

PROJECT PROFILE FORM

[Please keep responses brief and limit each to 200 words]

NAB Project №
[completed by NAB]
GIP code/Project №
[obtain from DSPPAC]
Cost Centre/Activity №
[obtain from Dept.]
Donor/DSPPAC file №
[obtain from DSPPAC]

- Project title: Pathway to enhancing waste management at the Etas Bouffa Landfill
 through effective waste and pollution monitoring, control, segregation and
 capacity building to meet Vanuatu's reporting obligations and maintain Vanuatu's
 pristine nature.
- 2. Project description: [Brief description of project, key activities and outputs, how will it be implemented?]

Description of Project: The proposed project is an initiative of the Department of Environmental Protection and Conservation (DEPC) under the Ministry of Climate Change (MoCC), to enhance waste management at the Bouffa Landfill. Bouffa landfill is managed by the Port Vila City Council (PVCC) that is under the Department of Local Authorities (DLA). This proposal seeks the support of the GCF Framework to:

- i) Procure a landfill weighbridge tobe stationed at the Etas Bouffa Landfill in efforts to enhance waste monitoring overtime to ensure that our reporting obligations in waste management are met at the national, regional and international level.
- ii) Establishment of an office at the landfill including the gate house.
- iii) Institutional strengthening and capacity building for DEPC at the Landfill facility.
- iv) Fencing the 57 Hectares of land where Etas Bouffa Landfill is located.

Key Activities and Implementation: There are only four key activities of the project:

- A) Procurement of the landfill weighbridge to support monitoring and data collection in waste management, currently all records are estimated and manually registered. The installation of a weighbridge will allow us to digitize our monitoring and data collection.
- B) The establishment of an office at the landfill to complement the installation of the weighbridge.
- C) A budget for a qualified data management officer and a maintenance officer who will be stationed at the office to oversee the data collection and maintenance of the weighbridge respectively within the five (5) year duration of the project.
- D) The fencing of the landfill is a longstanding issue, fencing the premises permanently will reduce the number of unauthorized vehicles and persons from entering. At the same time enforcing waste collection businesses and also opportunity to formalize waste pickers to segregate incoming waste, waste audits and other related activities.

3.	Approval sought:	✓ Identification*	\boxtimes	Concept	
	*For identification of p	project, use first page or	nly 🗆	Continuatio	n of existing project
4.	Funding envelope	e: [e.g. GCF Readiness,	GCF	Project Prep	aratory Facility, GCF/GEF project, other]
5.	Total funding (Vatu	ı and USD):	6.	Access m	odality:
				51	
				Direct	

	[i.e. direct by using the Government's financial system, international by using an external financial system, or a combination?]
7. Implementing entity/organisation:	8. Executing entity/lead government agency:
Department of Environmental Protection and Conservation (DEPC) [the name of the national, regional or multilateral institution that is receiving direct financial transfers to carry out the project. An implementing entity may also carry out the functions of an executing entity.]	DEPC [the name of the entity, e.g. Ministry / Department / Agency / NGO, through which funds are channelled or used for the purposes of an activity or part thereof, and/or any entity that executes, carries out or implements a funded activity, or any part thereof.
9. Other government / partner agencies:	10. Project contact details: [Contact person, title, organisation, email, telephone, address]
Department of Local Authority (DLA) and the Port Vila City Council (PVCC)	1. Mrs Donna Kalfatak Director Department of Environmental Protection & Conservation PMB 9063 Nambatu Area Port Vila 2. Ms Ionie Bolenga Principal Officer – Waste Management & Pollution Control Department of Environmental Protection and Conservation PMB 9063 Nambatu Area Port Vila Tel: +678 (33430)
11. Location: [e.g. village, island, province, and	12. Duration:
GPS coordinates if available] Department of Environmental Protection and Conservation PMB 9063 Nambatu Area Port Vila	Years5 months From2021 to2025
13. Theme(s):	14. Climate/DRR relevancy (% of budget)
☑ Mitigation☑ Adaptation☑ Cross cutting☑ DRR / DRM	 ☐ High (≥80%) ☐ Low (≥25%) ☐ Medium (≥50%) ☐ Marginal (≥5%)
15. Sector(s) by ministry: Agriculture, livestock, forestry, fisheries and biosecurity Lands and natural resources (geology, mines, water) Climate change adaptation, meteorology, geo-hazards, environment, energy and disaster management	16. Scope: □ Regional □ National □ Provincial □ Community 17. Number of people impacted/affected: □ Direct □ □ Indirect □ Women □ □ Youth (<30 years) 18. Project Type: □ Capacity building
Education and training	Community awareness
Finance and economic management	Disaster response
☐ Foreign affairs, international	☑ Field implementation☐ Formal education program
cooperation and external trade Health	

Infrastructure and public utilities		Knowledge communication	
Internal affairs (custom and culture,		Pilot / trial / demonstration Project	
labour and employment services)	\boxtimes	Planning and governance	
Justice and community services		Policy formulation and integration	
Trade, tourism, industry and		Policy support	
commerce		Research (feasibility study etc.)	
Youth and sports development		Other	

STOP HERE IF PROJECT ONLY AT IDENTIFICATION STAGE

CONTINUE FROM HERE ONLY IF PROJECT AT CONCEPT OR FUNDING PROPOSAL STAGE

Project rationale: [What is the rationale for the project? What is its strategic context? What is the primary need, and how was it identified? Is this program building on any previous activities, projects or policy?]

Rationale of the Project:

There are two key issues of waste management in Vanuatu:

- 1. Waste segregation is not practiced in households, all unsegregated waste are transported to the Bouffa Landfill at Etas
- 2. Plastic waste accumulation at the Bouffa Landfill at Etas
- A) An overview on the impacts of plastic waste on our current Semi-Aerobic Landfill system.
- B) A snapshot on community livelihood near the Landfill.

What is its strategic context:

In Vanuatu, although the introduction of relevant orders under the Waste Management Act No.24 of 2014 in 2018 on;

- · Phasing out the ban on single-use plastics
- The Littering Law
- Licensing of Private Waste Operators (PWO)

Complimentary frameworks, facilities and budget to support the implementation of these regulations remains a major challenge for the Government. A possible reason to contemplate on is waste management has never been a budget priority of the Government over the past 35 years after Independence, therefore current efforts of the DEPC are aimed at changing the mind-sets of the people of Vanuatu into making environmental protection (including waste management) a priority just like other basic necessities. Also, the current National Solid Waste Management Strategy 2020 which is tobe reviewed this year (2021) and has an implementation plan but no allocated budget, therefore the review will undergo the normal government process of policy development inorder to qualify for Government budget.

The plastic waste conundrum has remained a global issue over the years, at the international level the United Nations Environment Program (UNEP) has continued to highlight the need for UN member countries to reinforce their domestic laws to combat this issue. In Vanuatu, the Government through the joint collaboration of the Ministry of Climate Change (MoCC) and the Ministry of Foreign Affairs, International Cooperation & External Trade (MFAICET) took the bold step to address this issue in 2018 through the introduction of the ban on single-use plastics. The Government's target since then has been to phase out the ban on single-use plastics given that as single-use plastics their tendency to become plastic waste is higher than more durable or reusable plastics such as plastic dishes that we use to do our laundry.

Since 2018, the Government has maintained its momentum on phasing out the ban on single-use plastics. The current trend has seen an increase in the number of banned items from three (3) in 2018 to eight (8) in 2019. The single-use plastics that were banned in 2018 were selected based on the results of a waste survey undertaken by the Vanuatu Environment Science Society (VESS), these were the single-use plastic items that were banned during the first phase of the ban:

- ii) Polystyrene Take-away Boxes
- iii) Plastic Straws
- iv) Shopping Bags

Commented [WM1]: Provide more detail information on the key issues and provide evidence of research or study on this issues

Furthermore, two other complementing regulations were endorsed in 2018; the Littering Law and the introduction of Private Waste Operators (PWOs) that are currently being licensed under the Department of Environmental Protection and Conservation (DEPC). Under the Littering Law, there are specific penalty schedules for individuals or corporate bodies that are engaged in illegal dumping activities. The purpose of the introduction of the PWOs is to ensure that waste collection coverage is maximized in Port Vila and around Efate Island, it also provides an incentive for locals to establish businesses in waste collection, recycling, reusing, composting and other waste management practices such as incineration. However, compliance and enforcement to these regulations remains an issue given the lack of human resources and budget to fully implement the regulations at the national level.

In 2019, the results of another waste audit undertaken jointly by the UK Government and the Vanuatu Government resulted in the ban of the following eight (8) single-use plastics, the Government also agreed to phase-out the ban on disposable diapers until 31st December 2020 given that 61 % of solid waste entering the landfill was disposable diapers. The following are the single-use plastics that were banned during the second phase of the ban:

- 1. Mesh Nets for fruit and vegetable packaging
- 2. Polystyrene trays for fruit packaging
- 3. Plastic Cutleries
- 4. Plastic Plates
- 5. Plastic Cups
- 6. Plastic Stirrers
- 7. Plastic Egg Trays/Boxes
- 8. Artificial Plastic Flowers

At the International level, Vanuatu is a member to the following relevant Chemical Conventions:

- I) Basel Convention on the Transboundary movement of hazardous waste.
- II) Rotterdam Convention on the prior informed consent of the Transboundary movement of hazardous waste.
- III) Minamata Convention on the impacts of Mercury on human health and the environment.
- IV) Stockholm Convention on protecting human health and the environment from persistent organic pollutants (POP's).
- V) Vienna Convention for the protection of the Ozone Layer.

In the context of plastic waste, the Basel Convention has last year included plastic waste in its annex of hazardous chemicals, therefore reaffirming that plastic waste is hazardous waste. Hazardous waste is defined as 'waste that is dangerous or potentially harmful to human health and the environment'. Hazardous waste can be liquids, solids, gases or sludge's for example industrial waste – chemical solution/mixture waste. At the global market, no country is currently accepting plastic waste either for recycling or reusing through energy conversion – this only means that all plastic products that Vanuatu imports will remain in Vanuatu as plastic waste when no longer useful to consumers that buy them.

Given that we are party to the Basel Convention, at the Government level the DEPC is ready to dialogue with other relevant Government stakeholders on domesticating our laws and regulations to meet our international obligations to the chemical conventions that we are party to.

The principal concept that the DEPC continues to preach during awareness campaigns is to apply waste segregation in households and practice composting and 3 R's – Reduce, Reuse & Recycle. The end product of waste segregation, composting and 3 R's is that at the end of the day only a minimal amount of waste is disposed in the garbage bag and transported to Bouffa landfill, therefore our landfill is not exhausted overtime.

- A) Reduce: Minimize the amount of waste that we create.
- B) Reuse: Practicing to use items more than once
- C) Recycle: Putting a product to a new use instead of disposing it.

At the National level the DEPC is preparing to renew and launch very import waste management policies next year.

- 1. National Landfill Guideline
- 2. National Solid Waste Management Strategy 2021 2025
- 3. National Waste Minimization Plan

4. National Plastics Strategy

What is the primary need, and how was it identified:

The primary need of the project is to upgrade the Bouffa landfill inorder to achieve the following three (3) objectives:

- i) Enhance waste data monitoring & reporting: Procurement of the landfill weighbridge to support monitoring and data collection in waste management, currently all records are estimated and manually registered. The installation of a weighbridge will allow us to digitize our monitoring and data collection.
- ii) Strengthen DEPC mandate on Institutional & human resource capacity at the landfill: The establishment of an office at the landfill to complement the installation of the weighbridge. A data management officer will be stationed at the office to oversee the data collection and maintenance of the weighbridge.
- iii) Secure & control access to the landfill: The fencing of the landfill is a longstanding issue, fencing the premises will reduce the number of unauthorized vehicles and persons from entering. At the same time enforcing waste collection businesses and also opportunity to formalize waste pickers to segregate incoming waste.

These objective are part of the Recommendations of the latest waste audit (2018) funded by the UK Government (report $\underline{attached}$) – Recommendations section page 71 – 79.

Is this program building on any previous activities, projects or policy:

The program is very relevant to the National Sustainable Development Plan (NSDP) 2030 under the 'Environmental (ENV) Pillar 2: An economy which fosters sustainable growth and development through low impact industries and modern technologies to ensure the wellbeing of future generations'. Specifically under the policy objectives

- ENV 2.4 to reduce waste and pollution through effective waste management and pollution control ENV 2.4.1 Number of controlled waste disposal facilities.
- ENV 2.5 to strengthen environmental institutions and governance to meet national and international
 obligations ENV 2.5.1 Proportion of targets met in the National Environment Policy and Implementation
 Plan (NEPIP) 2030 and ENV 2.5.2 Proportion of environmental obligations within international
 conventions and treaties are met.

The relevant Government policy and strategy are the NEPIP and the National Solid Waste Management Strategy (NSWMS) as they both feature very important policy objectives and thematic areas on waste management and are directly aligned to the overarching NSDP 2030.

As previously mentioned above, the four key purposes/activities of the project as reiterated below are fundamental to the establishment of any landfill in this era, it has been an outstanding **NEED** for the Government and the country as a whole given that waste management is normally not prioritized under Government Budgets.

- Procurement of the landfill weighbridge to support monitoring and data collection in waste management, currently all records are estimated and manually registered. The installation of a weighbridge will allow us to digitize our monitoring and data collection.
- ii) The establishment of an office at the landfill to complement the installation of the weighbridge.
- iii) A budget for data management officer and a maintenance officer who will be stationed at the office to oversee the data collection and maintenance of the weighbridge respectively.
- iv) The fencing of the landfill is a longstanding issue, fencing the premises permanently will reduce the number of unauthorized vehicles and persons from entering. At the same time enforcing waste collection businesses and also opportunity to formalize waste pickers to segregate incoming waste.

1. Project objective against the baseline:

What is the objective of the project?

There are four (4) objectives of the project:

- i) Enhance waste data monitoring & reporting: Procurement of the landfill weighbridge to support monitoring and data collection in waste management, currently all records are estimated and manually registered. The installation of a weighbridge will allow us to digitize our monitoring and data collection.
- ii) Strengthen DEPC mandate on Institutional & human resource capacity at the landfill: The establishment of an office at the landfill to complement the installation of the weighbridge.
- iii) Financial support for institutional strengthening and capacity building: A budget for data management officer and a maintenance officer who will be stationed at the office to oversee the data collection and maintenance of the weighbridge respectively.
- iv) Secure & control access to the landfill: The fencing of the landfill is a longstanding issue, fencing the premises will reduce the number of unauthorized vehicles and persons from entering. At the same time enforcing waste collection businesses and also opportunity to formalize waste pickers to segregate incoming waste.

The current intrinsic factors that instigated the development of this project proposal are:

- 1. Impact of plastic waste on Bouffa Semi-aerobic Landfill.
- 2. Community livelihood near Bouffa Landfill

These two intrinsic factors coupled with the available baseline data on waste management in Vanuatu will provide a grounding purpose especially in seeking the understanding of the project review committee to urgency to address outstanding issues pertaining to Vanuatu's only designated landfill – the Bouffa landfill.

1. Impact of Plastic Waste on Bouffa Landfill

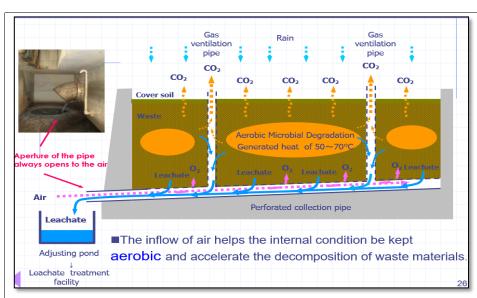
In terms of waste management in Port Vila, Efate, majority of waste collected contains plastic waste which are all collected and dumped at the Bouffa Landfill at Etas. The Bouffa Landfill at Etas assumes a 'Semi-Aerobic System', the system has two key parts, figure 1 shows the schematic representation of the system:

- A) Circulation of Air more oxygen means more micro bacteria development –more bacteria to break down waste particle and increase decomposition
- B) Gas Ventilation (air to flow in and out) and leachate collection pipe (air and leachate to flow through).

Given that plastics are not natural but are made from different types of chemical chains referred to as polymer chains they take over hundred years to fully decompose, chemicals may be toxic and hazardous in nature so even the decomposition of plastic waste overtime in a small island state like Vanuatu will pose threat to Vanuatu's biodiversity including plants, animals, forests & land, our oceans & fresh water systems and the people of Vanuatu.

Furthermore Vanuatu does not produce or manufacture plastics but imports all plastic products, to date all business/shops that import plastic products have no 'end of use' plans for their products – they only focus on their profits while plastic waste continues to accumulate at the Bouffa Landfill at Etas. Vanuatu currently does not have the appropriate 'environmentally friendly technology' to manage plastic waste. For this reason when more plastic is dumped at the Bouffa Landfill in Etas, it clogs the systematic operation of the Landfill and reduces the forecasted life expectancy of the Landfill.

Figure 1: Semi-Aerobic Landfill Design



When the gas ventilation system is impacted then the leachate does not flow through to the leachate pond but it remains as stagnant water under the layers of waste and is easily leaked into the water table, this again poses threat to all surrounding water sources and especially the Teouma River downhill from Etas. Another issue that arises from a clogged system is the unpleasant odour it gives off, any passer-by at Bouffa landfill will confirm that the system is emitting unpleasant odour that attracts other pests including flies.

Bouffa Landfill receives an average of fifty seven (57) Tonnes of waste per day, the total land space is 48 Hectares and so far 20 Hectares of land has already been used. It should be highly noted that when comparing the increasing population with the limited allocated land space at Bouffa Landfill, the Government must start to prioritize which wastes should enter the landfill and which should not.

For all waste that could enter the landfill, there must be waste management practices and budget in place to better manage waste segregation and focus on waste with good decomposition rate to suit the landfill's semi-aerobic system.

2. Snapshot of Community Livelihood near Bouffa Landfill

As we commemorate forty (40) years of Independence Anniversary this year, the Government must continue to take into consideration community livelihoods especially in populated areas such as Etas area where there is no water supply and electricity system in place. The area of Etas can be seen as a very vulnerable place to reside given the current state of the Bouffa Landfill. The pollution at the landfill is beyond repair and therefore the Government must make bold decisions inorder to safeguard the health and lives of surrounding communities and the long term environmental impacts.

The latest site visit to the Bouffa Landfill was undertaken this week on Tuesday 20th October 2020, the visit only confirmed that Etas community members have continued waste picking activities although not safe and hygienic, waste pickers do not have protective clothing and hand gloves. It has now become part of their livelihood – their job. Members of the surrounding communities in Etas rummage layers of garbage bag everyday just to find something useful to take back home. Typically, waste pickers start 'working' at 08:00 Hours and finish at around 15:00 Hours in the afternoon just before the landfill gate (chained) closes at 16:30 Hours. There have been observations over the years on waste picking activities at the landfills and with the current state of the landfill, waste pickers are exposed to different types of hazards that may affect their health immediately or in the long

It should be highly noted that the most occurring activity that waste pickers engage in is the collection of plastic waste and further exploring reusing plastic wastes in ways convenient to their life style, however the act of reusing plastic waste in this context is not hygienic and may pose health threats now and in the future.

Project objective against Baseline:

The project objectives will be based on the recommendations of the report on the UK Waste Audit by the Asia Pacific Waste Consultants (APWC) in November 2018, the audit mainly focused on Bouffa landfill and the Luganville open dumpsite – this proposal is made for the Bouffa landfill at Etas, Port Vila, Efate.

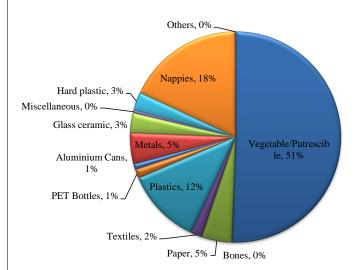
During the UK Waste Audit in 2018, these were the observations of the Bouffa landfill status:

- The access road to the landfill was accessible, the leachate pipes and vertical gas facilities were also operational [compared to now (2020)].
- An indication of efforts to undertake waste segregation.
- Waste at the landfill was highly piled in thick layers given that there was no operational excavator to compress the waste.
- Extensive scavenging activity by waste pickers at the Bouffa landfill. 'The waste pickers range in age from six to 60 years and sometimes include entire families. The pickers are removing everything from food scraps for their animals to scrap metal, plastic bottles, copper, brass, aluminium, glass bottles, paper and cardboard. Some work by themselves while others work in groups. Each scavenger interviewed picks about one to two 240-litre MGBs full of materials each day. The materials (mostly scrap metal and aluminium cans) are stored in bulk bags stashed all over the landfill'.
- As mentioned above, the Bouffa landfill has a total land space of 48 Hectares, since the last waste audit in 2018, at least 20 hectares out of the 48 hectares has been used.

Background of baseline information:

It is very important to note that although the paragraphs that follow will illustrate that support in terms of equipment and technical capacity were provided, staff turnover overtime within the Port Vila City Council mainly due employment permanency has resulted in

2004: A waste characterization survey report, November 2004 under the Japanese Technical Cooperation
Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (JPRISM) indicated the following percentage of solid waste as composition of household waste and waste
entering the landfill in the pie chart below:



2006 – 2008: A JICA report indicated that 51.8 tonnes of waste is dumped at the Bouffa landfill on
a daily basis. 'In 2006 approximately 100 million VUV was injected into the site by JICA under 'Project
on Improvement of Bouffa Landfill in the Republic of Vanuatu' to rehabilitate and build capacity'. In

Commented [WM2]: Good information that can be bring up to detail the issue

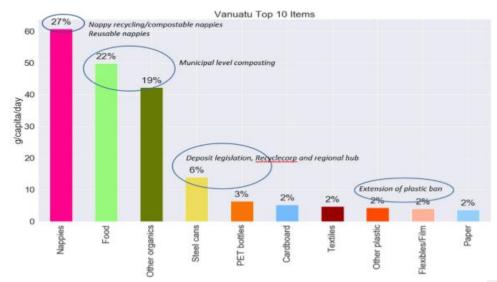
2008, Port Vila City Council (PVCC) confirmed that the site would effectively have an operational life of seven (7) years with opportunity to extend towards the northern end of the landfill site. JICA also supplied equipment, including a tipper truck, excavator and bulldozer. None of this equipment was operational in 2018 during APWC visit'.

- 2012: Regional training on waste landfill maintenance operations 'training conducted on the construction of perforated concrete leachate pipes (60 cm diameter), setting up of a trickling filter for leachate treatment, rehabilitation of broken gas ventilation pipes and general daily maintenance operations (for example, setting up of daily unloading areas, waste pushing and compaction, soil cover)'.
- 2013 2014: Improving data management and introduction of the current tipping fee system 'manually recording vehicle type and capacity, type of waste and location waste was collected'.
- 2016 2017: Another JICA report updated that an average of 57 tonnes of waste entered the Bouffa landfill every day.
- November 2016: 'Rehabilitation of the site funded by PacWaste Project: PacWaste is a European Union (EU) funded initiative. This project consisted of repairing the underground main leachate pipe, replacing damaged vertical gas facilities, clearance of waste along the main access, creating a new access on the disposed waste for direct entry to the available space at the back, and building a disposal cell for asbestos. As part of the report, some follow-up actions were also included, but some have only been partially implemented'.
- The UK funded waste audit that took place in 2018 produced the following data on waste management content and especially outlining the top ten (10) waste items that enter the Bouffa landfill:





Figure 22 lists the top ten individual items disposed of in Vanuatu and proposed best practice actions to manage these items.



[What is the objective of the project? Describe the baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies) and the outcomes and the impact that the project will aim to achieve in improving the baseline scenario. Refer to the logical framework and theory of change template below]

2. Policy coherence and alignment: [provide details as to how the project aligns with the National Sustainable Development Plan (pillar, goal and objective), the Climate Change and Disaster Risk Reduction Policy, and other policies, plans, strategies and priorities]

Commented [WM3]: You mention some of the policy, which policy will this project be addressing

The Vanuatu government 2022 priorities includes Waste Management in Policy Outcome 6: Improved Resilience and Natural Resource Management and stated as improving waste management services and operations to reduce pollution impacts and the two target outcomes are;

- (i) Improved environmental and climate services in all six provinces in accordance with the decentralisation policy and
- (ii) Improved waste management and pollution control.

Within Vanuatu's National Waste Management & Pollution Control Strategy and Implementation Plan, there are seven thematic areas:

- 1. Thematic Area 1: Policy, Legislation & Enforcement
- 2. Thematic Area 2: Sustainable Financing
- 3. Thematic Area 3: Capacity Development
- 4. Thematic Area 4: Waste Minimization (there is also a separate Waste Minimization Plan)
- 5. Thematic Area 5: Integrated Waste Management
- 6. Thematic Area 6: National Coordination
- 7. Thematic Area 7: Public Awareness

These were identified as priority thematic areas to implement in the period 2022 – 2025 as they capture activities that are in line with the Government's decentralization policy such as the 'establishment of dumpsites in all provinces and municipalities of Vanuatu.

Two thematic areas out of seven and their objectives have tangible targets;

- 1) Waste Minimisation: reducing the amount of waste generated and landfilled (end up in dumpsites) and
- 2) Integrated Waste management: implement effective waste collection and disposal throughout Vanuatu and limit the impact of waste and pollution on urban areas and ecosystems and to improve Waste Pollution Control management infrastructure and support sustainable operation and maintenance.

This proposal includes two activities for Waste minimisation and one for Integrated waste management.

• The proposals are in line with the NSDP Environmental pillars goal 2.4: 'reduce waste and pollution through effective waste management and pollution control under Environmental indicators 2.4.1 (regarding the number of controlled waste disposal facilities) and 2.4.3 (stating the implementation of proportion of revised National Waste Management strategy and Action Plan). This is also in line with Sustainable Development Goal (SDG) 11: 'to make cities and human settlements inclusive, safe resilient and sustainable' specifically SDG Target 11.6 'By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management', with the two associated indicators 11.6.1 and 11.6.2.

Establishment of dumpsites in Provinces/Municipalities:

Inorder to progress in reducing waste and pollution control targets, there is greater need for all Provincial Governments/Municipalities to establish their dumpsites to accommodate all types of wastes. The dumpsites must be well structured to encourage

waste segregation within provinces/municipalities. It is the sole responsibility of each province/municipality to negotiate for lands to establish dumpsites, the Department of Environmental Protection & Conservation (DEPC) is only involved in preliminary environment assessments (PEA) or environmental impact assessment (EIA) where applicable and to provide technical and financial assistance to set up the dumpsites.

The Government has already prioritized work on addressing plastic waste and pollution through legislative strengthening measures – plastic ban phases. Another waste area that is manageable in Vanuatu is 'organic waste', specifically reducing waste accumulation overtime by using organic waste to make compost products.

Plastic waste:

The government has started addressing issues with plastics form 2018 – 2020, the government is expected to phase out certain types of plastics each year given their detrimental impacts our natural environment.

The Commonwealth Litter Program (CLiP) "Waste Data from Vanuatu - 2018' lists Hygiene wastes which includes diapers as the next waste type with over 20% and Plastics and metals follow with the next highest from under 20%.

To continue to minimise waste, amendments to the waste management regulation this year will include the requirement of quarterly import permits for diapers and annual license to sell diapers if they are to be bought from an importer to sell.

The government therefore needs to do enforcement throughout the six provinces to ensure the bans and regulation are in place and that quarterly import permit and license to sell diapers are enforced. The government penalises those who are in noncompliance.

Organic waste:

Estimated waste generation in Vanuatu is about 114 ton/day in 2019. For Port Vila alone, it is 58 ton per day (Vanuatu Waste Minimisation Plan 2021 -2025). And organic waste has the highest component of waste.

CLIP waste data shows that organic waste is close to 50% of waste for Port Vila and this would be similar for other locations in Vanuatu.

Composting is one major means of decreasing the amount of organic waste to the landfill. The DEPC would like to start doing composting with market wastes in collaboration with the Port Vila Municipal Council and a private local stakeholder at one of its smaller markets first in Port Vila (seaside market) and then extend the idea to other provinces. The idea is to sell the compost produced and promote the idea that organic waste can make money and furthermore achieve the goal of reducing the amount of waste to the landfill.

In addition, only Port Vila has a landfill, Luganville has a dumpsite but the other four provinces in Vanuatu have no dumpsite. Waste is being disposed at any place as determined by villages and communities. This needs to be addressed, there is need for provinces/municipalities to negotiate with landowners to identify appropriate sites tobe established as dumpsites for disposal of waste at each province on the island where the government provincial centre is located.

Ma	anagei	he DEPC is seeking additional budget to implement the National Wastement, Pollution Control and Implementation Plan specifically targeting Wastemation and Integrated Waste management.	
an	nd Sus	C will continue to abide to its vision to "Leading Vanuatu to a Clean, Resilient stainable Environment" and additionally ensures that Vanuatu maintains its its invironment with Clean Oceans and Healthy People.	
3.	Curre	nt status: [progress to date and current activities]	Commented [WM4]: What is the current status for th
DE	EPC ha	s consulted with the Port Vila City Council and has continued to dialogue with them the best practices to manage Bouffa Landfill.	project
		urrently partially supporting the extension of the Bouffa landfill given that the current te has reached its capacity to hold waste.	
4.	historio	et overview: [If the project involves a particular market describe the products or services including the call data and forecasts. If applicable, provide the key competitors with market shares and customer base. To ovide, if any, pricing structures, price controls, subsidies available and government involvement.]	
Th	overall	menting / executing entity background / justification: [Quality of the management team, strategy, financial profile, equity investment, management, operations, production and marketing] artment of Environmental Protection & Conservation (DEPC) will take the	Commented [WM5]: Overview of government body implementing this project
lea	adıng ı	ole in the proposed project priorities.	
		artment of Local Authority and Department of Urban Affairs which oversees and other Provinces in Vanuatu will support DEPC.	
6.	structu and flo	arrangements: [Governance structure of the project, organisation re, roles and responsibilities of the project management unit, steering committee, executing entities by of funds structure. construction and supervision methodology with key contractual agreements, conal arrangements with key contractual agreements following the completion of construction]	Commented [WM6]: If the project sits with the DEPC, you explain the implementing arrangement
Th	ne Dep	artment of Environmental Protection & Conservation (DEPC) will take the	
lea	ading i	ole but jointly with the support of the Department of Local Authority and	
De	epartm	ent of Urban Affairs which oversees PVCC and other Provinces in Vanuatu.	
		agement of the landfill will remain with the PVCC, DEPC will oversee the ment of the Weighbridge and related facilties.	
7.		ts Areas [GCF projects only]	
		ced emissions from (mitigation): Increased resilience of (adaptation): Most vulnerable people and communities	
		emission transport — Health/well-being, & food/water security	
		ings, cities, industries & appliances Infrastructure and built environment	
		stry and land use Ecosystems and ecosystem services	
8.		ted performance against investment criteria [GCF projects only] [brief description]	
	a)	Impact Potential: [Potential of the project to contribute to the achievement of the GCF's objectives and result areas]	
	b)	Paradigm Shift Potential: [Degree to which the proposed activity can catalyse impact beyond a one-off project investment]	
	c)	Sustainable Development Potential: [Environmental, social and economic co-benefits, including gender-sensitive development impact]	
i	d)	Needs of the Recipient: [Vulnerability and financing needs of the beneficiary country and population]	

- e) Country Ownership: [Beneficiary country's ownership of, and capacity to implement, a funded project]
- f) Efficiency and Effectiveness: [Economic and financial soundness of the project]
- Consultation [Specify the plan for multi-stakeholder engagement, and what is been done so far in this regard, e.g. National, Provincial, Community, Civil Society, Private Sector]

We have consulted with the Port Vila City Council, we all agreed that it is a longstanding issue that the Government must assist to address given our reporting obligation (in relation to solid waste management data) to relevant International Conventions such as the UNFCCC.

10. Potential overlaps / duplication to be resolved: [What related projects are being undertaken in the area?]

There are currently no projects that have confirmed their interest to support the <u>entire</u> priorities of this proposal.

11. Technical feasibility/evaluation: [Brief summary of technical feasibility of project. Will the project fund local staff? If so, where? Are there additional staff required (e.g. counterparts, proposed T/A Positions)? TOR must be included for all T/A positions.

The DEPC has always been working with JICA and SPREP to address Waste Management issues in Vanuatu.

Through these ongoing support, JICA and SPREP will be able to source technical expertise to assist the DEPC to implement the project.

- Regarding the Weighbridge, the quotation was provided by JICA
- JICA will be able to fund technical expertise to provide training on the management of the weighbridge.

The DEPC has currently submitted a restructure proposal, under the Environmental Protection Division a "Solid Waste Management Officer" has been included, this officer will be trained by JICA to manage the weighbridge system.

- **12. Economic and financial analysis/viability:** [Brief summary of the economic and financial viability of the project]
- **13. Financial management and procurement:** [Describe the project's financial management and procurement, including financial accounting, disbursement methods and auditing]
- 14. Environmental and social considerations: [e.g. environmental and social impact safeguards / assessments, vulnerability framework]
- **15. Gender and social inclusion considerations:** [e.g. gender, disability, indigenous concerns, assessment of any benefits from project to women, youth, children and vulnerable groups]
- **16. Monitoring, reporting and evaluation:** [How will the project be monitored and evaluated? Provide project specific institutional and implementation arrangements for monitoring, reporting and evaluation. Provide methodologies for monitoring and reporting of the key outcomes of the project]
- 17. Sustainability measures: [Exit strategy/ how will the project be sustained after project funding? What is the Vanuatu Government funding source? What is the future maintenance requirement? What are the future recurrent cost implications for the Government?

Commented [WM7]: Who have you consult with and what are the outcomes of your discussions?

Commented [WM8]: Have you aware of previous or current projects that will not be an overlap for this project

Commented [WM9]: Please complete this section 11-18-

18. Supporting do			e]					
Budget temp	olate [mandatory	<i>¹</i>] □	Risk assessm	nent <i>[manda</i> i	tory] 🗌	Logica	al framework	<
Concept not	е		unding prop	osal		Financ	cial analysis	;
Environment			Project timeta			Letter	of support	
Consultation	•		ocation map		ans where c			ed1
19. Provincial cons						onomadi	ion is involve	ш
I certify that the Governments P disagreements t attached.	Province has b rovincial Plan.	peen cons I also co	ulted with an onfirm that I	nd the project am not av	ct is consis vare of ar	ny ongo	oing dispute	es o
Name		Signatu	ire			Date		
20. Director of Lea								
I certify I have c project. I am sati								ı this
Name		Signatu	ire			Date		
21. DSPPAC Sector	•	_						
I certify I have c project. I am sati								ı this
Name		Signatu	ıre			Date		
22. Director Gener I certify that I ha this project. I a understand that approved by the been appropriate and expenditure	nve checked the am satisfied the no Governmer a appropriate g ed, the approve	e project pat this protect protection of the pro	oject propos will be relea It authorities, funding has l	al is ready sed for the any additio	for prese project un onal gover	entation til the p nment	for approvoroject has licentribution	al. beer has
Name		Signatu	ire			Date		
23. Logical frame								
Objective [The theory risk reduction) and ho							gation or disa	ster
[Adaptation,	[Elaborate on t						nrojects a shi	ft to
mitigation, disaster risk reduction]	low-emission sustainable de	sustainabl	e developme					
Expected Result	Indicator	Means of	Verification	Baseline	Targ Mid-term	et Final	Assumptio	ns
Impacts (that contribu	te to the objective	ve)						
[For GCF projects refer to the	,	,						
performance								
measurement frameworkl								
Project outcomes (th	not contribute to	imposto)						
Project outcomes (if	iai contribute to	impacis)				1	I	
Project outputs (that	contribute to ou	tcomes)		1	l .	1	1	
1.								
Activities	Description	Inputs			Descripti			
1.1		1.1.1.			[Expand to	ahles as	needed1	

*please use this forma	at only if there is	s not a mandatory format required by the	he implementing/executing entity

24. Project budget summary (estimated in Vatu '000)

Items/component	Year 1	Year 2	Year 3	Year 4	Year 5	Total	% of Total
Loans [specify source]							
Grants [specify source]							
Aid in kind*							
Government of Vanuatu							
Other e.g. GCF, community							
expand table as needed							
Total							100%

^{*} contributions made directly towards projects realisation such as equipment, materials, labour, T/A, building works, vehicles, time etc. and other quantifiable resources that count towards the achievement of the project results

25. Project component costs (estimated in Vatu '000)

Items/component	Year 1	Year 2	Year 3	Year 4	Year 5	Total	% of Total	
Equipment/materials								
Personnel/staff/labour								
- e.g. technical assistance								
- e.g. local salaries								
Training/workshops etc.								
Travel								
expand table as needed								
Total							100%	

This is for the main project components only. Not every cost needs to be specified. Other examples of components might be accommodation, vehicles, fuel, freight, allowances, VNPF contributions, telephone, computers, stationery, an implementing entity administrative fee (if included as part of the loan/grant), project monitoring, contracts, rent, printing, overheads etc.

26. Project risk factors, mitigation measures, and assessment tool*

[Use tool to describe the financial, technical/operational, social/environmental and other risks that may prevent the project objectives from being achieved, and proposed risk mitigation measures.]

Selected Risk Factor 1							
Description	Risk category	Level of impact	Probability	Score			
[Description of risk factor, e.g. new government regulations, loss of key staff, delays in delivery of equipment etc.]	Select [financial, technical/operational, social/environmental, other]	Select [low <5% of project value, medium 5-20%, high >20%]	Select [low, medium, high]				
Mitigation Measure(s)							
[Describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?]							
Selected Risk Factor 2	D: I		D 1 1377				
Description	Risk category	Level of impact	Probability	Score			
	Select	Select	Select				
Mitigation Measure(s)							
Selected Risk Factor 3							
Description	Risk category	Level of impact	Probability	Score			
	Select	Select	Select				

Mitigation Measure(s)						
Selected Risk Factor 4						
Description	Risk category	Level of impact	Probability	Score		
	Select	Select	Select			
Mitigation Measure(s)						
[Expand table as needed]						
Total score (add all the scores and divide by the total number of risk factors)						
[Describe other potential issues which will be monitored as "emerging risks" during the life of the project (i.e.						

[Describe other potential issues which will be monitored as "emerging risks" during the life of the project (i.e. issues that have not yet raised to the level of "risk factor" but which will need monitoring). This could include issues related to external stakeholders such as project beneficiaries or the pool of potential contractors.]

^{*}These are project related risks, not broader, general, global climatic and environment risks

	Probability	Low	Medium	High
Impact	Score	(1)	(2)	(3)
Low	(1)	1	2	3
Medium	(2)	2	4	6
High	(3)	3	6	9

Multiply the impact of each risk factor by the probability of each risk factor to give an individual risk factor score. Then add all the individual risk factor scores and divide by the number of risk factors to give an overall project risk score.

Key 1 Negligible 2 Minor 3 Moderate 4 Major 6 Severe 9 Extreme

History of the document

Ver	sion	Date		Nature of revision
1.0		NAB Meeting 9 Febru	ary 2018	Initial endorsement