be recorded in World Bank Supervision Reports and Implementation Completion Reports will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Annex M EMP Outline

The need for an EMP/ESMP will be determined through subproject screening. The plan should detail mitigation measures for identified environmental and social impacts. The EMP will provide practical and relevant means to mitigate risks and impacts that are locally appropriate and cost-effective. The VGMD PMU will prepare the EMP for approval by the World Bank (and the DEPC if relevant) prior to implementation. The EMP will contain:

- Description of the proposed subproject;
- Analysis of anticipated impacts including location, duration and magnitude;
- Detailed mitigation measures including drawings and costs; and
- Statement of responsibilities for implementing mitigation measures and overall EMP compliance.

Responsibilities as allocated in the EMP are to be understood and agreed to by all parties involved (including contractors where relevant).

Mitigation measures will be developed in accordance with national legislation, design standards and technical specifications where relevant to help prevent potential environmental impacts. Standardized mitigation measures are included in the ESMF and may be modified or expanded on to be fit-for-purpose.

Assessments and proposed mitigation measure may have an inequitable impact on women or disadvantaged groups that need careful consideration. The proposed design must consider viable alternatives and the overall inclusivity with regard to gender and the needs of vulnerable groups or persons where applicable.

Consultation

The Consultation Strategy outlines a participatory process with communities and affected persons that is transparent, culturally appropriate and respectful of traditional protocols and decision-making processes. The participation of various stakeholder groups at national and local levels will inform details regarding the likelihood and magnitude of impacts (geographic, socioeconomic, gender-related) and appropriateness of mitigation activities and interventions. The process will allow for concerns to be raised and integrated into decision-making. A transparent process will likely facilitate establishing broad community support for the Project and subproject(s).

Social Assessment (SA)

Under OP4.10 and OP4.12, a Social Assessment (SA) is required for Category B subprojects where communities or individuals may be adversely impacted. This is unlikely in the majority of situations since the majority of projects will have an overwhelming social benefit, and are beneficiary-led.

The SA will determine the degree to which communities and identified vulnerable people could be adversely affected by project activities (often related to security of tenure, land access, livelihood sources and subsistence dependency). The SA will look at the socio-cultural setting, governance

structures, cultural heritage, and livelihood aspects of the local context. The assessment should provide detail on:

- Socio-cultural aspects of the community or cluster of communities;
- Detail on livelihoods, local economy and subsistence activities;
- Level of dependency on resources and current threats or degradation issues;
- Local governance structures including decision-making on natural resources;
- Customary tenure, boundaries, access rights and authoritative powers;
- Sites and/or resources that may hold cultural/spiritual significance; and
- Territories and/or resources under dispute.

The potential magnitude of impact will be determined through stakeholder consultations, sites visits and previous experience. Consultation activities should be planned to minimize disruption and avoid consultation fatigue.

Where it has been identified that the subproject may cause some degree of physical or economic displacement or loss of assets or access to assets, the Land Acquisition Framework will be followed. The PMU will validate the impacts of land acquisition (if any) in coordination and consideration of all stakeholder groups.

Disclosure and Reporting

All safeguard instruments must be disclosed publically on the National Advisory Board website, Bank's InfoShop, and hard copies available at relevant Area Council Office with summary or project information bulletin in Bislama.

All consultation activities must be documented with meeting minutes, list of attendees (male/female), issues raised and outcomes, being mindful of the sensitivity and confidentiality of such records.

EMP Contents

- 1.0 Introduction
- 2.0 Project Description and Schedule
- 3.0 Potential Environmental and Social Issues and Mitigating Measures
- 4.0 Institutional Arrangements and Capacity Development