# CONCEPT NOTE
## for a
## GEF-8 Project / Other Donors
### for
## Scaling Up Data for Decision Making & Environmental Monitoring

## GEF- 8 Inform Plus

**Region:** Pacific region 14 countries + 7 Territories

**Proposed Project Type:** Full Sized Project (FSP).

**Proposed Project Full Title:** Scaling Up Data for Decision Making & Environmental Monitoring

**Proposed Project Short Title & Acronym:** Inform Plus (IP)

**Type of Trust Fund:** Multi-Trust Fund (GEFTF, LDCF, SCCF).

**GEF Agency(ies):** TBD\ UNEP

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

**Proposed Project Duration:** 48 moths (4 years)

**Proposed Project Objective:** Enhanced use of data for decision making in the environment sector throughout the Pacific region. Building on the tools and momentum the Inform project established, this scaled up project will expand the user base and fill significant gaps including in situ monitoring, increased partnerships between the environment ministries and other ministries, increase use of spatial tools, and the establishment of standardise environmental standards and key indicators for key resources. This project will also build the capacity of line officer to advocate for the use of environmental information and knowledge.

### Proposed Project Components, Outcomes & Outputs

Support from GEF-8 countries STAR allocation is being sought to increase the environmental outcome from improved environmental governance and data use.

Component 1: Environmental Governance.

    Outcome 1: Environmetal Standards

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

Ouput 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: Develop and implement in partneship with Pacific island countries routine monitoring and field data collection of environmental stardards and key environmental indicators.

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:

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 exisiting 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:

Output 4.1.1: Training & capacity building to strengthen environmental officers use and interpretion 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.

Outome 5.1:

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.



PROJECT JUSTIFICATION:

1). Global environmental and/or adaptation problems, root causes & barriers that need to be addressed (systems description):

SPREP serves 14 Pacific Island countries in 4 key focal areas, Climate Change, Waste, Biodiversity and Environmental governance. The Environmental Governance program (EMG) supports monitoring reporting and enforcement through processes and legislative support. The EMG program has developed 14 country portals and state of environment (SOE) reporting processes that increase data driven decision making. By providing national and regional data repositories and reporting tools to support the monitoring, evaluation and analysis of environmental information, it supports environmental planning, forecasting and reporting to key multilateral environmental agreements (MEAs). While this process of environmental reporting is well established, timely updates and effective interventions are hindered by the scarcity of human resources and lack of capacity, specifically in the areas of environmnetal 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.

### 2). Baseline scenario and associated baseline projects:

SPREP member countries have built up a consistent workflow in terms of producing environmental reporting based on standardised indicators and 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 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 put the foundational pieces in 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, disconnect 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.

### 3). Proposed alternative scenario with expected outcomes and components of the project:

To build on the efforts of Pacific Island Countries and address outstanding issues, a five-component project has been developed. These five components will apply to all 14 island countries; however they will be applicable at different levels of complexity due to the different capacity level of each country.

The five linked components have been envisaged to ensure that targets are clearly set, field data are collected correctly, and with 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.

Component 1: Environmental Governance.

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.

## 4). Alignment with GEF focal areas:

Inform Plus 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 inform plus 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.

## 5). Incremental/additional cost reasoning and expected contribution from the baseline, GEFTF,

Without the GEF 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 GEF, there will expansion of the work that has been achieved by the Inform Project and data management gaps to enable addressed and strengthened.  Capacities will be built on monitoring and filed data collection, better utilization; enhancement and expansion of the GIS use for data collection and analysis and policy advocacy.

## 6). Global environmental benefits (GEFTF) and adaptation benefits (LDCF/SCCF):
Tracking international objectives at the national level. Data and tracking SDGs and progress on MEAs remains a high. Provides a platform for robust collaboration

## 7). Innovation, sustainability & potential for scaling up:
This project allows for scaling up to include line ministries outside Environment with shared mandated focal areas.

The Pacific Island region is overcoming a consistent challenge amongst both developing and developed nations not to apply high quality data experience to decision making and problem solving. These long-standing issues both in the Pacific region and globally has been partially addressed through the implementation of the Pacific Environmental Portal (PEP) and in a series of national processes, including 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 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. The amount of information to be used to support good decision making is nearly unlimited as is the work to free it up, interpret it and use it. 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 technological, this includes the Pacific Environment Portal (PEP) network, indicator reporting tools and common online tools developed to reuse national indicators for multiple nationals reporting commitments.

Larger innovation is the changes 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.
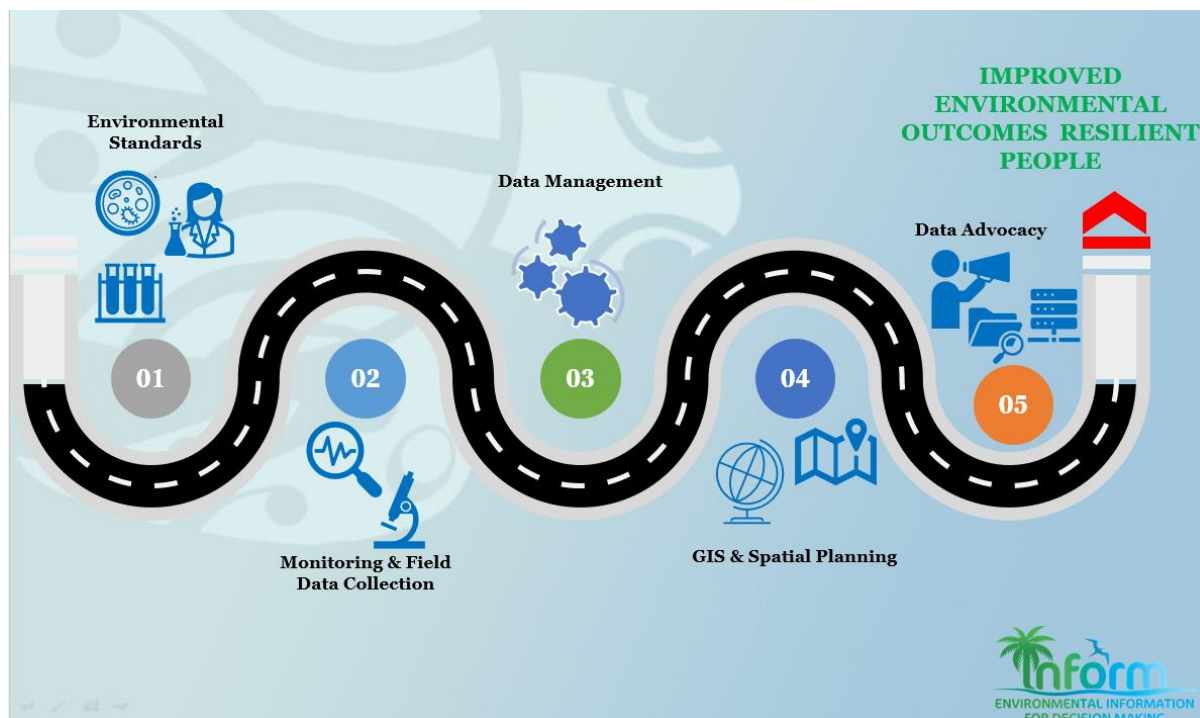


## 8) Stakeholder consultation and engagement:

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

<u>Project Steering Committee (PSC) meetings</u>: PSC meetings 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 Coordinating team and its membership will consist of representatives of the sub-regions.

The PSC meetings 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 stakeholder input for and to reach decisions on the Project's deliverables, such as revised policies, laws, and regulations; the NILUP, LDN target setting and others. Workshops will be widely used throughout the Project and be organized 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 campaigns**: The Project will conduct awareness campaigns on key project contents, 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. Trainings will focus both on the project's primary beneficiaries, as well as on the Project's implementers, including several other government agencies.

Following the Inception Phase, the Project Implementation Phase performs a continuous engagement of stakeholders throughout the project lifetime. Project implementation requires stakeholder engagement customized not only in terms of formats that are adequate to the specific needs to the concerned stakeholders.

## 9) Gender:

The project will be aligned to the SPREP Gender Policy and also on national gneder 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 to ensuring women have access to data and information that will allwo thme to make decsion.

Component 2 on data collection in the field will seek to gather gender disaggregated data whereever possible to allow for gender disaggregated analysis and conclusions.

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 enviroment.

## 10) Privtate sector engagement:

## 11. Risks:

Loss of momentum and regional support and engagement 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 sustanbale decisions.

Other environmental risks:

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

Social & political risks:

Endurance of achievements in creating an enabling policy, legal and regulatory environment for sustainable data and infromation management and environment protection 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 devloped based on the needs of the members.

## 12. 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 impementation 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.

## Further information:

Inform Project Manager
Environment Monitoring & Governance (EMG)

## ANNEX 1: Environmental Standards

## ANNEX 2: Field Monitoring Methodologies

## ANNEX 3: PEP Architecture and Enhancement

## ANNEX 4: GIS

GIS is a powerful tool for environmental data analysis and planning. GIS stores spatial information (data) in a digital mapping environment. A digital base map can be overlaid with data or other layers of information onto a map to view spatial information and relationships. It allows better viewing and understanding physical features and the relationships that influence in each critical environmental condition while determining various environmental parameters and impact analysis.

Condition now

- GIS knowledge to be addressed (application to monitor and report on the environment is less)
- Data may be available (agencies have data sharing policy in place), data not publicly shared by consultants (request basis)
- More awareness on using a centralized portal to store updated national environment data.
- Accessibility is limited to certain agencies (there is less awareness from these agencies on the datasets available for each member country)

With the increasing developments in most PICs, there is a need for proper planning in all stages of development particularly in terms of environment impact assessment and monitoring.

Having accessible information available to stakeholders, developers and consultants it will enable them to be more aware of the environmental conditions of the area of interest which can be effectively monitored by approving agencies/company over time for compliance trends due to the impact of the development.

The initial phase of development normally requires issuance of the Terms of Reference (TORs) from the Environment Authority which acts as a guide on how the environment study is to be carried out.

Environment baseline sampling is part of this process and requires the locality data capture of all sampling to be conducted. Having this baseline information on a centralized portal will assist in efficient mapping of all sampled areas with the appropriate environmental information tagged to its location.

In terms of environment reporting, real time field data collection is important prior to any development and can be monitored for anomalies in the results obtained from sampling conducted over time. Accurate and precise reporting is compiled based on the spatial data collected over time and gives an accurate representation of the health of the environment over the tenure of the development lease issued to companies.

Any information on the current condition of the environment is normally captured by environment consultants during the preparation of the EIA reports for developments (foreshore, extraction, mining, logging etc). However, all data captured for the sampling sites are provided as maps in the report and the data is not made available to environment authorities.

GIS datasets captured from the EIA study can be acquired from consultants and stored on a centralized data portal. Monitoring of these sampling points by the relevant authorities will be based on that which was captured by the consultants and any additional data on the area of study. Results and trends will provide the current indication of the state of the environment in the phase of the development which can then be used for national country reporting to MEAs.

Demand that countries need

- GIS training (Environment authorities)
- Data (publicly available data – PEP)
- Open-Source Software (QGIS)
- Reporting

Using GIS for monitoring of environment impacts is not highly practiced for most PICs due to the lack of spatial environment data, technical knowledge, and awareness on its use for effective environment management. In Fiji, the use of GIS has been used in certain government departments for monitoring of developments such as rock/sand extraction, foreshore development, mining and mineral exploration which has assisted in ensuring environment compliance and sound decision making by the approving authorities. Almost all active environmental monitoring systems are local or regional systems aimed at monitoring specific components of the environment and helping to solve specific environmental problems. One

consequence of the rise in environmental awareness is the need for exact information, as this is the only way for authorities to evaluate the most appropriate measures and regulations.

The current state of GIS in environmental monitoring remains very much focused on the fact that GIS is an ideal tool for producing maps which can also be used as a user interface. GIS is used to a much smaller degree as an active component of environmental monitoring systems. Progressively it is to be expected that environmental monitoring and GIS will become much more closely integrated. At the same time, GIS are becoming more and more user-friendly, making them much more relevant as tools for non-GIS experts and from other professional areas for decision making.

Capacity of GIS use (Tracking reporting and analysis Conducting analysis and training with counterparts

- Online training to be conducted for the member countries.
- Status of GIS use to be addressed.
- Develop a standard GIS environment data acquisition template with metadata.
- Identify baseline GIS datasets that are currently available in each member country.
- Identify other GIS data that needs to be captured as environmental baseline data (include data aligned to MEAs which are already available or requires update).
- Standardized map template to be developed for each country.
- Conduct GIS analysis to address environmental response to pollution, water resources management, waste and climate change through effective monitoring of development.

GIS training can be conducted for member countries for field data acquisition (with env. attributes that needed to be included), spatial data inventory, spatial data storage and uploaded to centralized GIS data portal (and updating the information over time).

Environmental planning and reporting can be done using GIS technology - this can be conducted for the periodic assessments (done by approving agencies), types of sampling conducted (to address certain indicators aligned to MEAs) etc.

In terms of GIS analysis, training for member countries can be a continuation form the earlier training in data capture and these environmental data can be incorporated into map overlay (showing different spatial datasets) to enable stakeholders to identify areas (water source, settlements, infrastructures, heritage sites, etc) that are highly likely to be impacted through GIS analysis, and is an important way of showing the spatial distribution of impacts.

## ANNEX 5: Data Advocacy Plan