

Project Concept

“Enhancing Pacific Island Countries and Territories access and use of environmental data” Pacific Environmental Data (PED) Project

Region: Pacific Region 14 countries

Proposed Project Type: Full Sized Project (FSP).

Proposed Project Full Title: Enhancing Pacific Island Countries and Territories access and use of environmental data -Pacific Environmental Data (PED) Project -

Proposed Project Short Title & Acronym: Pacific Environment Data (PED)

Project Implementing Entity(ies):

Project Executing Entity(ies): Secretariat of the Pacific Regional Environment Programme (SPREP), Environmental Monitoring and Governance Programme (EMG)

Proposed Project Duration: 60 months (5 years)

Proposed indicative budget: USD 4.2 million

Proposed Project Description

The proposed Pacific Environmental Data Project will strengthen the regional capacity to host, share and use environment data collected from its member. Through this mechanism PIC governments will strengthen their national data management process with clear tools and policy for its usage. Establishing the project objectives will also allow SPREP and its member countries to fully institutionalize data and information management internally from existing initiatives, programs, and projects. This will foster enhanced data access and use for member countries, partners and for reporting to MEAs and SDGs.

The project will also present an opportunity for SPREP to work more with national Governments in strengthening and recognizing environment data into national statistics data collection systems processes.

Many PICs lack access to comprehensive environmental data management system to consistently track their 34 core environmental indicators which directly correspond to the majority of the 11 GEF core indicators. This project will enhance national reporting and data management environment to allow for tracking, reporting, and planning to address national priorities, Aichi targets, post-2020 global biodiversity framework and GEF core indicators. In addition, the project will support the establishment of national environmental standards for wastewater, soil and air quality. The delivery of the project will also support the member countries in addressing the following Regional and Global agreements including:

- a) Aichi Target - the programme will address targets 1 to 20 - where it will address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; reduce the direct pressures on biodiversity and promote sustainable use; and enhance implementation through participatory planning, knowledge management and capacity building.
- b) Sustainable Development Goals – the programme will be specifically addressing SDG Goal 14, 15, and 17 and will indirectly contribute to achievements of Goal 3,5,6,7,10,11,12, and 13. It will also contribute to the 2050 Strategy recently approved by Pacific Leaders.
- c) It will also contribute to the implementation of the Multilateral Environmental Agreements such as UNFCCC, CBD, Basel/Rotterdam/Stockholm Convention, and the Waigani and Noumea Convention which SPREP is the Secretariat.
- d) The SAMOA Pathway – The programme will be fully supporting the goals and commitment by the Pacific Leaders in these areas:
 - Promoting and enhancing the use of information and communications technologies

- Promoting and enhancing gender equality and women's equal participation, including in policies and programmes in the public and private sectors in small island developing States.
- Sustainable Tourism - Establishing and maintaining, where necessary, the governance and management structures for sustainable tourism
- To build resilience to the impacts of climate change and to improve their adaptive capacity through the design and implementation of climate change adaptation measures appropriate to their respective vulnerabilities and economic, environmental, and social situations.
- Strengthened integrated approach to establishing and strengthening innovative energy road maps in small island developing States.
- Disaster Risk Reduction – improving national and regional reporting systems, where applicable, to increase synergies and coherence.
- Oceans and Seas – strengthened the integrated ecosystem approach to ocean-related activities to optimize opportunities. It will contribute to available science, give due regard to conservation efforts and precautionary approaches, and ensure coherence and balance among the three dimensions of sustainable development.
- It will also strengthen partnerships, improvement of water and sanitation and management chemicals and waste and hazardous waste; and has agreed by the leaders the importance of bio-diversity conservation; including strengthening collection of data and statistics which is a primary focus of the proposed project.

Barriers that the proposed project will address:

SPREP serves 14 Pacific island countries in 4 key focal areas, Climate Change, Waste and pollution, Biodiversity and Environmental governance. The SPREP Environmental Governance program (EMG) supports monitoring, reporting and enforcement through processes and legislative support. The EMG program has developed 14 country data portals hosting data that can be utilized for national state of environment (SOE) reporting processes that increase data driven decision making. The network of national and regional data repositories and reporting tools established to support the monitoring, evaluation and analysis of environmental information supports environmental planning, forecasting and reporting to key multilateral environmental agreements (MEAs). While this process of environmental reporting is established, timely updates and effective interventions are hindered by the scarcity of human resources and lack of capacity, specifically in the areas of environmental standards, field data collection, data sharing and access, GIS analysis and data advocacy. Pacific Island countries have identified challenges with enforcement particularly in the areas of environmental standards due to a lack of clarity around the threshold of violations. Pacific Islands countries have begun to address these decades long issues of data access, data sharing and data use and this project will expand and amplify the benefits that are beginning to take shape across the region.

Baseline scenario

SPREP member countries have built up a consistent workflow in terms of producing environmental reporting based on standardised indicators and the available data set. Several significant challenges remain, including inter-agency and inter-ministry collaboration and data sharing, fundamental understanding of environmental standards and field data collection methodology, use of GIS technology and tools and the ability to advocate for data use.

One of the associated baseline projects being delivered by SPREP ending in 2022, is the Inform project. This project has built a good foundation for this work to build upon. It's the momentum from the Inform project that this project seeks to build upon.

Pacific island countries are transitioning from an un-networked, disconnected data environment to one that is interconnected and collaborative and it requires ongoing policy supports and application to shift business culture and allow the new practices to take hold and succeed. The data environment currently remains predominantly siloed into specific sectors with few bright spots and ad hoc open data opportunities exploited but consistent multi sector collaboration largely lacking.

The Inform Project has achieved key positive outcomes for SPREP Pacific member countries as outlined below:

1. Platform

- a. The Network of Environment Portals established consisting of 1 Regional Portal; 14 national portals; 17, 000 datasets and the Indicator Reporting tool. These have improved the timely availability/use of data for decision making, planning and reporting (i.e national SOE report development); and Positive uptake of processes, platforms and policies by PICs.
- b. Inform E-learning Series on SPREP Moodle platform containing 3 course units developed on the use of tools developed by the Inform project
 - Unit 1 Environment Data Management (data portal)
 - Unit 2 Environment Reporting (Indicator Reporting Tool)
 - Unit 3 Introduction to geospatial Information System
- c. Interactive SOE Webpage Platforms developed which has increased accessibility of results of SOE assessments for planning, policy and decision making including availability to and accessibility by the public (academics, researchers, officers)

2. People

- a. National Capacity Built on the use of existing data portals for decision making, Indicator Reporting tool, mobile app for data collection. This covered the growing awareness of the benefits of improved data management carried out by the team in-person and virtual.
- b. National project focal point and relevant staff are well integrated into project delivery and a two-way flow of communication has been established

3. Processes

- a. State of Environment (SoE) Reports and National Environmental Management Strategies (NEMS) developed.
- b. Findings of the regional SOE fed directly into the Pacific nature conference that provides guidance for biodiversity and conservation priorities for the next 5 years and support the implementation of CBD objectives
- c. SOE process fully implemented across the region
- d. Countries take ownership of the SOE development processes with the team providing backstopping support
- e. NEMS development process fully informed and integrated to the SOE process
- f. Increased uptake of standardized environmental indicators by Pacific island countries and Links between indicators and regional/global reporting requirements are clear

4. Policies

- a. SPREP environmental data policy and Standard of Operating Procedure developed
- b. Support to the development of National data policy development.
- c. Good data management, procedures and clear practices in place for member countries

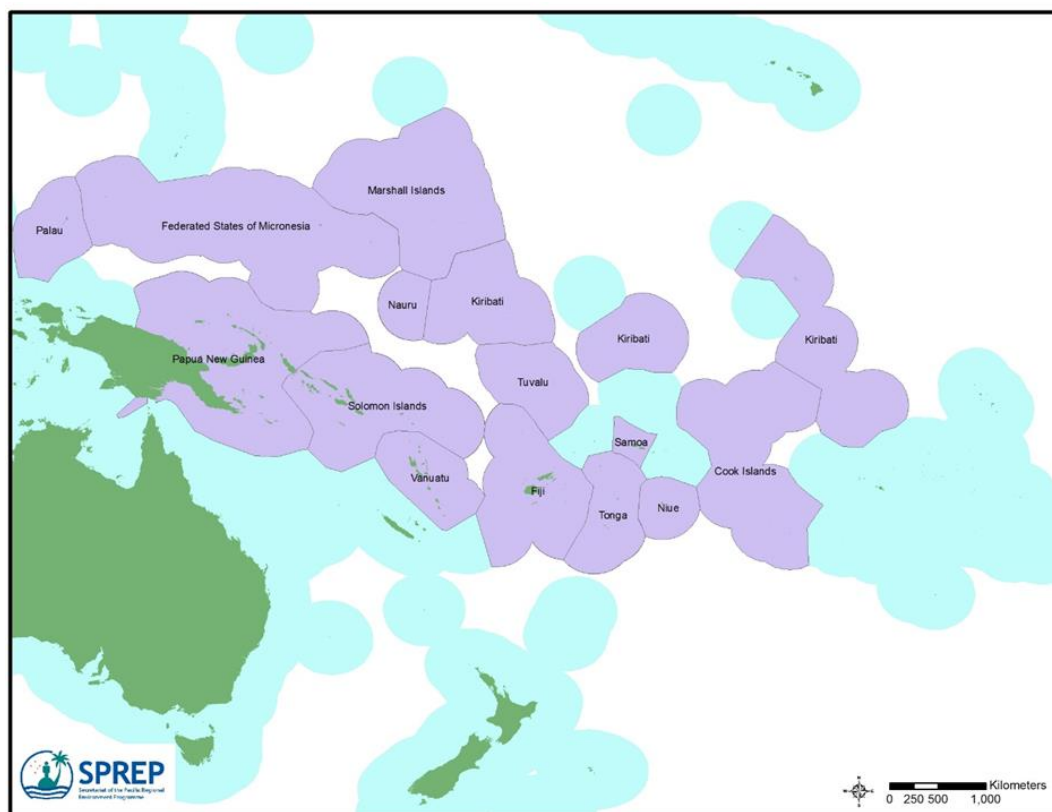
Proposed alternative scenario with expected outcomes and components of the project

To build on the efforts of Pacific Island Countries and address critical areas to strengthen access to and use of environmental data, a five-component project has been developed. The proposed project will

apply to all 14 Pacific island countries as in figure 1 below; given the different levels of complexity and capacity of each country, a differential approach will be applied.

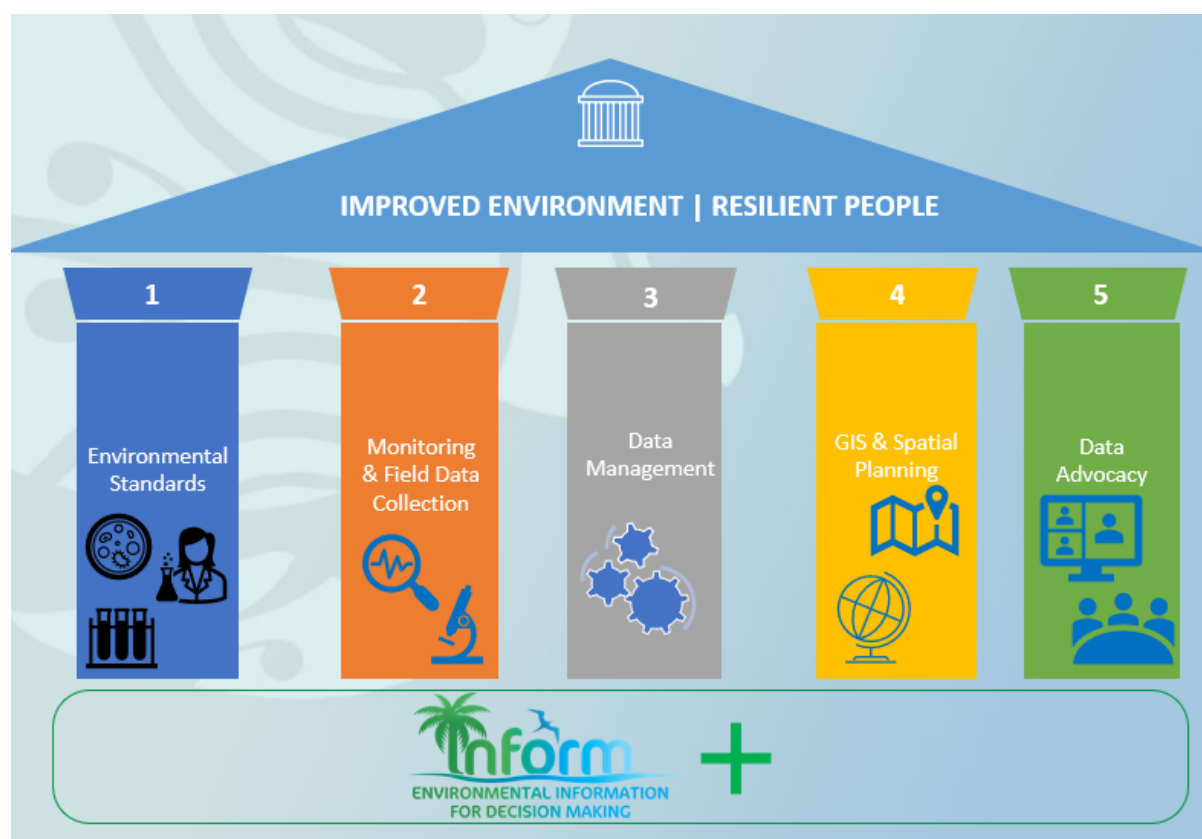
The five linked components in figure 2 have been envisaged to ensure that targets are clearly set, field data are collected correctly, and standardised methodologies and data can be analysed and applied. Modern visualisation tools can be used to make the information accessible to multiple audiences and national officers responsible for the subject matter are empowered to advocate for the data to be used. This proposed project will support the 14 SPREP member countries achieve better environmental outcomes through sound and informed decision making – figure 3.

Figure 1: Project Map and Coordinates



Component 1	Environmental Standards.
Component 2	Monitoring and field data collection for environmental standards and standardised environmental indicators.
Component 3	Data management utilising the Pacific Island Network Portal (PEP). Production of information products for decision makers based on existing data sets.
Component 4	Enhance and expand GIS use for data collection, analysis and presentation to inform decision makers.
Component 5	Policy advocacy training for environment officers based on environmental data.

Figure 2: The Five Components of the Project



Component 1: Environmental Standards.

Outcome 1: Environmental standards are set and agreed by government and can include prohibition of specific activities, mandating the frequency and methods of monitoring, and requiring permits for the use of land or water. Standards differ depending on the type of environmental activity. This will assist countries in establishing status of environment from their monitoring.

Output 1.1.1: Air, water and soil environmental standards calibrated for each country's baseline conditions.

Output 1.1.2: Develop national legislation to codify and enforce environmental standards.

Output 1.1.3: Training & capacity building to strengthen environmental officers monitoring, interpretation and enforcement skills.

Output 1.1.4: Development of tracking tools for environmental standards and enforcement actions.

Component 2: Monitoring and field data collection for environmental standards and standardised environmental indicators.

Outcome 2.1: Routine monitoring and field data collection of environmental standards and key environmental indicators are developed and implemented in partnership with Pacific island countries. Field data collection will involve the process of systematically gathering quantitative and/or qualitative data with appropriate tools used for purposes of monitoring, evaluation, and/or learning and also to support decision making.

Output 2.1.1: Develop and implement field data collection methodology and mobile data collection tools.

Output 2.1.2: Develop standard operating procedures for field data collection.

Output 2.1.3: Build capacity for long term monitoring and data collection

Component 3: Data management utilising the Pacific Island Network Portal (PEP). Production of information products for decision makers based on existing data sets.

Outcome 3.1: Increased users of the PEP- Data management utilizing the Pacific Island Network Portal (PEP). This component will expand the use of the PEP to other Government Ministries and setors to allow better integration and sharing of data and information.

Output 3.1.1: To enhance PEP and expand user base to additional line ministries

Output 3.1.2: Build national officers capacity to process and interpret a variety of data sets for reporting and planning needs.

Output 3.1.3: Build on existing regional data policy on the sharing and dissemination of data across stakeholders and assist countries in adapting for use.

Component 4: Enhance and expand GIS use for data collection, analysis and presentation to inform decision makers.

Outcome 4.1: Increased use of GIS for data collection, analysis and presentation to inform decision makers. GIS is a computer system capable of holding and using data describing places on the Earth's surface. It performs five main data-related functions – data acquisition, data input, data manipulation, data management, data analysis and data output. GIS has important uses in different fields, such as a monitoring and decision-making supporting tool in Environmental Impact Analysis, disaster management, zoning of landslide hazards, determination of land cover and land use, management of natural resources and many more to ensure sustainable development. GIS is under used in Env and climate sectors in PICs, Spatial planning will be applied for EIAs, SOEs and planning

Output 4.1.1: Training & capacity building to strengthen environmental officers use and interpretation of GIS data for informed decision making.

Output 4.1.2: Enhance and expand availability of GIS data for use in the environment sector.

Output 4.1.3: Embedding GIS data into national processes for environment impact assessments, environmental monitoring and environmental reporting.

Component 5: Policy advocacy training for environment officers based on environmental data.

Outcome 5.1: Increased advocacy capacity building/ tailored communication approaches and products for decision makers. Advocacy for the use of existing findings, reports and data is low. The PICs have asked for support to increase use. More focus will be made on this where there will be more training delivered for decision makers.

Output 5.1.1: Advocacy capacity building.

Output 5.1.2: Tailored communications products to reach decision makers.

Output 5.1.3: Media engagement strategy.

Figure 3: Improved environmental outcomes through Informed Decision.



Alignment with GEF focal areas

The Pacific Environmental Data project will further breakdown inter-sector silos and address inter-related and interdependent challenges including biodiversity loss, freshwater availability, land degradation, pollution, and climate change. Through the implementation of the Pacific environment Data integrated landscape and seascape management will be enhance through multisector collaboration and advocacy for change. With the dual mandate of conservation and climate change resilience SPREP and SPREP focal points in the environment and climate sectors will accelerate natural based solutions to the current climate emergency. Through working across water, environment, and climate sectors this intervention will work at the landscape level to address water security issues and mitigate drought, to ensure clean and stable water supply for Pacific people.

Incremental/additional cost reasoning and expected contribution from the baseline

Without the GEF 8 member countries intervention, the regional support necessary for consistent and up to date reporting will diminish, this will affect the development of the national SOEs and NEMS and influence necessary policies, legislation, and regulations that are required to support monitoring, field data collection and data portal and data management awareness. Areas such as environmental standards and data management will remain incomplete and inadequate to ensure better data and information for decision making and policy development.

Through the implementation of this project with resources provided by member countries on the GEF 8 STAR allocation of 300 thousand US Dollars from each of the 14 Pacific island countries which would give a total of 4.2 million over 5 years with all 14 PICs contributing. Capacities will be built on monitoring and field data collection, better utilization; enhancement and expansion of the GIS use for data collection and analysis and policy advocacy. The proposed full size Pacific Environment Data project will require contribution from programming Member countries' GEF STAR allocation

Global environmental benefits (GEFTF) and adaptation benefits

The proper data tracking and reporting on international commitments at the national and regional level on achievements of SDGs and progress on MEAs remains a high priority for the Pacific Region. This will provide a platform for robust collaboration with regional partners and international organizations and countries in making the right decision to address the declining state of biodiversity, climate, land and soil health, ocean health, freshwater resources, fisheries, and the presence of hazardous chemicals. With increasing population, growing middle class, armed conflicts, rural-urban migration, inequality, unsustainable consumption patterns, and other stressors, it is inevitable that the declining trends will be further worsened by the breakdown in food, energy, urban, health, and natural systems that in turn underpin human development. A healthy environment is the foundation for economic and social development. Without a healthy environment, human health and well-being will be inevitably compromised. With this in mind, the work of the GEF is more critical than ever in restoring the health of the environment that underpins the health and well-being of people.

The loss of biodiversity and its associated ecosystem services has not been reversed and threatens human well-being in many ways. The oceans are under increasing threat from climate change and associated acidification, loss of coral reefs, overfishing, and pollution, requiring more substantial efforts than have been deployed to date. Freshwater systems including transboundary freshwater systems that underpin and connect ecosystems, human health, and key economic sectors are being depleted rapidly, threatening livelihoods, and triggering conflicts.

The project is in line with the mandate of the GEF to support developing countries in meeting their commitments to multilateral environmental agreement (MEAs) is foundational to sustainable

development and essential to prevent setbacks to the gains that countries and the development community have made in reducing poverty and improving livelihoods.

Innovation, sustainability & potential for scaling up

This project will strengthen the engagement of other sectors outside the Environment Ministry with shared mandated focal areas. This process has started with some member countries and the project will progress its adoption nationally.

There is a global challenge of accessing quality data and information to support decision making. Some progress in addressing this global challenge has been made in PICs which needs to be further strengthened and expanded. Specifically, initial steps to address these long-standing issues both in the Pacific region and globally have been taken through the establishment of the Pacific Environmental Portal (PEP) including a series of national processes for the State of Environment (SOE) reporting and National Environment Management Strategy (NEMS) development. Through these innovative approaches, Pacific island countries are establishing good governance practices in the environmental sector. Several hurdles remain to be overcome to fully realise the potential of the multi-sector data sharing and data use for sustainable development.

The project seeks to enhance inter-sector, regional and international collaboration on common environmental problems, the sharing of information not just amongst sectors within countries but the sharing within regions and amongst regional organizations, like SPREP and SPC. This project seeks to remove blockages in the system and support the growth of an open data community, applying the best available information in the Pacific region to the most pressing of environmental problems that are faced by Pacific island nations.

One of the innovative solutions is through the use of technology, this includes the Pacific Environmental Portal (PEP) network, indicator reporting tools and common online tools developed to reuse national indicators for multiple national reporting commitments. This project will involve the use of digital tools to assist in the collection, gathering, analysis and sharing of data that will make task easier and complete. Targeted capacity building and training of participating countries will be conducted on field data collection using technology to support data collection tool.

Transformation of business practices to provide more accessible information and development of an open data community and active Pacific Island government officers working collaboratively in an open fashion to solve environmental problems.

Stakeholder consultation and engagement

Stakeholder will be consulted and engaged throughout the lifetime of the project. Some approaches that will be followed are described below

- Project Steering committee (PSC) meetings: PSC meeting will be held quarterly similar to function of the steering committee established in Inform One. The Project steering committee will be convened by the Inform Project Coordination team and its membership will consist of representatives of the sub-regions. The PSC meeting will include special mechanisms to review and address the concerns of the members, and particularly of disadvantaged groups.
- Annual work and budget planning workshops: these workshops will also serve the review of progress achieved in the preceding year, including the identification of causes for potential delays. These workshops will contain special provisions to provide an opportunity for members to present their views and voice their priorities. The Reports of these workshops will be widely circulated

- **Workshops:** Workshops will be held to obtain structured stakeholders' input for and to reach decisions on the projects' deliverables, such as the revised policies, laws, and regulations, the NILUP LDC targets setting and others. Workshops will be widely used throughout the project and be organised in an inclusive manner. Reporting on workshops will be mandatory and the duty of the Inform Project team. Special provisions to facilitate the genuine participation of disadvantaged groups will be strengthened.
- **Awareness Campaign:** The project will conduct awareness campaigns on key project content. Awareness campaigns will target the decision makers, government ministries, CROP agencies, partners, and institutions.
- **Trainings:** The project has strong capacity development component of which trainings are a central element. Training will focus on the project's primary beneficiaries, as well as on the project implementers, including several other government agencies.

Following the inception phase, the implementation phase performs a continuous engagement of stakeholders throughout the project lifetime. Project implementation requires stakeholders' engagement customised not only in terms of formats that are adequate to the specific needs to the concerned stakeholders.

Gender Equality and Women's Empowerment

The project will be aligned to the SPREP Gender Policy as well as national gender policy requirements. It connects sustainable development to the active involvement of women in economic and political decision-making, the elimination of gender-based discrimination, and in ensuring women have access to data and information that will allow them to make informed decision.

Component 2 on data collection in the field will seek to gather gender disaggregated data wherever possible to allow for gender disaggregated analysis and conclusions to inform appropriate interventions to be taken.

Major objective of the project is to grow the Pacific open data community. A major component of the open data community of practice will be to develop a dialogue and foster the use of data to better illustrate the intersection between the gender and environment.

Risks

Loss of momentum and regional support and engagement from member countries and regional partners will be a risk associated with the project but, it will be very low.

Climate change risks: The Climate Change Risk of the project will be very low, but instead, data collected will assist in member countries and regional organisations and partners on sustainable decisions.

Other environmental risks:

The risks related to the environmental sustainability of project investments are low. The Project will contribute to better environmental data management and protection and planning.

Social & political risks: Endurance of achievements in creating an enabling policy, legal and regulatory environment for sustainable data and information management and environment protection and planning is highly likely. The sustainability risks in enacting most project legislation beyond the Project's lifetime are expected to be at most moderate, because this will be developed based on the needs of the members and SPREP as an organisation.

Coordination

SPREP will have overall responsibility for coordinating all aspects of project implementation including monitoring, evaluation and learning (MEL), as part of its overall responsibility for coordinating the implementation of the SPREP Strategic Plan, which includes environmental governance and informed decision making through better data use. Steering committee will be established with membership from the 14 Pacific Island nations, the donor and implementing partners as well as SPREP programs.

Consistency with National Priorities

The project will assist in other national priorities such as national waste strategic plan; national environmental management strategies; strengthening of data management and interpretation for better decision making.

National Biodiversity Strategy Action Plan (NBSAP) - It will assist member countries to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity that will be integrated into appropriate and relevant sectoral or cross-sectoral plans, programmes and policies, as well as tracking progress to achieving national goals and commitments

CBD National Report - The programme will contribute to member countries use data and information collected and stored in the hub to develop and submit on time CBD reporting. Member countries will expand the use of State of Environment Report (SOE) to compile National CBD reports. The system will assist relevant actors (e.g inter-governmental organisations, specialist non-governmental organisations and scientific bodies) to formulate focused strategies and programmes to assist parties, individually or collectively, with implementation. This also assists individual parties or groups of parties to identify common issues to be addressed thus facilitating the development of cost-effective and mutually supportive regional initiatives for implementation.

The data and information obtained will be useful into the reporting by member countries and partners to the followings MEAS

- Convention of Biological Diversity (CBD)
- Cartagena Protocol National Report
- Nagoya Protocol National Report
- United Nations Framework Convention on Climate Change
- Basel, Rotterdam and Stockholm conventions
- Minamata Initial Assessment (MIA)
- Stockholm National Implementation Plan (NIP)
- Waigani Convention
- Noumea Convention

Knowledge Management

The focus of the programme is to enhance the use of data for decision making and knowledge management is integral to the project with the PEP network serving as the central hub for regional knowledge management and sharing

Further information

Director Environmental Monitoring and Governance Programme; and Inform Project Manager Environment Monitoring & Governance (EMG) Programme.