



EU EDF 8 – SOPAC Project:

**Reducing Vulnerability of Pacific ACP States
through integrated planning and management
(Island Systems Management) in the sectors impacting
on hazards, aggregates and water resources.**

Proceedings of the Regional Workshop 1,

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1 SOPAC Project: Reducing Vulnerability of Pacific ACP States and SPC PROCFISH Project – Joint Session

1.1 JOINT SESSION PRESENTATIONS

Dr Russell Howorth welcomed participants to the joint session of the SOPAC Project: Reducing Vulnerability of Pacific ACP States and the SPC PROCFISH Project Advisory Committee Meeting.

Dr Howorth articulated the importance of this opportunity to establish and strengthen linkages and synergies between these regional projects for the benefit of all stakeholders. Noting that the importance of efficient and effective implementation is key not only for the beneficiary countries but also for the associated organisations and donors to all have a common interest in closer collaboration and stronger linkages between the programme's activities.

Dr Howorth briefly explained that funding secured under the EDF 8 was only for use in project interventions in the existing 8 ACP countries, however future project expansion to include the 6 new Pacific ACP countries (Cook Islands, Niue, Nauru, Marshall Islands, Federated States of Micronesia and Palau) are expected through funding available under the 9th EDF. Given interest in the current EDF 8 projects by these countries the EU have already indicated the availability of funding from the non-focal sector of EDF 9.

Dr Howorth introduced Dr Tim Adams, Director of the Marine Resources Division of SPC, who introduced SPC and the SPC PROCFISH Project to delegates. He explained that SPC is formed of three divisions:

- Social Resources
- Land Resources
- Marine Resources, with a particular focus on living resources

The importance of marine resources to the Pacific region is clearly identified and highlighted by the SPC PROCFISH Project. The SPC Marine Resources Division has responsibility in the following key areas:

- Stock status advice and assessment
- The sustainability of marine ecosystems
- The assessment and management of reef fisheries
- Practical assistance to member countries, working with the FFA, to enable Pacific Countries to realise ongoing economic benefits from their fisheries
- Assistance in order to help member countries maintain maritime standards at international levels

The PROCFISH Project focuses on a number of key areas:

- Scientifically based investigation and assessment of tuna and reef fisheries resources and ecosystems
- Sustainability of regional fisheries
- Comparative baseline assessments of both the biological and social aspects of reef fisheries across the Pacific

Dr Adams went on to detail that the SPC PROCFISH Project had two components: PROCFISH/O – a 3-year project to further develop scientific information on tuna fisheries and pelagic oceanic ecosystems for the purpose of providing advice to SPC ACP States and the PROCFISH/C – a 5-year project to apply standard methods comparatively across the region to assess the current status of reef-fisheries (social as well as biological aspects and covering invertebrate and fin-fisheries).

Dr Howorth then introduced the SOPAC Project: Reducing Vulnerability of Pacific ACP States (henceforth, the SOPAC Project). SOPAC has traditionally been an applied scientific organisation with strengths in data collection. The development of the SOPAC Project was aimed at trying to take applied science and the importance of accurate and accessible data further into countries for its sharing and practical use in decision-making.

He noted the commonality between both projects and their focus on using information and knowledge as inputs into decision-making processes. The objective in providing data and information systems is to improve overall resource management decisions.

The SOPAC Project has the central aim of reducing vulnerability. This is to be targeted in three key areas:

- aggregates for construction
- water resources supply and sanitation
- hazard mitigation and risk management

In highlighting the linkages between the two Projects, Dr Howorth gave the examples of:

- the importance of interactions with reef fisheries in sourcing aggregate material from coastal environments
- potential pollution of coastal environments from downstream effects of island development
- social, economic and environmental impacts both directly and indirectly of disasters on coastal communities and their surrounding ecosystems

The SOPAC Project is based upon the concept of Island Systems Management (ISM). This concept embraces the view that resource management in our islands is a broad, integrated and holistic approach. As many of our islands are relatively small this broader form of management goes beyond traditional coastal zone management to address the management of whole islands as integrated environmental entities.

The key element of ISM is the development of an effective system for gathering and sharing data and information. It has been suggested that this toolkit may take the form of establishing centralised in-country GIS systems. The benefit of this approach will be to provide a base of information that links remote sensed satellite imagery of land with swath-mapped bathymetric data of coastal areas.

Communication between the Projects was identified as crucial to ensure that all potential benefits from the sharing of baseline data of study areas are realised, as this will form the basis of ISM. It is access to this information that is fundamental to improving decision-making, the primary output of both Projects.

1.2 JOINT SESSION DIALOGUE

Dr Howorth opened the floor to delegates from both meetings for discussion.

Question: Is there an established process for further consultation between the two Projects as the basis for sharing information?

Response: It was indicated that this decision was dependent on the opinion of the two meetings.

Question: Is it intended to establish a formalised system of interaction particularly in relation to identification of study sites and the interlinkages between systems and Project activities?

Response: It was highlighted that the PROCFISH Advisory committee intend to meet regularly in conjunction with the SPC member country Heads of Fisheries meetings. The PROCFISH Project is further developed in the identification of sites which also required country consultation.

However everyone agreed that there are clear benefits for ongoing communication between the Projects and demonstrating in-country the value of such communication. This dialogue also indicated there was a need to establish coordination at several different levels.

Such dialogue was seen to indicate the value of this joint meeting. It was reiterated that the two groups should consider where the value of interaction can be best gained and to suggest possible mechanisms for communication.

Question: Is it planned within the SOPAC Project to integrate data and information into government decision-making processes?

Response: The transferral of information is a key element of the SOPAC Project. Advocacy and multi-stakeholder participation are significant components and considered fundamental to ensuring that recipients at whatever level of decision-making will make use of the information.

The SPC PROCFISH Project is narrower in its focus and therefore has a smaller number of partners and stakeholders.

The importance of communication, the involvement of all stakeholders and the need for taking a risk management approach to selection of sites and the establishment of both Projects in countries was expressed. This point was made using the example of how conflicts could arise through the prioritising of resource use in reef areas. For example, the increasing need for sand and aggregates being sourced from reef areas would impact directly upon fisheries management. To ensure such conflicts do not arise it is essential that the Projects communicate fully and involve all stakeholders.

Question: What was the scale of study sites for surveys under the SOPAC Project?

Response: At this stage the SOPAC Project intends to utilise imagery at the scale of 1:10,000 with 1 primary and 1 secondary site being identified for each country. Preliminary target sites were generally areas of concentrated human habitation.

It was suggested the Projects need to be presented to the delegates before commonalities and linkages could be identified and built upon especially by countries.

Question: Will the GIS centre proposed under the SOPAC Project be stand-alone or house other data etc?

Response: If this element of the SOPAC Project is effectively delivered it is expected that the centres will naturally become national information centres.

2 SOPAC Project: Reducing Vulnerability of Pacific ACP States - Regional Workshop 1

2.1 INTRODUCTION

The Deputy Director, Dr Russell Howorth welcomed delegates and outlined the agenda for the meeting and upcoming discussions. He asked that each country consider their priorities originally identified during the Project development and to share information in order to update SOPAC on their current national priority issues. The aim for this meeting is to look at the next four years of the SOPAC Project and identify how it fits into the new SOPAC Corporate Structure while focusing on the national level Project implementation process.

Dr Howorth informed delegates that the Project Team was expected to be in post by early 2003. He stressed that the expertise and representation at this meeting would be able to provide provisional and all necessary information to develop the draft Project work programme for 2003.

The participation of delegates from Cook Islands, Marshall Islands and Federated States of Micronesia was seen as an opportunity to familiarise themselves with the Project focus to determine its appropriateness to them and provide a basis for validating the potential extension of the Project to their countries. This was considered particularly important given that they were not principal stakeholders in the original Project development process. It was highlighted that SOPAC's Governing Council had previously agreed the relevance of the Project to future ACP countries and it was now timely to reassess this relevance.

As the Project focuses on 8 ACP countries, Dr Howorth indicated that the Project was expected to be implemented incrementally. SOPAC was therefore also seeking input from delegates as to their countries' priorities and readiness to begin implementation of activities.

He expressed his appreciation for the attendance of all participating ACP countries and conveyed apologies for the Kiribati representative who was also participating in the concurrent SPC workshop and Tonga, whose commitments meant they would have to depart following the first session. Papua New Guinea, Nauru and Niue also could not be present at the meeting due to prior commitments.

Dr Howorth further emphasised the importance of this workshop and the need for feedback. He also stressed that further multi-stakeholder consultations will be conducted by the Project Team in each participating country.

2.2 SESSION 1 – PROJECT INTRODUCTION

The SOPAC Project: Reducing Vulnerability of Pacific ACP States was introduced by Dr Howorth. He stressed that this session was an opportunity to ensure that all delegates were up-to-date with the Project and its background. To set the scene for the workshop he reported on the Project development history. In summary, he drew attention to the signing of the grant and financing agreements on the 13 March 2002. He also noted that the SOPAC Project has been at least 3 to 4 years in development.

To begin discussions on the Project, Dr Howorth introduced the simplified Project logframe as included in the final Financing Proposal (Annex C: Logical framework – see Appendix 1). He brought to the attention of delegates; this logframe did not contain the level of detail necessary for understanding the conceptual basis for the Project. The information necessary for discussion at this meeting was contained in the final draft Financing Proposal (submitted by SOPAC to Brussels) and provided as further Workshop background material.

Dr Russell Howorth briefly provided an overview of the Project history. He summarised that the Project was initially planned as four separate, but concurrent projects covering the following areas:

- Aggregates for Construction
- Water and Sanitation
- Hazard and Risk Management
- Training and Capacity Building

Following development discussions with the EU concerning the nature and scale of the project it was agreed that the fourth area above should be incorporated within each of the other three. It was also decided that rather than three separated projects these should be considered as one integrated Project.

The rationale for integrating these elements into a single project was the goal in each sector of data gathering and information management. Furthermore it was considered as critical that a holistic approach and use of techniques such as GIS was necessary in order to enable the sharing of resultant data and information amongst the various sectors.

Following this shift, the existing concept of Island Systems Management was adopted as a means of describing this integrated approach to doing business. It was noted that the SOPAC Governing Council had already endorsed this concept.

Following the re-packaging of the project proposal, a full and independent review was conducted by an external consultant. The consultant carried out in-country discussions and worked with a team at SOPAC to develop a detailed field report and draft Financing Proposal. This report showed the strong support for the Project and its relevance and timeliness.

The draft Financing Proposal was refined through consultation with the EU, and finally endorsed, with the official signing of a grant agreement on 13 March 2002. The final Financing Proposal identified three key sectors: aggregates for construction, water and sanitation, and hazard mitigation and risk assessment. It was also recognised that GIS and the sharing of knowledge through effective communication at all levels and across all sectors were key cross-cutting elements.

2.3 PROJECT INTRODUCTION DIALOGUE

Dr Howorth then opened the floor for discussion.

Tonga queried the apparent omission from the Project documentation of any reference to the need for a high-level geodetic survey. This was considered fundamental to establishment of an integrated framework for GIS and the ISM concept.

SOPAC responded indicating that work with PCGIAP and the third phase of the Sea Level and Climate Monitoring Project would go some way to providing high-level geodetic survey elements for PICs.

Tonga reiterated the need for an integrated geodetic framework as a common basis for establishing comparable information between PICs and as the basis for ISM. The importance of being able to utilise current and historical data was also highlighted.

SOPAC acknowledged the importance of geodetic data in ISM however this was not a key activity within this Project. At the same time, it is the aim of meetings such as this to explore how this Project can utilise and strengthen links with outcomes and geodetic data from other important Projects such as the Sea Level and Climate Monitoring Project.

SOPAC also reassured delegates that geodetic data could be transferred to the GIS database in future and that as such the absence of this element in the Project need not delay implementation. SOPAC also noted that some large-scale geodetic surveys are to be carried out through the maritime boundaries delimitation Project.

Tonga also noted compatibility problems that had been experienced with geodetic data and GIS during work with the power utility in Tonga.

Tuvalu agreed with Tonga's concerns and pointed out that the Sea Level and Climate Monitoring Project did not account for scale. He also reiterated the need to have a national geodetic framework as critical component of any GIS network.

SOPAC acknowledged the importance of establishing standards for GIS and informed delegates that WGS84, as the best available international standard, would be used as the basis for all GIS activities.

Cook Islands provided further background to activities of the PCGIAP and commented that the observation campaign for 2002 is underway (6 – 13 October) and that results will be available on the PCGIAP website. He also highlighted that other activities in the geodetic field will be undertaken as part of the Pacific initiative.

SOPAC recognised that the ISM toolkit hinges on quality spatial datasets and agreed that this is not necessarily available for all countries at the national level. The current best option is to use WGS84 as the “best” approach to developing GIS in participating countries and that once national geodetic data becomes available transformation is possible.

Tonga expressed that they had raised the issue primarily to ensure that SOPAC considered the importance of geodetic data in trying to establish GIS in PICs.

SOPAC acknowledged this and confirmed that this was an important part of the validation exercise and the need to make sure that the data will be useful for countries.

After discussion on this issue the Workshop agreed that in the absence of any appropriate national geodetic framework, the Project should adopt WGS84 as the basis for GIS

Fiji requested clarification from SOPAC as to how SOPAC envisaged the Project to work in country especially given the different spatial scales, geography, timeframe and specific local characteristics of some of the Project interventions. He also queried what the final use of this information would be given the wide variation between countries.

SOPAC highlighted that it would be a relatively simple exercise if the Project was to be implemented for a small single island system. However, it was recognised that in larger island and archipelagic states, key geographic areas would need to be agreed upon. Through this workshop SOPAC is looking to countries to validate the appropriateness of sites for the Project.

Fiji also queried the longevity of the Project outcomes and whether the capacity in country would exist to extend the methodology to other areas.

SOPAC responded that in each country success would be determined by the adoption of processes and outcomes from this Project. The future extension of this Project to other ACP countries is likely to be possible under the Cotonou Agreement (EDF 9).

The Solomon Islands commented on the importance given to the national focal point especially in coordinating activities within key ministries to be involved in this Project. The delegate also asked if there were any formal processes to be used in this Project.

SOPAC responded that the national representative would have a critical role as the point of entry into country multi-stakeholder consultations. The Project Team would expect to work closely with the national representative in the organisation of in-country multi-stakeholder consultative workshop and Project implementation. Reference was made to the importance given to the inclusion of a broad spectrum of stakeholders in the Cotonou Agreement.

Fiji emphasised the importance of collaboration between various agencies in government for the Project to be fully integrated. However, the delegate noted that this approach often resulted in delays in implementation.

SOPAC concurred with the importance of this issue and highlighted the key role of both the Project Team and the national representative in ensuring coordination and full integration of the Project.

Tonga thanked SOPAC for the opportunity to participate in the meeting. However they also noted that due to the late notice given they could not attend the whole meeting, as other commitments required their attention.

2.4 SESSION 2 – COUNTRY IMPLEMENTATION PRIORITIES & DIALOGUE

2.4.1 Fiji Dialogue

Fiji presented their Summary of Implementation Priorities to the Regional Workshop (See Appendix 4.2.1)

SOPAC noted that Fiji's presentation had covered the three key areas of the Project and that the tools suggested under the Project were suitable for addressing these issues. Further details on the issues and potential sites were requested.

Fiji responded that the specific priority areas, which they would like to address, include: support for overarching national water legislation; completion of hazard assessment work carried out in Suva and its extension into the Suva / Rewa corridor; extension of aggregate mining issues beyond the immediate coastal to terrestrial sources.

Fiji stated that the selection of one locality for all three specific Project areas is difficult. To explain, Fiji highlighted that water was a national issue, and that where information on water resources existed, support was required to put this into an accessible database for management and development of appropriate legislation and management strategies.

In relation to coastal hazards, the area from Rewa to Lautoka, being the major urban corridor on Viti Levu and the location of most of the tourism infrastructure needed particular attention. Currently there are several activities being carried out for which data, including remote sensed data has been acquired and could provide the basis for risk management and assessing of further development plans.

In response to SOPAC's query regarding water and pollution issues Fiji highlighted that they had a multitude of islands and there was the potential to develop pilot integrated water management Project on a small island such as Vanua Balavu where population pressures and associated water and sanitation issues are critical and that these could be used as development sites (pilot/demonstration) Projects.

2.4.2 Vanuatu Dialogue

Vanuatu presented their Summary of Implementation Priorities to the Regional Workshop (See Appendix 4.2.5)

SOPAC acknowledged the key priorities raised in each three Project sectors and emphasised the links between the priorities expressed by Vanuatu and Fiji in taking the data that exists for hazard and risk assessment further to provide tools for the development of plans. SOPAC also acknowledged the similar request of assistance by Vanuatu in the development of a national plan for water management. A community-based approach to water management demonstration Project was suggested as means of encouraging ownership and awareness in rural areas. The importance of the GIS spatial database together with a centralised communication system is the key to the Project.

Vanuatu explained that a GIS committee has been established in country and they now wish to develop their planning capabilities.

In response, SOPAC indicated that it might be useful to consider establishing a GIS centre in Vanuatu as a pilot Project. It was also noted that Vanuatu have recognised the opportunity on how best to utilise in-country resources and capabilities through the development of a central unit.

The Marshall Islands questioned how the role of capacity building could be incorporated into the Project.

Referring to the logframe, SOPAC identified that training of country personnel was captured under each activity. As an example it was suggested that a key element in the establishment of a national GIS centre would be the training of local personnel. An important component in this capacity building was the setting up of information and communication technology infrastructure. It was anticipated that governments would recognise the importance of this GIS Centre within the life of the Project and continue to support its operation.

The Cook Islands expressed their keen interest in the dialogue particularly in relation to similar issues being faced in the Cook Islands in the three key Project sectors. A key point raised was the importance of a coastal morphological map that was developed with the assistance of SOPAC and has provided the basis for risk management.

SOPAC noted the similar issues faced by the Cook Islands, Fiji and Vanuatu, and went on to bring attention to the importance of coastal maps prepared by SOPAC in the late 1980s. Coastal maps have been produced for Samoa and Rarotonga providing a critical information base for coastal management. However such maps still do not exist in many of the PICs. Therefore it may be opportune that the Project considers using the Project tools to develop such maps for other countries.

2.4.3 Tuvalu Dialogue

Tuvalu presented their Summary of Implementation Priorities to the Regional Workshop (See Appendix 4.2.4)

In follow-up to the presentation, Tuvalu stated their support for the Project and the specific need to have GIS fully integrated.

SOPAC sought clarification as to whether the requested development of a national GIS capacity was similar to that requested by Vanuatu.

The Tuvalu delegate agreed.

SOPAC went on to point out the importance of GIS as a tool in this Project. However, it must be acknowledged that data gathering and information are fundamental to the success of this GIS tool. It was also emphasised that training is integral in establishing national GIS capacity.

As presented by Tuvalu droughts show the clear linkage between the water and hazard sectors thus highlighting the importance of an integrated approach to addressing these issues. The Project should provide the framework for tackling these issues through a common set of goals.

Increasing development in Tuvalu as exemplified by the development of a new wharf, hospital and airfield together with the increasing expense of importing aggregates is making it critical to source alternative aggregate material.

2.4.4 Solomon Islands Dialogue

Solomon Islands expressed their appreciation for the invitation to participate in this Workshop and in the Project. The delegate indicated that although he did not have a formal presentation he would provide their Country Paper submitted to the World Water Forum PrepCom in Sigatoka earlier this year. The Solomon Islands representative went to express appreciation to SOPAC and the EU for the assistance that they have provided in several key areas as part of the recovery programme.

National responsibility in the three Project sectors were outlined:

- Water
 - Urban water supplies managed by Honiara Water Authority
 - Rural water supply and sanitation administered by Ministry of Health
- Aggregates
 - Ministry of Mines – due to the security situation they are currently focused on capacity building activities
- Hazard and risk management
 - Ministry of Mines has received assistance from SOPAC in the monitoring of volcanic activity in some islands.
 - Currently power in Solomon Islands is supplied totally by diesel except for 2 small hydro-power installations supplying approximately ~ 200 kW – power outages are common in provincial centres and in particular in Honiara
 - Renewable energy (solar photovoltaic) has been integrated into several rural Projects

- The main difficulty in managing risk to infrastructure has been customary ownership of land. An example of this was the situation created by an active volcano eruption which forced the relocation of people and subsequent negotiations with land owners

Interest from Sea Level and Climate Change Monitoring Project to establish instruments in the Solomon Islands was noted.

The delegate emphasised the lack of hydrological data needed to manage water and limited monitoring of urban water supplies. He went to highlight the importance of customary land in sourcing water. Conflicts in ownership of land and natural resources such as water that is owned by the state is a continuing problem.

The existing Rivers and Water Legislation (1969) urgently require review. The current legislation applies only to areas adjacent to Honiara and there is a need to broaden water management nationally. Key ministries responsible for water management include: Ministry of Mines, Health, Finance and Works. It was also noted that WWF has assisted in rural water supply programmes.

Stressing the importance of raising public awareness as to the significance of water as a finite resource is critical in the Solomon Islands in light the potential impacts of pollution, logging etc.

Discussions began with SOPAC highlighting that the assistance required by the Solomon Islands in recovery, and given the current security situation, SOPAC has had discussions to how best SOPAC and in particular this Project may assist. Areas that may not require fieldwork such as data information management have been suggested.

SOPAC informed the delegate from the Solomon Island of potential areas for work in electronic communications. Discussions with the national telecommunication provider resulted in agreement that despite being owed substantial amounts by existing accounts that was the possibility of establishing under a new account communication connection.

The Solomon Islands reiterated the importance of land ownership and conflicts in potential legislation in the water sector.

The Federated States of Micronesia empathised with the fundamental importance of land issues to the success of any intervention and in particular this Project. The delegate stressed the need for strong community support and cooperation.

SOPAC reported that the land issue had been discussed at the FEMM. SOPAC also highlighted that this issue goes beyond ownership of land especially in terms of resource ownership as experienced in the development of mineral policies in several countries. It was also noted that this issue might require an appropriate regional level of engagement or mechanism.

FSM reiterated the importance of full community participation for the successful adoption of tools developed by the Project.

To further illustrate the problem of land ownership in the risk management, the Solomon Islands gave the example of population growth on active volcanic islands and associated land ownership conflicts has resulted in the building artificial islands.

The Solomon Islands highlighted the need for a more structured process of hazard monitoring by informing the Workshop of work being undertaken by US Marine to install local seismic monitors and sea level gauges and the lack of accurate local meteorological warning systems. It was suggested that a building code for traditional buildings should also be considered.

SOPAC responded that the IDNDR Disaster Management Unit has investigated such codes.

2.4.5 Samoa Dialogue

Samoa presented their Summary of Implementation Priorities to the Regional Workshop (See Appendix 4.2.2)

Samoa thanked SOPAC for the introduction to the Project and to the EU for its inputs. Samoa provided an updated status report on their current requirements and expectations from the Project.

SOPAC remarked on the need to review the activities the outcomes of the large World Bank Asset Management Project and the potential role of SOPAC in its upcoming review process. It was also pointed out that under EDF 9, the EU was engaged a rural water supply Project. The Project will therefore need to carefully consider these Projects to ensure that the EU Project adds value.

Cook Islands commented on the need for an integrated approach to Project interventions and recognised the importance of regional capacity in the interim as national capacity building development progresses. It was emphasised that there was a need for countries to fully consider all issues to ensure that there was not a “lolly scramble” approach to implementation of in-country activities. It was also acknowledged that contributions by all stakeholders needed to be clearly identified. The Project should differentiate between regional and national activities and ensure that regional activities are not those that should be a national responsibility.

Cook Islands commented on the problem of land ownership and the similarity with lagoon ownership. In the outer islands, the belief is they own the lagoon whilst under Law it is owned by the State. Following the development of pearl farming in several lagoons, the local populations assumed full control and ignored government advice. Only following the disastrous outbreak and loss of many pearls, did the local population appreciate the importance of the whole system and government advice. Cook Islands also welcomed the opportunity to participate and share experiences.

In reference to the logframe, Samoa noted the budget given to staffing and queried whether there was an allowance for in-country attachments for the development of professional skills.

SOPAC informed delegates that country counterparts were integral in earlier proposals however these were eliminated by Brussels. Efforts are being made to ensure that in-country training is included as far as possible within the budget. SOPAC highlighted that Council, EU and the RAO had agreed to use of interest earned for this purpose.

Fiji asked Samoa whether land-based aggregates had been considered as an alternative to coastal sand mining.

Samoa responded that institutional and government capacities were an impediment and that there was a continuing problem with land ownership.

Fiji suggested the establishment of village based aggregate commercial development

Samoa responded that this had been considered but often individuals would take responsibility for the development of such ventures creating intra-village tension.

The Marshall Islands recognised the similarities of problems faced and those raised by other delegates. They expressed their willingness to learn from other countries and shared many of the problems in aggregates and water sectors. It is hoped that the Project will go some way to address some of these problems.

The Federated States of Micronesia expressed their appreciation for being able to participate and noted that they also faced similar problems. They noted a lack of capacity in government and the need for decision-makers to recognise this. They requested assistance in completing the work already initiated by SOPAC and consideration for the extension of the Project under EDF 9.

SOPAC asked the Forum Secretariat, as Regional Authorising Officer, to update the Workshop on progress towards finalisation of EDF 9.

The Forum Secretariat expressed that the release of finances under EDF 9 hinged on the ratification of the Cotonou Agreement. The two thirds ACP quorum required has been met and now it is up to the four remaining EU states left to ratify. Commissioner Nielson had recently advised the Forum Secretariat that these countries have completed the paperwork and he was confident that the money would be available by January 2003. It was therefore important that a Financing Proposal be developed and fast-tracked through the process. There was every possibility that the new six ACP countries could be included within the current Project's start-up timeframe.

SOPAC called upon Cook Islands, Federated States of Micronesia and Marshall Islands to fully consider joining the Project immediately given this news in order that a Financing Proposal could be submitted within a month.

2.5 SESSION 3 – THE SOPAC PROJECT IMPLEMENTATION

SOPAC welcomed participants and requested that they consider the record of Session 2 – Country Implementation Priorities and pass all comments back to the rapporteurs. It was noted that the final record of the meeting would include the record for the joint session, country papers will be appended, and a complete proceedings would be provided later.

Samoa thanked SOPAC for preparing the record and suggested that at the end of each section there should be a checklist of key outcomes or activities for follow-up.

SOPAC acknowledged Samoa's suggestion and agreed that this would be useful. It was indicated that there was a need by the end of the meeting to agree to the next stage of activities and follow-up timeframe in order to provide SOPAC with guidance.

SOPAC also noted the presence of the Cook Islands and Republic of Marshall Islands as observers and that this was deliberate so as to ensure they were fully briefed on the project and could see how it fitted in respect to their own national context.

The Cook Islands requested that a list of participants also be provided and appended to the record, as the final record would be used to present to government as part of their regular reporting.

SOPAC welcomed the EU delegate who went on to comment on the preliminary nature of Project progress to date stressing the desire of the EU to see concrete and understandable national priorities and work-plans established as soon as possible. All activities under the Project should complement other existing EU interventions in ACP countries.

SOPAC responded that 6 (Fiji, Kiribati, Samoa, Tonga, Tuvalu and Vanuatu) out of the 8 participating countries had already provided background papers of their priorities. SOPAC shared the view of the EU that this Project should complement other EU initiatives, in particular National activities and acknowledged the challenge of integrating the SOPAC Project into existing major national programmes. The annual current EU water project in Samoa was used as an example.

The SOPAC Project provides an agreed framework for interventions at a strategic level in ACP states however the challenge now is to identify what is needed for each country to address this strategic goal. Effective implementation is dependent upon identification of the key national activities. It is the purpose of this session to begin establishing a work programme for the Project to be implemented over the next 15 months and that it was expected to have recruited staff during the first quarter of 2003.

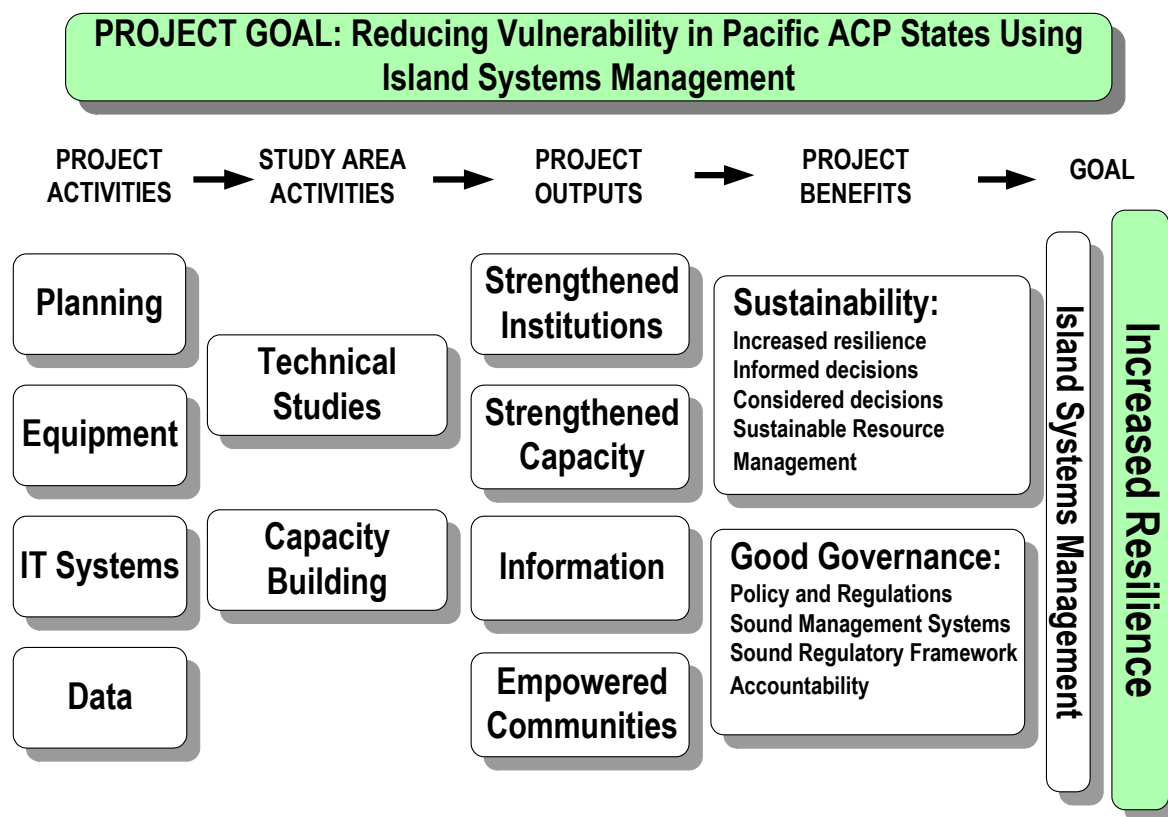
The EU reiterated the need to have the project activities clearly defined especially in which country, where and when. This was based on their need to report scientific-focussed activities back to Brussels.

SOPAC introduced the background paper and highlighted that this would provide the basis for developing an advocacy brochure. There is a need at the regional level for SOPAC, RAO and EU as well as at the national level for ownership and commitment. This advocacy brochure will help to introduce the Project to all stakeholders and provide insight into the detailed activities that will contribute to achieving the overall Project goal.

SOPAC asked delegates to consider whether this draft document was suitable for use as such as an initial awareness-raising tool and as a means of engaging local stakeholders in the build up towards an in-country consultative workshop. SOPAC also drew attention to the draft advocacy poster and asked delegates to recommend improvements prior to distribution. The importance of partnerships within countries was stressed as critical to support SOPAC in the advocacy of the SOPAC Project.

SOPAC introduced the Project Implementation Flowchart as presented in Figure 1.

Figure 1. Project Implementation Flowchart



The main points raised were the need for clarification of the terms vulnerability and Island Systems Management or ISM especially as these terms often mean different things to different people. Also noted was the need to choose study areas as soon as possible and involve all stakeholders as fundamental first steps in following this flowchart. Partnerships and ownership of the Project by all stakeholders was considered critical to its success.

2.6 THE SOPAC PROJECT IMPLEMENTATION DIALOGUE

SOPAC opened the floor for discussion.

Tuvalu sought clarification on how the Project would monitor progress towards the Goal.

SOPAC responded emphasising the value of establishing complete ownership of the Project by all beneficiaries. Success of the Project and therefore realisation of its Goal will be gauged upon the reactions of multi-stakeholder group. The Goal of the Project goes beyond the lifetime of SOPAC intervention.

Tuvalu then raised the question of whether the Project was proposing the appropriate tools.

SOPAC assured delegates that the right tools, skills and technical equipment have been identified as part of the Project development to ensure delivery of products and outcomes necessary to achieve the Project Goal.

Cook Islands appreciated the discussion and further commented on the issues raised by Tuvalu. Recognising that the Project was still in the inception phase the delegate suggested that the Project needed to be strategic and assess all potential risks to national activities. To help illustrate this point Cook Islands brought the meetings attention to the approach taken in the Project Proposal (p9). Cook Islands expressed their interest in working with the Project Team towards determining potential activity failure areas and looking for ways to ensure success.

SOPAC agreed with this suggestion and indicated that a national risk management schematic was an important component of multi-stakeholder consultative outcomes to ensure everyone knows their responsibilities and the associated risks to the Project.

Tuvalu reiterated the importance of land tenure issues and that the multi-stakeholders consultation is key to selling and implementing this Project.

SOPAC recognises this issue and the need to address it at this stage of the Project. There is a clear need for the Project Team and national counterparts to carefully design the process of involvement of multi-stakeholders to include land and lagoon owners. It was suggested that countries could undertake translation of Project documentation to aid in this process.

Samoa acknowledged the importance of the active participation of country delegates in this national consultative process. All stakeholders including SOPAC, RAO, donors, delegates and their national counterparts need to have a clear understanding of the Project Goal and its activities to ensure success and sustainability. It was felt that this meeting had provided all delegates with the necessary briefing and knowledge to fully engage in the inception process.

The Solomon Islands restated the critical involvement of all stakeholders as a necessary first step in taking the Project into the Solomon Islands. Success will be determined by all stakeholders accepting the Project and being satisfied with the outcomes.

SOPAC questioned delegates as to whether it should be an outcome of this Workshop to agree to the importance of the multi-stakeholder involvement and that following the Workshop national focal points should establish a Project Consultative Group. This Group would plan, manage, monitor and evaluate progress throughout the Project.

Solomon Islands expressed there may be some difficulty in establishing a broad multi-stakeholders group.

SOPAC acknowledged that some countries might have difficulties in this task.

Fiji suggested that it might be useful to translate the listed benefits of the Project into language that clearly identifies tangible benefits to encourage people to take ownership of the Project. Adding to comments on the value of multi-stakeholder consultation Fiji expressed the importance of accounting for scientific and traditional knowledge in the establishment of resource management systems.

Cook Islands supported comments made by Fiji and suggested that it may be useful to develop a Frequently Asked Questions with responses briefing paper to aid delegates in this process. The delegate also suggested that existing meetings such as the Meeting of Mayors could be an alternative opportunity to engage stakeholders.

SOPAC supported this idea of the development of a FAQ sheet. SOPAC went on to suggest that delegates prepare a calendar of meeting and events, which this Project could benefit from.

SOPAC advised delegates that the SPC/EC PROCFISH meeting were still involved with country presentations and had yet to discuss study site selection. Therefore, at this stage their group did not feel it was appropriate to engage in further joint discussions.

The Workshop then considered the need for a regional consultative mechanism such as the current meeting. SOPAC informed delegates of the regular meetings between the EU, RAO and SOPAC.

The Solomon Islands delegate noted that the SOPAC National Representatives are the focal point for SOPAC. However it was suggested that maybe an alternative focal point should be identified for this Project.

SOPAC informed delegates that it must by Constitution communicate with National representatives. However, countries have the prerogative to choose alternative focal points for Projects according to their particular circumstances.

Marshall Islands queried whether the Project funding could accommodate regional regular consultative workshops.

The Forum Secretariat referred to the Financing Agreement (Pg 6) that explicitly states the need for annual regional review meetings, which was intended to coincide with the SOPAC Governing Council and TAG Annual Meetings.

The EU suggested that the only risk to having reviews carried out, as part of the SOPAC Annual Session would be the lack of detailed activity review including assessment of key performance indicators and progress. The EU delegate queried as to protocols accorded during discussions during Annual Session.

SOPAC assured the EU that it expected that the EU would be directly involved in discussions either within Council or as part of a special tripartite meeting.

The EU responded that this would be amenable and there could be high-level attendance from Brussels as long as dates for the upcoming meeting were made available as soon as possible.

The Solomon Islands queried the inclusion of the SOPAC Project being included as an Agenda Item at Governing Council given that the Project currently involves only 8 ACP countries.

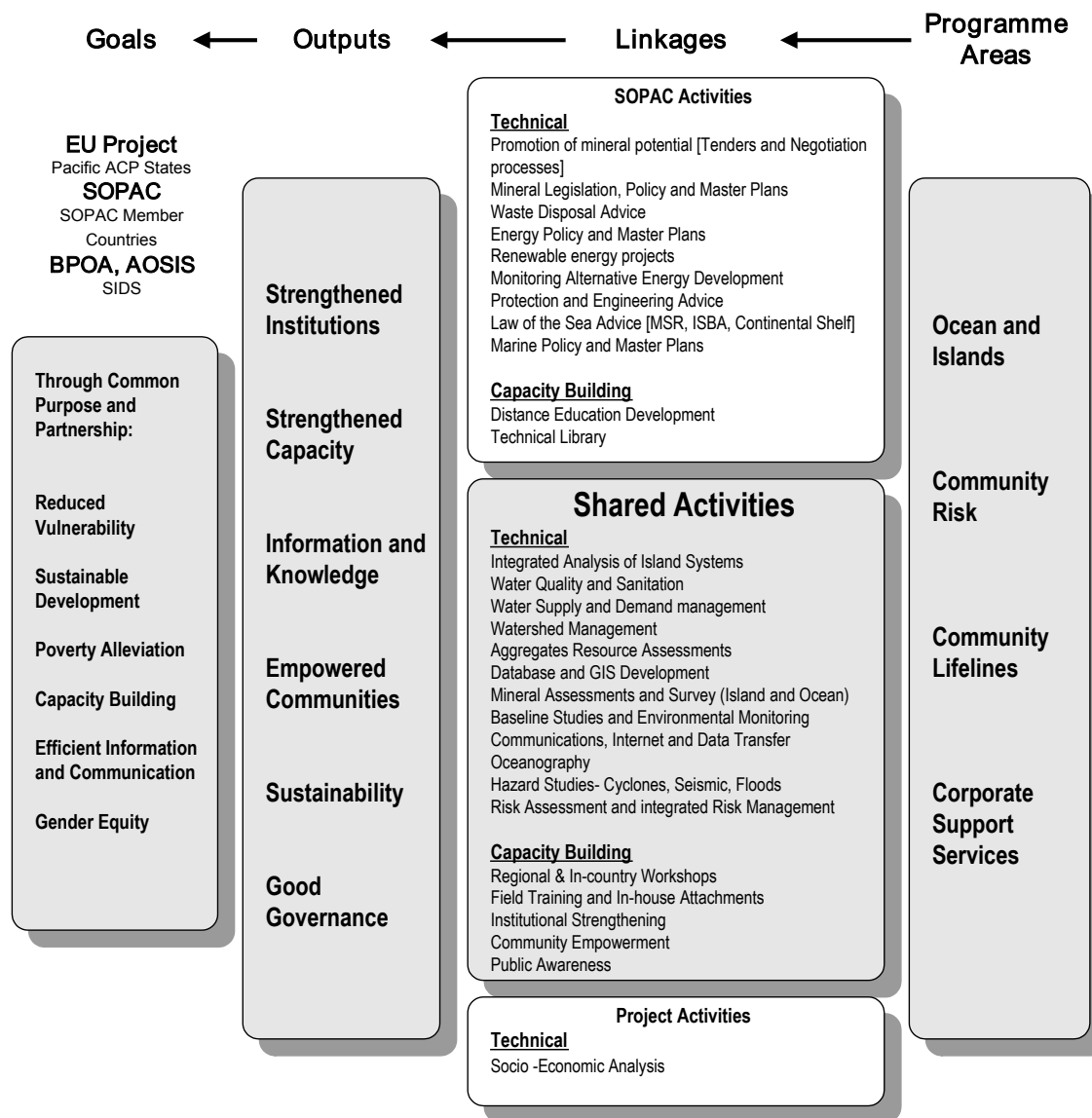
SOPAC noted that by the next Session the new ACP countries are likely to be involved and this provided a good opportunity to include Australia and New Zealand in discussions. This also provided a cost-effective method of regional consultation with countries and TAG.

November was suggested by SOPAC as an appropriate date to launch the first national multi-stakeholder consultative meeting. In order to meet this date there is a need for dialogue between SOPAC and national focal points especially in the engagement of all key resource users and owners.

2.7 SESSION 4 - SOPAC & THE SOPAC PROJECT WORK PROGRAMME

SOPAC went on to introduce how the SOPAC Work Programme integrates with the Project as presented in Figure 2.

Figure 2. Project and SOPAC Work Programme Linkages



SOPAC's key work programme areas

- Ocean & Islands
- Community Lifelines
- Community Risk

And links with SOPAC Project Goal and activities were outlined.

SOPAC stressed that in order to move the Project forward a degree of realism was required. At present the Project Team are expected to be in place by early 2003. However, this should not delay implementation that will continue to fall under the responsibility of the current Executive Management Team and additional professional assistance will be engaged as required.

2.8 SOPAC & THE SOPAC PROJECT WORK PROGRAMME DIALOGUE

SOPAC put to delegates whether the above process is acceptable to continue with the next steps of developing the overall Project workplan together with working on a more detailed workplan and budget for 2003.

Samoa responded that they felt confident they could continue to move forward with planning and implementation of the Project. Whilst recognising national constraints, the delegate expressed the desire to maintain momentum and for delegates to continue moving forward. At the same time the importance of avoiding any delay in the establishment of the work programme logistics and budgetary allocations is essential to prevent derailing of the process.

SOPAC acknowledged the support for keeping things moving and will continue to work towards securing the Project Team and completion of all activities.

Tuvalu noted the expectation of the implementation of Project Team to be in place by early 2003 and asked if there was any validation of the time chart as presented in the Final Project Proposal.

SOPAC highlighted the need to review the Gantt chart and this was part of the refinement of the overall Project workplan that must include decisions such as those made during this meeting such as the national consultative process. A detailed workplan and budget for 2003 must be submitted to the RAO and EU early in 2003.

Fiji recognised the significance of identifying critical national needs as quickly as possible to progress the Project.

The Cook Island commented that the Project could be much a benefit to non-ACP countries and that their participation throughout even if requiring alternative funding was considered useful.

The Forum Secretariat encouraged the new ACP countries to identify their priorities with a view to being able to actively participate in the Project as quickly as possible.

The EU reiterated comments made by the RAO that Commissioner Nielson had reassured that the EDF 9 funding should be available by the January 2003. The EU delegate stressed the need to submit the Financing Proposal for the new 6 ACP countries as soon as possible.

SOPAC agreed to utilise the current Financing Proposal as the basis for quick development of a new Financing Proposal and would provide a provisional budget similar to that which was provided for the Project.

The Forum Secretariat agreed and suggested that SOPAC prepare a short document using the current Financing Agreement and use the budget presented to develop an indicative budget for inclusion in the Proposal.

Cook Islands expressed their pleasure at this news and called upon SOPAC to quickly finalise the process. The Cook Islands thanked delegates, Forum Secretariat, EU and SOPAC for allowing them to participate in these fruitful discussions.

SOPAC informed delegates that all correspondence relating to the Project would be circulated to all EDF 8 and EDF 9 ACP Countries. Seeking direction from delegates SOPAC requested support for suggestions made earlier as to the best way forward over the next 3 – 6 months.

Fiji expressed their support.

The EU reiterated the need to establish a precise idea of the national priorities and Project activities in the 6 new ACP countries together with the current ACP as quickly as possible. These details will help to accelerate the process of involving the new ACP countries.

SOPAC informed delegates that due to Council decisions on the three SOPAC Work Programme developments all planned country visits could not be conducted before the New Year. SOPAC sought guidance from the Workshop as to prioritising these visits and as to which countries were ready to host a national consultative workshop.

The Solomon Islands delegate indicated that a consultative committee had already been established as part of the preparations for WSSD. This committee could provide the basis for a national consultative workshop.

Samoa indicated their readiness for participation. They noted that SPREP and SOPAC would be invited to review the current World Bank project and this is to be held in February 2003. This would provide an ideal opportunity to convene a consultative workshop.

In awareness of the time and commitment to coordinating and organising a national consultative workshop the Solomon Islands queried whether there was resources in the project to support a country coordinator.

SOPAC responded with the suggestion that it may be possible to establish MoUs between member countries and the SPC/EC PROCFISH Project has proposed the Project as. Funding for this role may be possible within the budget.

Fiji indicated their willingness to participate and their stated their availability to initiate consultations in November this year.

SOPAC suggested that Fiji might be useful as a pilot consultative exercise and provide practical lessons on which to build future workshops.

Vanuatu stated their readiness to move forward and address the identified priorities.

SOPAC recognised this and suggested that they may be an ideal pilot project for the GIS centre.

Tuvalu indicated that they are committed at present but would be available to commence national consultations in February 2003.

SOPAC pointed out to the Workshop that input from Kiribati, Papua New Guinea and Tonga is still required.

Solomon Islands suggested that although Fiji might be considered an easy pilot opportunity it may just as useful to also trial the process in another country like Solomon Islands.

SOPAC acknowledged all country responses and their known priorities. In response to statements of readiness to begin national consultations SOPAC indicated they would begin communication with Fiji and Solomon Islands as well as Vanuatu as a pilot for the GIS Centre.

The EU informed the Workshop that there was money within the Project budget for short-term consultancies and that this could be used to engage national and regional counterparts and resource experts.

SOPAC highlighted the potential use of other consultative stakeholder groups such as those established under the SPREP PICAPP project.

In closing SOPAC indicated they would engage in the following:

- Finalise an advocacy brochure and produce poster
- Develop a FAQ sheet
- Begin communications with Fiji and Solomon Islands regarding national consultations to be convened before the end of the year
- Finalise the proposal for EDF 9
- Need for input by EU into advocacy brochure

SOPAC will produce appropriate documentation and looks forward to country input.

SOPAC thanked all delegates for their efforts and energy over the two days and asked if anyone had any final comments.

The Marshall Islands then thanked everyone and SOPAC for their work and for including the new ACP countries and looks forward to the future implementation of this SOPAC Project in their countries.

3 Regional Workshop Key Outcomes

The following summarises the key outcomes from discussions had during the EU EDF 8 SOPAC Project: Reducing Vulnerability of Pacific ACP States through integrated planning and management (Island Systems Management) in the sectors impacting on hazards, aggregates and water resources, Regional Workshop:

1. Communication and ongoing interaction between the Projects was considered key to ensuring maximum benefits to all stakeholders
2. A risk management approach should be taken in the selection of Project sites in order to avoid potential conflicts between the Projects
3. The importance for establishing standards for GIS was acknowledged. The Workshop agreed that in the absence of any appropriate national geodetic framework, the SOPAC Project should adopt WGS84 as the basis for GIS.
4. The SOPAC National Representative is expected to play an important role in identifying the SOPAC Project focal point.
5. The SOPAC Project focal point will have a pivotal role in coordinating in-country multi-stakeholder consultations. The SOPAC Project team will work closely with the guidance of all stakeholders throughout the Project implementation.
6. Fiji identified support for overarching national water legislation; completion of hazard assessment work for development of plans and the extension of aggregate mining issues beyond the immediate coastal to terrestrial sources as key priority areas.
7. A potential pilot integrated water management project for a small island was proposed for Vanua Balavu, Fiji.
8. Vanuatu identified completion of hazard assessment work for the development of plans, establishment of a GIS Centre and development of a community-based approach to water management in rural areas as key priorities.
9. It was agreed that the GIS spatial database together with a centralised communications system is key to the Project.
10. Vanuatu was proposed as being suitable to be a pilot for this component of the SOPAC Project.
11. The SOPAC Project will establish information and communication technology infrastructure together with training local personnel in the strengthening of GIS capacity in each country.
12. Coastal morphological maps are important tools in the development of coastal development plans. The SOPAC Project provides an opportunity to develop such maps for all countries.
13. Tuvalu identified GIS capacity, the impact of droughts and increasing demands from development for aggregate as key priority issues.
14. The SOPAC Project will provide a framework and a common set of goals in order to establish an integrated approach such as that needed to address the issue of droughts in Tuvalu.
15. Solomon Islands identified water management and associated conflicts as key priorities.
16. Addressing land and lagoon ownership and potential resource use conflicts and the need for strong community support and cooperation were identified as critical to the successful implementation of this Project.

17. The SOPAC Project needs to carefully consider all other EU funded country interventions to ensure that the Project adds value.
18. The Project should differentiate between regional and national activities and ensure that regional activities are not those that should be a national responsibility.
19. The SOPAC Project will utilise interest earned to secure professional experience for country counterparts as agreed by Governing Council, EU and RAO.
20. The release of finances under EDF 9 awaits complete ratification of the Cotonou Agreement. It is likely that the money would be available by January 2003.
21. All the new ACP countries including Cook Islands, Federated States of Micronesia, Marshall Islands, Nauru, Niue and Palau were requested to fully consider their national priorities in order to join the Project
22. The Financing Proposal for the 6 new ACP countries should be submitted as soon as possible. It was agreed that the current Financing Proposal should be used as the basis for development.
23. The importance of partnerships within countries was stressed as critical to support SOPAC in the advocacy of the SOPAC Project. Translation of Project documents and identification of tangible benefits in participating countries could enhance this process and encourage ownership of the Project.
24. To provide focal points with background support for advocacy for the Project, a Frequently Asked Questions (FAQ) briefing paper, advocacy brochure and posters were suggested.
25. The meeting agreed that the annual review and monitoring of the SOPAC Project should be incorporated into the Annual Session of Governing Council. High-level attendance from the EU in Brussels could be possible.
26. To continue moving the SOPAC Project forward in lieu of the Project Team in place, responsibility for implementation will rest with the Executive Management Team and professional assistance as required.
27. Revision of the overall Project workplan must include decisions made during this meeting. A detailed workplan and budget for 2003 must be submitted to the RAO and EU early in 2003.
28. All correspondence relating to the Project will be circulated to both the EDF 8 and EDF 9 ACP countries.
29. SOPAC sought guidance from the Workshop as to prioritising proposed national consultative workshops.
30. Solomon Islands indicated their immediate readiness to participate; the existence of a WSSD consultative committee was suggested as the basis for a national consultative workshop in November 2002.
31. Samoa indicated that they would be ready to initiate in-country consultations in February 2003.
32. Fiji indicated their willingness to participate and their availability to initiate consultations in November 2002. It was suggested that Fiji might be a useful pilot exercise for this consultative process.
33. Vanuatu stated their immediate readiness to be involved. It was suggested that Vanuatu might be an ideal pilot project for the proposed GIS Centre.
34. Tuvalu also indicated due to commitments they would be ready to commence in-country consultations in February 2003.

35. Kiribati, Papua New Guinea and Tonga are still required to indicate their readiness to initiate national consultations.
36. SOPAC indicated they would initiate discussions with Fiji, Solomon Islands and Vanuatu to begin identified consultative workshops and pilot project.

For complete details of each country's priorities as presented to the meeting please refer to the Country Summary Papers in appendices.

4 Appendix

4.1 PARTICIPANTS LIST

SOPAC/EU Project: Reducing Vulnerability of Pacific ACP States Project Inception, Regional Consultation Meeting, 8-9 October, 2002, Tanoa Hotel, Nadi, Fiji

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4.2 COUNTRY SUBMISSIONS

4.2.1 Fiji

Brief Country Report and Update on Current and Planned/Related In-Country Projects and Priorities: Fiji

Presented by Mr Bhaskar Rao, Director of Mineral Development, Mineral Resources Department, National Representative of Fiji to SOPAC

Capacity development, timely access to reliable information on hazards occurrence, mitigation measures, resource availability and mechanisms, policies and legislation to sustainably manage these are key areas being addressed by this project and therefore are specifically relevant to Fiji. Much of Fiji's recent preoccupation has been on good governance and management issues relating to Minerals, Water, Agriculture and development in general.

Recently we have seen:

- Completion of significant projects such as the IDNDR, Pacific Cities that relate to Tsunami and Earthquake risk to Suva. These have added much to our knowledge of hazards but to Fiji these are as yet incomplete in terms of implementation of strategies and recommendations. In many ways this was a pilot project.
- A revolution in terms of ICT yet information critical nationally to management decisions is still effectively siloed in various agencies and departments – there is difficulty in terms of access and reliability of much of this information. In terms of resource information much data is old and possibly obsolete.
- Aid inputs in development of major road/bridge and water supply infrastructure (ADB)
- Fiji has seen a major loss in terms of technical capability and in-house capacity, the reasons being too obvious to mention
- Effective decisions and steps have been made to strengthen the office of the NDMO, but much remains to Operationalise the Disaster Management Act and move on into the more practical matters such as educating public,
- Increased development of the near and offshore and interest in resource exploitation offshore areas
- Recognition internally of the need to conserve and manage in a more coordinated manner our water resources, both surface and groundwater.
- Premature closure of the Institutional Strengthening projects not just in MRD but many other national departments.

DEVELOPMENTS & PRIORITY AREAS

Aggregates:

The use of marine aggregates in the construction industry is perhaps not a major issue as much as in the non-volcanic low-lying countries. It may however become a growing trend. Of much greater concern is the lack of adequate information (volume, quality, access) with regard to on-land aggregate sources. Because of this and of a lack of environment guidelines and control that the easier step to remove aggregates from beaches, rivers are taken with consequent deleterious effect. A result of poor quality aggregate is recognised in the poor roads. Assistance in simple and effective assessment methodologies for quantifying size and quality of resource is a welcome area of intervention.

Suva is a major developed area and in its coastal areas there is active mining of coral sand for cement aggregate and the only local quarry is now well within a large and growing residential area.

Possible projects include geological mapping and drilling of selected localities and testing of aggregates in areas of development (Suva-Nausori, Lautoka-Nadi). Development of capacity building with regard to assessment and estimation of aggregates. Such quarries could be money-spinners for landowners and economically more sustainable.

Hazards:

With increased growth in the urban centres i.e. Suva, Nadi and Lautoka, and the coastal areas of particularly Viti Levu with regard to tourism infrastructure - there is then an increase in the vulnerability with regard to effects from geological hazards. Fiji is currently in the process with JICA assistance of establishing a VSAT (satellite based) seismograph network and also with their assistance (MMAJ) presently undertaking a baseline geochemical and environmental survey in the watersheds including the area between Sigatoka and Rewa Rivers. This would be GIS based and hopefully is a pilot project to expand to include whole of Viti Levu at a later date.

Within the coastal arena there is a concentration of settlements and tourist/other infrastructure along this zone. A particular area is that from Rewa-Nausori to Lautoka and including the Coral Coast where much of the Viti Levu population and tourism infrastructure resides. An integrated study of this area is warranted to provide technical data that can be utilised to carry out EIA's for planned infrastructure, or vet EIA's.

The obvious choice is to expand on the Suva Pilot Project from where it has been left. These include the IDNDR and Pacific Cities Projects that need to be rolled out to include the Nausori – Suva – Lami development corridor and moved into an implementation phase. This includes development of management and evacuation plans for preparedness/mitigation.

The current proposed SOPAC-MRD project to swath map parts of the western and Coral coast to be expanded to cover offshore-near shore and coastal areas and extend from Rewa to Lautoka via the Coral Coast as part of a ICM program (bathymetry, remote sensing, coastal mapping) – will assist in assessment of coastal problems and a basis for evaluation of EIA's, impact of tourism infrastructure etc and lead to a pilot project on coastal zone management for Fiji.

Water:

Government is finally getting committed to the idea that a water resources management strategy backed up by comprehensive overarching legislation to cover both groundwater and surface water resources. This has been the result of competing demands for water for commercial use. This follows ADB and ESACP funded initiatives earlier in August 2002. This is not a newly identified need having been first attempted in the 1980's under FAO and AusAID support.

Fiji has several island types and varies from big islands – Viti Levu, Vanua Levu to littler ones who have consequently different problems. The smaller islands often are all groundwater based and management of this resource; pollution (over abstraction and poor sanitation) and development are critical issues. The ecosystems are much more fragile.

Assistance is sought in the provision of support to the National Water Committee, and in developing water resource strategies, policies and legislation.

An integrated groundwater management system on a medium sized island i.e. Vanua Balavu or other to address issues of groundwater management (including aspects of abstraction rates, pollution, sanitation, equipment maintenance). This would serve as a pilot for others in the Lau and Yasawa and other smaller island groups.

Capacity Building and ICT:

Fiji like many other small countries is short of trained and skilled manpower and Capacity building is required as an essential component of each and every project. This is not via workshops but as willing staff on the actual projects, attachments and data processing.

IT, GIS development to an acceptable standard and the development of Internet and Intranet systems to disseminate information would lead to bettering of coordination and decision making. The current FLIS system needs to be expanded to incorporate other data. Data quality and access are issues that need to be addressed in Fiji.

The issue of an online database possibly held at SOPAC but mirrored say at MRD or other agencies is important.

4.2.2 Samoa

Brief Country Report and Update on Current and Planned/Related In-Country Projects and Priorities: Samoa

Presented by Mr Faatoia Malele, Assistant Director, Meteorology (Apia Observatory), Meteorology Division, Samoa

Country reports are to focus on recent, current and proposed related in-country projects as well provide an update of national priority issues in the project target sectors of (i) aggregates for construction, (ii) hazard mitigation and risk assessment and (iii) water and sanitation. As well, countries are to indicate implementation priorities in order to meet the identified issues:

On going related country projects:

1. The World Bank funded Asset Management Project has as one of its main components that of Coastal Infrastructure Management which to date has produced the following deliverables.
 - Coastal hazard mapping for Samoa. The study considers a planning period of 100 years for 3 main hazards in the event of coastal impact from cyclonic events of Class 5, coastal erosion, land slips and flooding. The whole of Samoa has been mapped using GIS. In addition a Coastal Hazard database had been set up which collected all anecdotal and technical data from interviews conducted with the community and from research materials.
 - Coastal Infrastructure Management Strategy. This is a national strategic plan endorsed by Cabinet for the management of coastal infrastructure and assets. It provides principles and policy directions recognizing an ethic of partnership between government, its stakeholders and community in its implementation.
 - Coastal infrastructure management (CIM) plans. CIM plans for 15 districts have been prepared and distributed to the districts. The Plan discusses solutions for the management of assets including environmental resources, ranging from hard options like seawalls to soft options which considers re-vegetation or ‘do nothing’
 - Economic Analysis report providing cost implications of possible solutions discussed in the CIM plans
 - Codes of Environmental practice which recognizes environmental aspects for construction. The application of the codes will facilitate environmental impact assessment
 - Establishment of MapInfo based GIS primarily to support coastal infrastructure management and cover other GIS needs of the government for activities under the mandate of the Department of Lands & Environment. This is also an opportunity to establish a land information system.
 - Institutional strengthening of the Department of Lands and Environment. Under the proposed restructure of the public sector, the intention is to add to the current mandate of the DLSE by it assuming responsibilities for Meteorological services, watershed management and urban management and planning.

The above activities have been completed under Phase I of the whole IAM project. Scoping of Phase will end in December 2002. Scoping work requires a national review of risk management and disaster preparedness with regard to hazards and climate change adaptation for key economic sectors including economic infrastructure. SOPAC and SPREP have been requested to be part of the review

team; the review findings will be discussed in a workshop proposed for February and the resultant recommendations will provide the direction for Phase II of the IAMP project with regards to disaster management and risk assessment. It is also the desire that the work of CHARM be integrated into the review.

2. Rural Water Supply Project – European Union

The project which has begun and funded under the 8th EDF aims at upgrading systems in the rural areas (boreholes, pumps, storage tanks, meter installation). The project will cover 30% of the total population in areas that are prone to drought. Meter installation was separately funded by the German government and aims to promote conservation of water. SOPAC has provided advice and comments on the Terms of Reference of the project. It has also provided analysis of freshwater lenses, salinity studies and borehole drilling; carried out aquifer feasibility studies as well as incountry training.

Under the 9th EDF, water and a sewerage reticulation system for Apia have again been identified as the key sectors for development and have had 88% of the resources earmarked for these purposes. The Proposed project includes the development of a Master Plan.

3. Institutional Strengthening of the Samoa Water Authority – AusAID

The project which is half way through its duration aims at capacity building within the Authority through improved financial systems, including the setting of tariffs, asset management, human resource capacity building and the development of information systems through ICT. The project is intended to enhance the role of the Authority in the management of large scale projects such as those funded by the EU.

Under the asset management component of the Institutional Strengthening project, software has been developed such as Pipeline 2000 in order to capture pipeline distribution in Apia and surrounding areas.

PROPOSED PRIORITIES WITH REGARD TO THE IDENTIFIED SECTORS UNDER THE VULNERABILITY PROJECT

Aggregates:

- Identification of aggregate resources for the two main islands is an immediate priority. The need for sand for construction purposes is a priority hence the immediate need for a sand budget study which would look at various sand grain size, availability, replenishment, potential sites for mining and procedures for sustainable development. Reports and digitized GIS data from aggregate studies would be useful for a sand budget study.
- Bathymetric mapping

Water supply and sanitation

- Mapping of watershed areas which would be crucial in the development of appropriate management plans and will also be a critical layer of information for GIS.
- Technical and advisory services

Hazard management and risk assessment:

- In-country GIS training

- Training on remote sensing – introductory workshop is requested which would consider an image processing system suitable for Samoa in terms of use, software compatibility and general system management
- Micro seismic studies
- Development of legislation on disaster
- Continuation of Pacific Cities project

4.2.3 Tonga

Brief Country Report and Update on Current and Planned/Related In-Country Projects and Priorities: Kingdom of Tonga

Presented by Tevita Malolo, Secretary & Surveyor General, Ministry of Lands, Survey and Natural Resources and the National Representative of Tonga to SOPAC

at the SOPAC/EU Project: Reducing Vulnerability of Pacific ACP States Project Inception Regional Consultation Meeting, from 8th –9th October 2002 at Tanoa International Hotel, Nadi, Fiji Islands

1. The Kingdom of Tonga is grateful for being considered one of the recipient countries of the SOPAC/EU Funded Project. I wish to take this opportunity to congratulate SOPAC for its successful project achievement to date. Tonga pledges to cooperate in all operational matters during the implementation of this very important project.

2. Recent, current and proposed related in-country projects are as follows:

(i) Cyclone Emergency and Risk Management Project (CERMP):

This comprehensive project is funded by Tonga Government loan from the World Bank. The implementing agencies are the Ministry of Finance, Ministry of Works and Ministry of Lands, Survey and Natural Resources (MLSNR). The Project Component B is for the “Emergency and Risk Management Capacity Building” with a total allocation of US\$1.8 million which is 29% of the project cost. Sub-Component B 2 of this project, with a financial allocation of US\$0.8 million, will deal specifically with capability development of the MLSNR. This would entail the *“establishment of updated high-resolution land and geographical information system for support of risk management and for may sectoral applications, including: (i) aerial photography and mapping of all main island groups; (ii) establishment of geographical information system for national use; and (iii) development and implementation of a national risk management strategy for national hazards and climate change effects”*, within the umbrella of the MLSNR.

(ii) Seismic Network Project:

This project, funded by JICA, is to monitor seismic activities in the Tonga Region. A telemetric seismic network consisting of 5 stations will be established in Tongatapu, Ha’apai, Vava’u, Niuaotupapu and Niuafo’ou Districts. This will assist Tonga in proper planning and management of earthquake hazards in the Kingdom. The MLSNR is the implementing agency.

(iii) International Water Project:

This is a GEF funded regional project. SPREP is the implementing agency through the Department of Environment (DOE), Tonga. A Project Management Unit has been established in the DOE to coordinate the project implementation.

(iv) Climate Change (National Enabling Activities):

Funded by the UN, this long delayed project is implemented by nation experts on contract basis under the control of a Project Management Unit established within the DOE.

(v) Pacific Islands Renewable Energy Project (PIREP):

This project is funded by GEF through SPREP as the implementing agency. A project team has been established in the Energy Planning Unit of the MLSNR as the national coordinator for the project.

(vi) Rainwater Harvesting Project:

Currently funded by the Government of Canada, the project is implemented through the control and coordination of the Tonga Trust, a non-government organization in Tonga.

3. Current national priority issues and implementation priorities in the Project target sectors:

Project Target Sectors	National Priority Issues	Priority Actions/Solution
Aggregate for Construction	<ul style="list-style-type: none"> ▪ Beach and Inland sand mining/quarrying (tax/town allotments) ▪ Coastal Erosion 	<ul style="list-style-type: none"> ▪ Baseline data collection, beach profiling and database establishment ▪ Draft legislation and regulations for monitoring and enforcement ▪ Bathymetric mapping of coastal zone ▪ Capacity building
Hazard Mitigation/ Risk Assessment	<ul style="list-style-type: none"> ▪ Cyclones, earthquake, tsunamis and volcanic activities ▪ Drought, flooding, storm surge, coastal erosion 	<ul style="list-style-type: none"> ▪ Coastal base line studies ▪ Capacity/Capability Building (GPS, GIS and Remote sensing) ▪ Development and implementation of a national risk management strategy ▪ Mapping of most vulnerable and low-lying areas
Water and Sanitation	<ul style="list-style-type: none"> ▪ Groundwater Shortage ▪ Pollution of water resources and supplies. ▪ Seawater intrusion ▪ Drought 	<ul style="list-style-type: none"> ▪ Ground resources/aquifers assessment (Quantity and quality) ▪ Draft Legislation and Regulation for proper management of ground water resources ▪ Rainwater harvesting ▪ Freshwater Conservation ▪ Capacity building

4. Tonga recognizes with appreciation the commitment proposed as EU grant for implementation of this project and also its minimal share on the cutting of this financial regional “cake”. Tonga has also noted the ultimate goal of this project and, the necessity for this project to be implemented in such a way to achieve its anticipated project outputs. Further, Tonga has also noted, with regret, the amount of overlapping that this project may inflict on the outputs of its national in-country project, CERMP. In view of this unforeseen circumstance, I request that SOPAC (as the implementing agency) and Forum Secretariat (as the authorizing agency) consider our humble plea by allowing Tonga (through MLSNR) to use its financial share on this EU funded project for implementing of in-country related activities to be determined later at the national project consultation in Nuku’alofa.
5. Thank you in advance for your assistance and committed support.

4.2.4 Tuvalu

Brief Country Report and Update on Current and Planned/Related In-Country Projects and Priorities: Tuvalu

Presented by Mr Fano Patolo, Director, Lands and Survey, Ministry of Natural Resources, Tuvalu

Country Summary of Implementation Priorities

SOPAC/EU Project

Reducing Vulnerability of Pacific ACP States

Nadi, Fiji Islands 8 - 9 October 2002

1. Introduction

Tuvalu supports the proposed EU Project: Reducing Vulnerability of Pacific ACP States through Island Systems Management and SOPAC as the implementation agent to assist developing island member countries achieve sustainable development by addressing their resource needs, and improving security of access to livelihood opportunities.

The three sectors proposed for the EU Project are priority areas for Tuvalu, namely: Aggregates for construction, Hazard mitigation and risk assessment, and Water and Sanitation.

Training both in-country and SOPAC must be an integral part of the EU project as there are few technical people in Government service. Project results can then be promulgated throughout the islands to increase public awareness of coastal processes and their effect on the environment, and of the need to conserve freshwater stocks.

2. Major Issues

Aggregates for construction:

Construction materials are essential but the problem is where to source them. Aggregates will always be needed for housing as concrete is the preferred local building material. Beach mining has seriously damaged the coastline and presents environmental conflicts as does dredging from the lagoon. Beach mining is no longer an option for major construction works, a lesson learnt from laying of the present runway when a protecting hurricane beach was removed to provide building materials. Damage is still being caused as a result.

The new road construction used imported materials, which is more expensive. There will be an event greater demand for fill and aggregate for the new hospital (under construction), a new runway and a new wharf.

Proper feasibility studies and EIA statements, followed by close monitoring, are needed.

Hazard mitigation and risk assessment

Disaster preparedness and training on the application of CHARM (Comprehensive Hazard and Risk Management) is essential for Tuvalu. The main disasters that Tuvalu can expect are tropical cyclones, drought, groundwater pollution, coastal erosion, and (rarely) tsunamis.

Disaster management is therefore a major priority and community awareness training is absolutely necessary.

Desalination plants were brought in during the 1999 drought but are very expensive to operate and maintain. During periods of drought outside assistance will still be needed. Alternative options need to be pursued such as water collection, sources of renewable energy (solar power, biomass, hydrogen) also need to be investigated.

The outer islands of Tuvalu have a choice of using either diesel or solar for lighting. Future plans are to transfer entirely to solar power. There are needs to investigate other sources of renewable energy such as wind power and wave energy, and crude oil from copra.

Water and Sanitation:

Water is a major priority; without water there is no life. The main source is rainwater collection s the freshwater lens has been almost totally polluted.

Assistance that SOPAC can provide include advice on:

- Methods of ensuring a more reliable water supply, particularly in times of drought
- How much water can safely be withdrawn without damage to the freshwater lens
- Rainwater collection off the airport runway, storage and treatment for second class uses
- Potential underground water reservoirs
- Building code so that new houses have minimum and proper facilities for rainwater storage and sanitation facilities
- Feasibility study on the incursion of saline water into the pulaka pits caused by natural ground holes.

3. Implementation Priorities

To address issues identified in the key sectoral areas(Aggregate and construction, Hazard mitigation and risk assessment and water sanitation), Tuvalu proposed the following projects in the order of priority.

1. GIS and Remote sensing development
2. GIS / RS Workshop
3. Marine Surveys – Aggregates, Coastal erosion and lagoon resources.
4. Coordination of Marine Scientific Research and retrieval of offshore data.
5. Professional development and skills training for key personnel (DMU)
6. Ocean wave energy potential assessment.
7. Advise and support on issues relating to UNCLOS.
8. Feasibility study on the incursion of Saline water into Pulaka pit caused by natural ground holes.
9. EIA and monitoring of the reef channel project.
10. Tuvalu private home evaluation survey.
11. Water and Sanitation Projects – Various (to be identified)

Since the project had been dragging for sometime, Tuvalu anticipates its implementation as soon as possible thereby expecting positive results along the line.

4.2.5 Vanuatu

Brief Country Report and Update on Current and Planned/Related In-Country Projects and Priorities: Vanuatu

Presented by Mr Michael Bakeoliu, Director General, Ministry of Lands and Natural Resources, National Representative of Vanuatu to SOPAC

SOPAC / EU PROJECT – REDUCING VULNERABILITY IN PACIFIC ACP STATES:
VANUATU

Addressing vulnerability reduction through the development of an integrated planning and management system.

Key Focal Area 1: Hazard Mitigation and Risk Management

Issue: 1 Volcanic Emergency Plan. The project to assist with the development of emergency plans in islands with active volcanoes in particular Gaua, Ambae, Ambrym and Tanna. A socio-economic study on volcanic hazard impact assessment had been completed for each islands, and we would be most grateful if this work could be extended to the development of emergency plans that may lead to the potential reduction of economic and human loss.

Project proposals have been developed in trying to secure funding. However, to date no donor has been identified. We, therefore, would be grateful to see how this EU project could be utilised to look at ways of implementing the proposed emergency plans.

Key Focal Area 2: Aggregates for Construction

Issue: 1 Sand budgeting assessment study. The area which we want to study to focus on is at Mele / Blacksands area, an area where sand is heavily mined to be utilised for building infrastructure. This has resulted in the removal of sand below the mean average water level resulting in the change of coastline i.e. sea moving inland.

A ban on the removal of sand is currently on and this was issued purposely to stop further degradation of the environment and to allow for the natural recovery of sand deposition. The study request will help us understand the sand budget process, what is involved, how it evolved; this will be used as a tool to raise awareness among stakeholders / authorities so as to better manage sand resource extraction. This will also provide advice on the best practices, sustainable limit of extraction and possibly advice on alternative options / resources.

Key Focal Area: 3 Water Resources, Supply and Sanitation

Issue: 1 The development of a National Water Supply Strategic Plan. The assistance requested basically is to boost capacity building within the responsible authorities in the development of this proposed plan. We would be interested particularly in water resources inventory, types of water sources available taking into account the already available data and information such as geological maps, rainfall data, rural water supply data etc. The plan will assist strategically develop water supply systems throughout the islands to ensure people have access to safe water supply at all times.

Issue: 2 Increase rural water supply systems coverage. Rural Water Supply section with the department of geology, mines and water resources also has a database of all water supply systems in the country, and categorised them into 3 categories. Category 1 – meaning the rural supply systems that are fully functional and in an excellent state. Category 2 – being for rural supply systems that required minor repair and maintenance and category 3 - referring to rural water supply systems that have totally broken down and not providing water at all. The overall objective of this section is to increase the coverage of rural water supply by 80% in the year 2005. It is therefore our wish if the project could assist in looking at assisting this section in maintaining / repairing category 2 water supply systems and bring them up to category 1. The assistance provided will surely increase the water coverage to disadvantaged rural communities.

Issue: 3 Establishment of an ICT, GIS, and RS unit. In concluding we would very much like to request that the secretariat assist in the setting up of an ICT, GIS and RS unit that will be responsible for dealing with ICT, GIS and RS issues. The proposed unit will be responsible for collecting, collating existing information / data we have in country particularly in the areas of forestry, agriculture, water supply, geology, etc.; storing them in databanks and representing these information in thematic maps that could be used in daily activities as planning tools for the proper development of our resources and infrastructures.

It is hoped to use the LUPO (Land Use Planning Office) and the mapping unit of the Land Survey department to head and manage this unit on behalf of the government and its stakeholders. We believe the establishment of this unit is really a need and is timely that this EU project look at this request as this will be used as a meaningful way of putting information together in a way that will enable us to better plan, develop and manage our vulnerable resources in a sustainable manner and promote the notion of integrated planning and management system.