Terminal Evaluation Report

2018

Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) in Fiji

GEF Project ID: 00084289

UNDP PIMS ID: 5148

Country:	Fiji
Region:	Asia and the Pacific
GEF Replenishment Cycle:	GEF-5
Strategic Program:	ABS
Implementing Agency:	United Nations Development Programme (UNDP)
Executing Agency:	Ministry of Environment

Prepared by:

Veikila C. Vuki

Terminal Evaluation Opening Page:

PROJECT DETAILS

Project Name:	**Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefits Sharing (ABS) in Fiji**
Project ID:	**GEF Project ID: 00084289 UNDP PIMS ID: 5148**
Country:	**Fiji**
Region:	**Asia and the Pacific**
GEF Focal Area:	**Biodiversity**
Funding Source:	**GEF Trust Fund**
GEF:5 Strategic Programs:	**ABS**
Implementing Agency:	**United Nations Development Programme**
Executing Agency:	**Ministry of Environment**
Other implementing partners:	**Institute of Applied Sciences, Ministry of I-Taukei Affairs**
Senior Beneficiary:	**Ministry of I-Taukei Affairs**

FINANCIALS

GEF Project Grant: USD $970,000

Co-financing Total: USD $2,712,779

Total Cost: USD $3,682,779

PROJECT TIMELINE

Preparation Grant Approval: 2nd October 2012

Concept Approval: 19th December 2012

Project Approval for Implementation: 19th April 2014

Start Date: 19th April 2014

Project Closed: 31st July 2018

TERMINAL EVALUATION DETAILS

TE Timeframe: April to July 2018

Evaluator: Veikila C. Vuki

Executive Summary

Project Information Table			
Project Title	**Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) in Fiji**		
UNDP Project ID (PIMS#:)	5148	PIF Approval Date	2nd October, 2012
GEF Project ID (PMIS#:)	00084289	CEO Endorsement Date	19th December, 2013
Award ID:	00070143	Project Document (ProDoc) Signature Date (date project began)	19th April, 2014 19th April, 2014
Country:	Fiji	Date project manager hired:	N/A
Region:	Asia and Pacific	Inception Workshop date:	3rd October, 2014
GEF 5: Strategic Programs	Biodiversity	Terminal Review date:	28th March-30thApril, 2018
Focal Area	ABS	Planned Closing date:	8th July, 2017
Trust Fund	GEF	If revised planned closing date:	31st July, 2018
Executing Agencies: Ministry of Environment			
Other Implementing Partners: Ministry of I-Taukei Affairs, Institute of Applied Sciences (University of the South Pacific)			

Project Financing	**@ CEO Endorsement (USD)**	**@ Terminal Review (USD)**
(1) GEF Financing:	$970,000	$970.000
(2) Government Contribution:	$60,000	$60,000
(3) University of the South Pacific:	$1,100,000	$1,100,000
(4) Georgia Tech	$1,231,779	$1,231.779
(5) University of California, San Diego	$321,000	$321,000
Total Project Costs (1 + 5)	$3,682,779	$3,682,779

Project Description

Fiji has a diverse ecosystem and significant areas of biodiversity. Fiji signed the Convention on Biological Diversity (CBD) in 1992 and ratified the Nagoya Protocol in 2011. Fiji also developed an ad-hoc ABS policy in 1997 and this was aligned with the CBD; and Fiji, therefore, fulfilled the CBD requirements. This ad-hoc policy has been used in the past to facilitate any access to Fiji's genetic resources for research and conservation purposes. Fiji also reviewed its NBSAP in 2010 and as a result, an ABS Guidance Framework was developed by the Minsitry of Environment. The ABS Guidance Framework has guided the ad-hoc administration of ABS to date.

The Ministry of Environment has an obligation under the UN CBD which Fiji ratified in 1992. The National Biodiversity Strategy and Action Plan (NBSAP) was developed in 1999, and was later endorsed in 2003. There was a revision of NBSAP in 2010 and the current NBSAP has a Guiding Principle on

ABS work. The NBSAP stated that "The intellectual property rights to biodiversity, genetic resources, bio-derivatives and knowledge about biodiversity be recognised and that appropriate mechanisms adopted to ensure, henceforth, fair remuneration, credit or other benefits are received by local communities, the discoverer or developer, and the nation."

The description of project collaborating partners are as follows: The Ministry of Environment is responsible for natural resource management and environmental protection in Fiji. The Ministry of I Taukei Affairs (MTA) has the mandate to protect indigeneous rights within Fiji. The Institute of Applied Science (IAS) at the University of the South Pacific (USP) has been leading research in investigating the uses of genetic resources in Fiji. It has been partnering with the International Cooperative Biodiversity Group (ICBG), an international group that consists of a number of tertiary, research, pharmaceutical and other industrial collaborators.

The project, ***"Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) in Fiji,"*** addresses the need to improve technological capacity at the national level during its four-year project implementation. It is the first national project to address the priorities for instituting relevant legislations, policies and institutional systems to assist with regulating the collection, storage, exchange, development and use of genetic resources to maximize benefits and opportunities for alternative livelihoods.

The main objective of the project is to discover nature-based products, build national capacities and facilitate technology transfer on mutually agreed terms. The project also encourages private sector engagement, investments, conservation and sustainable use of genetic resources. The main objective is to be achieved through discovering active compounds for pharmaceutical and agrochemical uses, operationalization of ABS Agreements and Benefit Sharing and increase national capacity to operationalize Nagoya Protocol Obligations. In essence, the project was to enhance ABS capacity in Fiji through a mix of bio-prospecting technical support through Outcome 1, the operationalization of the ABS agreements, policies and guidelines through Outcome 2 and the establishment of a national enabling environment for an institutional and governance framework through Outcome 3.

Summary of Conclusions

The Fiji ABS Project, ***"Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) in Fiji,"*** is funded through the Global Environment Facility (GEF) with an allocation of USD970000. The Fiji ABS Project is supported through an additional co-financing from Fiji government of USD60,000 and other co-financing of USD2,652,778 from various sources. Out of this co-financing, the University of the South Pacific contributed USD1,100,000, Georgia Tech contributed USD1,231,778 and University of California (San Diego) contributed USD321,000. The Fiji ABS Project has been implemented by the the Ministry of Environment, with support from UNDP Pacific Office, which is the implementing entity. The senior beneficiary is the Ministry of I-Taukei Affairs (MTA).

The project implementation responsibility is shared with three Responsible Parties: Institute of Applied Sciences of the University of the South Pacific for Outcome 1 and the Ministry of I-Taukei Affairs (MTA) and the Ministry of Environment for Outcomes 2 and 3. The day-to-day implementation of the projects is supported by a Project Assistant based at the Ministry of Environment.

The purpose of the Terminal Evaluation (TE) is the following: to identify potential project design problems, assess status of project progress towards the achievements of objective, identify and document lessons learned and make recommendations. The TE was to evaluate the following: project design and formulation, project implementation, project results, lessons learned and recommendations. Desk reviews of reports, interviews, and focus groups were methodologies used to conduct the evaluation.

The project design and approaches have responded well to government, donor and community needs. The project design has also considered the lack of previous scientific work on ABS in Fiji. The project design has been rated Satisfactory.

The project has made significant positive impacts and achievements in the outputs and activities. The capacity for ABS has been built in Fiji. Project results have been achieved within the budget and the project outputs and activities have been implemented with positive results although they have required technical expertise and partnerships outside of the country. The project has suffered from project delays because of the technical nature of the project. There has also been delays in recruitment and procurements.

The overall efficiency has been Satisfactory. There have been efficient achievements for the Outcomes despite the outputs requiring technical expertise, capacity building, procurement of equipment and consumables from outside of the country. This is particularly true for Outcome 1.

However, in terms of effectiveness, there have been delays in the implementation of outputs and activities under Outcomes 2 and 3. This has been rated as Moderately Satisfactory (MS). These delays in outputs of Outcomes 2 and 3 have been partly addressed by the interventions during the extension period for the Fiji ABS Project because of the recruitment of consultants. These consultants were hired to address some of these concerns and have also contributed to the outputs of Outcomes 2 and 3. The overall achievements of Outcomes 2 and 3 have been Moderately Satisfactory despite project delays.

Overall, the sustainability of the project has been rated Likely. The continuity of activities under Outcomes 1 looks promising. Capacity has increased in government and at the community level on ABS awareness and ABS policies and legislations have also been drafted. Overall, the project has a Satisfactory rating in terms of project design and overall project results. The rating has been Satisfactory in terms of project implementation and project results for Outcome 1. Overall, there have been positive achievements and impacts for Outcome 1 and its outputs.

A Moderately Satisfactory overall rating has been given to project implementation which has improved from the PIR ratings because of interventions during the extension of the project and the recruitment of consultants to address some of the implementation problems for the project and especially for Outcomes 2 and 3 and their outputs. For Outcomes 2 and 3, the ratings were also Moderately Satisfactory.

There have been problems with project implementation because the establishment of the Project Management Unit was not undertaken at the Ministry of Environment from the start of the Project. A combination of factors in the decision-making processes also caused delays in project implementations for Outcomes 2 and 3. Outcome 1 was undertaken well and capacities were built to undertake the ABS work in Fiji in the future with “state of the art” and well-equipped laboratories at the Institute of Applied Sciences at the University of the South Pacific.

The project has been effective in delivering Outcome 1. The activities for this Outcome has been funded with about 60% of project funding. In essence, the majority of funding for ABS work in Fiji funded Outcome 1. Project results for Outcome 1 included the discovery processes of active compounds for

pharmaceutical and agricultural purposes and these have been established for the nation at the Institute of Applied Sciences at the University of the South Pacific.

Furthermore, other project results from Outcome 1 have included scientific surveys and screening facilities for selecting and storing active compound. Capacities have also been built for taxonomic work for marine invertebrate and for analytical techniques, bioassays, data handling processes, marine sample collection and for storage of marine samples. Active compounds were purified and their structure determined using NMR techniques. Compounds were also tested using stringent scientific methods locally and overseas with partners. National capacities for scientific work have been built for students and researchers for Fiji and for the Pacific Region (namely Fiji and the Solomon Islands). The project results for Outcome 1 has, therefore, supported a Satisfactory rating in the overall outcome rating of project results.

However, early interventions could have been undertaken for the project management arrangements for the Ministry of Environment and the Ministry of I-Taukei Affairs who were responsible for these two Outcomes 2 and 3. The weakness in the decision-making process at the Ministry of Environment and the non-establishment of the Project Management Unit were also some of the key factors that caused the slow progress of outputs and activities for Outcomes 2 and 3. Some of the activities and outputs were undertaken during the project extension as interventions for the Fiji ABS Project.

In terms of replicability, the TE has found that the ABS scientific work has been established in Fiji through the Institute of Applied Sciences at the University of the South Pacific. The laboratory facilities and human resources training have been successful and worth noting. FPIC Processes and Permitting Processes have also been documented through consultations with the various government agencies and communities. During the extension period, interventions on draft policy and processes were documented.

Evaluation Rating Table

Evaluation Ratings:			
1. Monitoring and Evaluation	***Rating***	**2. IA& EA Execution**	***Rating***
M&E design at entry	Satisfactory (S)	Quality of UNDP Implementation	Satisfactory (S)
M&E Plan Implementation	Moderately Satisfactory (MS)	Quality of Execution - Executing Agency	Moderately Satisfactory (MS)
Overall quality of M&E	Moderately Satisfactory (MS)	Overall quality of Implementation / Execution	Moderately Satisfactory (MS)
3. Assessment of Outcomes	**Rating**	**4. Sustainability**	**Rating**
Relevance	Relevant	Financial resources:	Likely (L)
Effectiveness	Moderately Satisfactory (MS)	Socio-political:	Likely (L)
Efficiency	Satisfactory (S)	Institutional framework and governance:	Likely (L)
Overall Project Outcome Rating	Satisfactory (S)	Environmental:	Likely (L)
Impact	Significant (S)	Overall likelihood of sustainability:	Likely (L)

Recommendations

	Recommendation Table
1	Continue to Build National Collection for Extract Libraries & Microbial Strain Libraries
2	Continue building the National Database for Extracts & Microbial Strains
3	Continue building the National Database for Tracking Samples & Historical Collections and Sites Specific Samples
4	Continue building the National Sample Collections Database eg. Herbarium & Marine Invertebrate Collections
5	Continue national and international collaborations on Access Agreements to Database, Library of Extracts and Microbial Strain Library
6	A database is to be created on Natural Compound Extracts
7	The permitting process is to be streamlined and a clearing house created for different categories of permits

8	Further consultations on FPIC Process for legal drafting and for submission to Cabinet for approval
9	Legal Drafting of national ABS legislations and policies to be undertaken and submitted to Cabinet for approval
10	Further consultations on institutional stakeholder for ABS is to be undertaken
11	Further Analyses and Consultations and establishment of mechanisms for setting up the Trust Fund for ABS is to be undertaken
12	Further assessment and consultations on Fiji's National Competent Authority for National ABS is to be undertaken
13	Continue Commitment of Implementing Agency and Implementing Partners to ensure proactive responses to urgent interventions

Lessons Learned

	Lessons Learned Table
1	Every Project must have a Project Coordinator appointed
2	Significance of Establishing a PMU for the Project and dedicated Project Staff
3	International Partnerships with Universities has strengthened complex scientific work
4	Joint Missions to Communities for FPIC Process were Successful
5	Tour Visits to Laboratory Facilities and Workshops were Useful and Improve Knowledge
6	Memorandum of Agreement (MOA) for Budgets and Project Implementations of Project Activities should have been done after the Inception Workshop
7	Absence of MTE did not help the Project

Acronyms and Abbreviations

ABS Access and Benefit Sharing

ABWP Annual Budget and Work Plan

APR Annual Project Report

BPOA+10 Barbados Program of Action, 10-year review Meeting

CBD Convention on Biological Diversity

CO Country Office

DIM Direct Implementation

ICBG International Cooperative Biodiversity Group

IR Inception Report

MOE Ministry of Environment

MTA Ministry of i-Taukei Affairs

NBSAP National Biodiversity Strategy and Action Plan

NGO Non-Governmental Organization

NIH National Institutes of Health

NPC National Project Manager

NPD National Project Director

PA Protected area

PIR Project Implementation Review

PIU Project Implementation Unit

QOR Quarterly Operational Report

RCU Regional Coordination Unit

STRI Smithsonian Tropical Research Institute

ToR Terms of Reference

UNDP United Nations Development Programme

WSSD World Summit for Sustainable Development (2002)

Table of Contents

1. Introduction

1.1 Purpose of the Terminal Evaluation (TE)

The guidelines provided in the Terms of Reference (Annex 7) by the UNDP Pacific Office in February of 2018 guided the TE. The purpose of the TE was to assess the achievements of the project objectives, outcomes and outputs as specified in the Project Document. It assessed the effectiveness of project implementation, indicators and interventions of project's success or failure.

It also identified the necessary changes that were made in order to set the project on track to achieve its

intended results. It particularly addressed any divergence from the Project Document, and identified the reasons for such divergence and assessed interventions implemented to ensure the achievements of project objectives, outcomes and outputs. The TE also reviewed the project's strategy and its risks and sustainability, including the level of ownership and engagement from executing agencies and other stakeholders in delivering the project.

The specific objectives of the TE were (1) to assess the project results, with the following purposes:

- To provide financial accountability and transparency, and to highlight and assess project achievements;
- To provide an overall assessment of project results and in particular, the achievements of GEF strategic objectives;

and (2) to provide feedback on key lessons learned that can improve project sustainability benefits and also enhance UNDP's programs:

- To draw lessons that can enhance future project design and project implementation of UNDP-GEF financed projects;
- To provide feedback that can enhance project facilitation or achievements of project objectives and outputs.

1.2 Evaluation Scope and Methodology

The TE has assessed and reviewed the following: the extent to which the overall project design remains valid; the project's concept, strategy and approach. The effectiveness and the methodology of the overall project structure were also assessed. It also determined how effectively the project addressed responsibilities especially towards capacity building and challenges. The TE also assessed the extent to which project management has been effective, efficient and responsive.

The assessment of project performance was undertaken, based on expected results set out in the Project Logical Framework/Results Framework. These provided performance and impact indicators for project implementation and project results along with their means of verification. The evaluation questionnaires and focus groups discussions, project reports and interviews provided additional means of verifications. The questionnaire and focus group results also validate the Project Logical Framework and Results Framework. For cross-checking validity of information, links were established between evaluation questions and evidence from multiple sources of information.

The TE's signing of the contract between the consultant and the UNDP Pacific Office in Suva, Fiji was undertaken on the 6th of March 2018. The TE commenced on the 28th of March 2018 and was completed by the 27th of April 2018. The field mission to Fiji to review the Project was undertaken from the 10th of April to the 20th of April (see Annex 5: Mission Itinerary). The work plan was submitted as part of the Inception Report for the TE.

A presentation of the summary of the findings and ratings of project deliverables were also presented in Fiji to Project stakeholders and to the implementing partners just before the field mission to Fiji was completed to provide some feedback. A draft TE report was submitted to the Government of Fiji and to the UNDP Pacific Office on the 27th of April 2018 and the final TE report was submitted on the 17th of July 2018 for further comments. The final document will be submitted on the 16th of August 2018.

The TE process included a desktop review of a range of documents, including the Project Document, Government of Fiji documents and other relevant Fiji ABS Project reports (Narrative reports, Quarterly reports, field mission reports, 2016 PIR report, 2017 PIR report, consultant reports, etc.) and other relevant documents.

The field mission to Fiji took place between the 10th of April to the 20th April 2018. The field mission included meeting consultations with senior staff, laboratory staff, administration officer and financial officer and database staff of the Institute of Applied Sciences (University of the South Pacific). The consultant conducted focus group consultations and interviews with the group and also observed laboratory equipment and facilities for the Fiji ABS Project.

The methodology included key informant interviews with a range of stakeholders. These included the

UNDP staff, Department of Fisheries staff, Ministry of Environment staff, IAS staff and Ministry of I-Taukei staff. The Focus Group (FG) sessions were undertaken with the major stakeholders as a way to obtain their views on a wide range of relevant factors, including their level of understanding on Fiji ABS Project design and other project concepts.

The information from these consultations provided a useful overview of the participants' perspectives on project design and project implementation, as well as indications into operations, policies and procedures and of results accomplished and lessons learned. The interview checklist/questionnaires developed to guide this approach and a Schedule of people interviewed are presented in the Annexes.

The 3-phase methodology was developed for the TE and was applied throughout the TE are as follows:

Phase 1: Work plan development, information and data gathering, review of documents, document preparation and logistical arrangements.

This first phase was undertaken in Suva and it included the acquisition of project inception reports, UNDP and GEF project documentation, annual and mid-year reports, budgets, work plans and other associated project documentation. These materials were assessed and analyzed to help the consultant develop an understanding of the key aspects of the project, including its scope, its intended purpose, its intended and unintended operational and implementation modalities, and the resulting project outputs and outcomes.

Face-to-face meetings were also undertaken with the UNDP Pacific Office Project management staff in Suva and Skype meetings was held with the UNDP Regional Technical Advisor in Bangkok to discuss the Fiji ABS project and the TE mission.

Phase 2: Field Mission to Fiji, assessments of activities' performances and interviews

The Director of IAS, IAS staff in Suva, and the consultants for the Fiji ABS were interviewed face to face. They provided their views on the Fiji ABS project design, implementation and results. These discussions provided insights and perspectives on the Fiji ABS project design, management & implementation and project results.

During the field mission, formal and informal consultations were undertaken with the stakeholders. This generally comprised of initial, informal discussions on the Fiji ABS Project and the TE objectives, general project results and issues, followed by a questionnaire where appropriate. Topics and levels of detail covered varied according to the informants' roles in the Project. For example, Heads of Government Departments were interviewed more on the general level of support from the executing agencies and general outcomes within their Departments, the Project performances, and wider governance issues.

Those who were actively involved in the Project implementations were questioned more on technical details, training needs and effectiveness of Project activities. Social and other consequences of the Fiji ABS project such as gender issues; equity and policies were discussed with heads of sections in government and some non-government organizations

Detailed interviews and discussions were held with the main agencies and implementing partners (Ministry of Environment, Ministry of I-Taukei Affairs, Institute of Applied Sciences (University of the South Pacific, consultants) regarding Project details, deliverables, management, administration, communications and coordination, and financial effectiveness and accountability. Informants from organizations responsible for specific components (IAS senior staff, IAS laboratory staff, DoE staff, Ministry of I-Taukei staff) were interviewed on the progress and outcomes, and issues in their areas of responsibility.

The TE findings were presented to some of the Fiji ABS Project stakeholders and the three implementing partners on the 19th of April 2018. The consultant presented the findings, ratings on Outcomes and Outputs. Issues raised in the report were also highlighted during the meeting and activities flagged were also presented to the meetings for their feedback.

Phase 3: Report Finalization and Submission

The draft report was submitted on the 27th of April 2018 and feedback and comments from relevant stakeholders in Fiji and UNDP Pacific Office in Suva and UNDP's Regional office in Bangkok was incorporated before the 10th of May 2018. The final TE report was submitted to the UNDP Pacific Office on the 17th of July 2018, allowing time for stakeholders to further review and give additional comments

to be assessed and incorporated where needed. The final report was submitted on the 19th of October 2018.

1.3 Structure of the Evaluation Report

The guidelines for the reporting requirements of the evaluation are included in the Term of Reference (TOR) for the **Fiji ABS Project** (Annex 7). The TE report began with an **Introduction** and this includes the purpose of the evaluation, evaluation scope and methodology and structure of the evaluation report. In addition, the ethics, audit trail, limitations and evaluation ratings are also part of the **Introduction**.

The next section included the **Project Description**. This section focused on project duration, project objectives, main stakeholders, baseline indicators and expected results. The **Findings** section of the report is divided into the following:

- Project Formulation
- Project Implementation
- Project Results

The **Project formulation** section of the main findings discussed the clarity of project's objectives and components. It also highlighted and assessed the design of the project outcomes and whether the SMART (Specific, Measureable, Achievable, Relevant and Time-bound) criteria was used in the design. Further, this section also assessed whether the partnerships arrangements were clearly identified before project approval. It also assessed the approach used in the design and whether the selected intervention strategy addressed the root causes and principal threats in the project area. An assessment of how assumptions and risks remained valid in the project development phase was also undertaken.

The section of the report on the **Project Implementation** findings also assessed how the logical results framework was considered as an important M & E tool during the lifetime of the project. An assessment of whether the project partnerships and project involvement of stakeholders have been effective, efficient and responsive was also undertaken. It also specifically addressed the clarity of roles and responsibilities of the various arrangements for project implementation, and whether the level of coordination between relevant players (including the role by DOE as Implementing Agency, partnerships role of the University

of the South Pacific and the Ministry of I-Taukei Affairs). The quality of project execution by agencies was also rated in the project implementation section.

Project finances was assessed by examining the variances between planned and actual expenditure. The cost-effectiveness of the project was evaluated and this was undertaken by assessing the management of project funds. The differences between expected and actual co-financing was also determined. The co-financing was further assessed to find out whether it affected the outcomes of the project. The financial reporting requirements and compliance was also reviewed.

The section of the report on the **Project Results** findings assessed the relevance, efficiency, sustainability and impact of project results. This section of the report also highlights project key performances. The project results were supported by evidence-based results and these have influenced project performance evaluation ratings.

Further, the evaluation has also rated outcomes according to relevance, effectiveness and efficiency. The report also includes an evaluation of country ownership, mainstreaming, sustainability (this is also rated) and impact.

Finally, the report presents recommendations on future project benefits. The report concludes with lessons learned from the ABS project to be considered for GEF financed and UNDP project interventions.

1.4 Ethics

The TE was undertaken in accordance with the UNEG Ethical Guidelines for Evaluators and the consultant has signed the Evaluation Consultant Code of Conduct Agreement form (Annex 8). Specifically, the consultant has made sure that there is confidentiality of information from people who were interviewed for the Fiji ABS Project. Further, in accordance with the UN Declaration of Human Rights, the information from interviews have been presented to show respect to the people

who were interviewed without prejudice or malice.

1.5 Audit Trail

The audit trail was compiled by the consultant to document review comments to the draft report. This was undertaken to track comments from stakeholders as part of the evaluation process. It is presented as an annex separate from the TE report. The relevant comments have been included in the final version of the TE report.

1.6 Limitations

The evaluation was undertaken from March to July 2018. The evaluation included desk review, preparatory activities, field mission, presentation to stakeholders' meetings, production of a draft report and completion of the evaluation report; in accordance to the guidelines provided in the Terms of Reference (Annex 7).

A far as language is concerned, there was no limitations with respect to language. The project deliverables were produced in the English language. All progress reports and meetings minutes and technical reports were also presented in the English language. Some interviews were also undertaken in the Fijian language and the consultant was able to conduct those interviews in the Fijian language.

1.7 Evaluation Ratings

The evaluation findings were compared against the targets presented in the logical results framework, and was also analyzed against project development over the lifespan of the project.

A 6-point rating provided in the TOR was used: Highly Unsatisfactory (HU: severe problems); Unsatisfactory (U: major problems); Moderately Unsatisfactory (MU: significant shortcomings); Moderately Satisfactory (MS); Satisfactory (S: minor shortcomings) and Highly Satisfactory (HS: no shortcomings). Additional ratings where relevant were Not Applicable (N/A) and Unable to Assess (U/A). An overall 6-point rating is also provided for the key components evaluated: project design, implementation, and results.

The 6-point-rating GEF scale has also been used to assess the Objective, Outcomes and Outputs. The

effectiveness and efficiency of project outcomes were also rated according to the 6-point GEF scale, ranging from Highly Satisfactory (no shortcomings) to Highly Unsatisfactory (severe shortcomings). Monitoring & evaluation and execution of the implementing and executing agencies were also rated according to this scale. Relevance was evaluated to be either relevant or not relevant.

Sustainability was rated according to a 4-point scale, ranging from Likely (negligible risks to sustainability and the likelihood of continued project benefits after the project ends) to Unlikely (severe risks that project outcomes will not be sustained after project ends). Impact was rated according to a 3-point scale, including significant, minimal and negligible. In addition, an analysis of the status of delivery is provided based on a review of indicators and targets.

Rating for Effectiveness, Efficiency, M & E, IA & EA Execution	**Sustainability Ratings**	**Relevance Ratings**

6. Highly Satisfactory (HS): no short-comings	4. Likely (L)	2. Relevant – R
	Negligible risks	
5. Satisfactory (S): minor short-comings	3. Moderately Likely (ML)	1. Not Relevant – NR
	Moderate risks	
4. Moderately Satisfactory (MS): moderate short-comings	2. Moderately Unlikely (MU)	**Impact Ratings**
	Significant risks	
		3. Significant (S)
3. Moderately Unsatisfactory (MU): significant short-comings	1. Unlikely (U)	
	severe risks	2. Minimal (M)
2. Unsatisfactory (U): major short-comings		1. Negligible (N)
1. Highly Unsatisfactory (HU): severe short-comings		
Additional ratings where relevant:		
Not Applicable (N/A)		
Unable to Assess (U/A)		
Source: Terms of Reference		

Table 1.1: Rating Scales (Source: Term of Reference, Fiji ABS Project)

2.0 Project Description and Development Context

Fiji has about 300 islands in which 100 are inhabited with a total land area of 18,376 square kilometres. Most of the islands are volcanic in origin. About 85% of the total area consists of the two main island of Viti Levu and Vanua Levu. Most of the islands are volcanic. The population of Fiji was 837,271 in 2008

and around 51% dwell in the ruban areas. The climate is tropical with high rainfall. In recent years, cyclones and flooding have been frequent events. Dorughts have been severe in some parts of Fiji especially in larger islands during May to October (dry season).

The Ministry of Environment is responsible for natural resource management and environmental protection in Fiji. The Ministry of I-Taukei Affairs (MTA) has the mandate to protect indigeneous rights within Fiji. The Institute of Applied Science (IAS) at the University of the South Pacific (USP) has been leading research in investigating the uses of genetic resources in Fiji. It has been partnering with the International Cooperative Biodiversity Group (ICBG), an international group that consists of a number of tertiary, research, pharmaceutical and other industrial collaborators.

Fiji signed the Convention on Biological Biodiversity (CBD) in 1992 and ratified the Nagoya Protocol in 2010. Fiji developed an ad-hoc ABS policy in 1997 which was aligned with the Convention on Biological Diversity. This ad-hoc policy has been used in the past to facilitate any access to Fiji's genetic resources for research and conservation purposes. Fiji reviewed its NBSAP 2010 and as a result, an ABS Guidance Framework was developed by the Ministry of Environment. The ABS Guidance Framework has guided the ad-hoc administration of ABS.

The Ministry of Environment has an obligation under the UN Convention of Biological Diversity ratified in 1992. The National Biodiversity Strategy and Action Plan (NBSAP) was developed in 1999 and was later endorsed in 2003. There was a revision of NBSAP in 2010 the current NBSAP has a Guiding Principle on ABS work. The NBSAP stated that "The intellectual property rights to biodiversity, genetic resources, bio-derivatives and knowledge about biodiversity be recognised and that appropriate mechanisms adopted to ensure, henceforth, fair remuneration, credit or other benefits are received by local communities, the discoverer or developer, and the nation."

The Sustainable Development Bill was drafted in 1997 had restrictions on bioprospecting activities. These restrictions were related to exploitation of biological resources for commercial purposes and research. A permitting process for biological-diversity prospecting in Art 249, included the requirement of public notification and export controls. The Bill stated clearly that prospecting is prohibited without

prior informed consent. Further, benefit-sharing is in Art 249(1)(c), which requires that "a fair return is provided for any commercial exploitation of Fiji's biological resources."

The Traditional Knowledge and Expressions of Culture Bill was drafted and finalized in 2013. The bill has a provision that a user can have an "authorised user agreement" from the cultural authority or from owners of the traditional knowledge. If there is an authorised user agreement between the prospective user and the traditional owners, then the the traditional owners have given their prior informed consent to the proposed use of the knowledge. This Bill was developed with regard to plant genetic resources and is relevant to ABS matters under the Nagoya Protocol.

This project has focused mainly on implementing three outcomes. The outcomes are as follows:
Outcome 1: Discovering active compounds for pharmaceutical and agrochemical uses from organisms within the ecosystems of Fiji;
Outcome 2: Operationalization of ABS Agreements and Benefit Sharing; and
Outcome 3: Increased national capacity to operationalize Nagoya Protocol obligations.
The Fiji ABS Project was therefore designed to discover nature-based products and build national capacities that facilitate technology transfer on mutually agreed terms, private sector engagement, and investments in the conservation and sustainable use of genetic resources.

The Fiji ABS Project commenced in 2014 and was implemented for over 3 years. A no-cost extension was granted until July 2018 to ensure that benefits were fully realised. Through the Global Environment Facility (GEF) a funding of USD$970,000 was made available for the project. The ABS Project is executed by the Ministry of Environment. Other agencies including the Ministry of I-Taukei Affairs and University of the South Pacific played key roles in executing the components of the project.

These priorities were addressed through the following interlinked Components to achieve its goals and objectives through three main Components:

Component 1 included activities for discovering active compounds for pharmaceutical and agro-chemical

uses. It generally involves scientific surveys to collect samples on biochemical from marine-based organisms from the coastal environment of Fiji. The activity on establishing a screening facility for selecting and storing active compounds at the national level was also undertaken. The installations of laboratory facilities to have analytical chemical techniques, disease bioassays, data handling and collection, culture and long term storage of samples were undertaken in research facilities in Fiji. Furthermore, 30 active compounds were to be identified, purified and structure elucidated. At the least, a lead compound was to be identified for commercial purposes. Component 1 of the project is executed through the Institute of Applied Sciences at the University of the South Pacific.

Component 2 included activities on Operationalization of ABS Agreement and Benefit Sharing. The ABS agreements, interim guidelines, negotiation procedures and legal/customary protocols were to be developed in accordance with the Nagoya Protocol and the Traditional Knowledge and Expressions of Culture Act in Component 2. In addition, benefit sharing mechanism for ABS should have been strengthened by the use of Trust Fund mechanisms such as those proposed and established for the FLMMA. Component 2 of the project is executed through the the Ministry of Environment and the Ministry of I-Taukei Affairs (MTA).

Component 3 included activities on increased national capacity to operationalize the Nagoya Protocol Obligations. Activities on national laws and implementation guidelines on ABS were to be developed for the nation. In addition, administrative systems, procedures for ABS agreement negotiations between government and relevant parties and institutions were to be strengthened. A monitoring and evaluation system were to be developed and generated to monitor applications of the laws, policies, guidelines and agreements. Further, training programs were to be developed on bio-discovery techniques in national laboratories. Awareness programs for national stakeholders on Nagoya Protocol obligations were activities that were to be undertaken in Fiji. Component 3 is executed through the Ministry of Environment and the Ministry of I-Taukei Affairs and relevant government agencies

2.1 Project Start and Duration

The key project dates are listed here.

PIF Approval	2 October 2012
PPG Approval Date	2 October 2012
CEO Approval of Medium-Size Project Date	19 December 2013
CEO Endorsement Date	19 December 2013
Project document Signature by Fiji Government	19 April 2014
GEF Agency Approval of MSP Date (Prodoc Signature by UNDP)	19 April 2014
Project Inception Workshop	3 October 2014
Terminal Evaluation	28 March - 30 April 2018
Project completion (planned)	8 July 2017
Project completion (extended)	31 July 2018

Table: 2.1 Key project dates for the Fiji ABS Project

The project concept paper (project identification form) was approved on the 2nd October 2012. On the same day, the GEF project preparation grant was endorsed and appropriated. The Project Document was endorsed by the GEF - CEO on the 19th of December 2013. The Fiji government agreed to the Project Document on the 19th of April 2014 and the UNDP signed the document on the 19th of April 2014.

The project began officially at the DOE on the 19th of April 2014 and the project inception workshop was held on the 3rd of October 2014. The planned project completion date was the 8th of July 2017 and this was later extended to the 31st of July 2018.

2.2 Problems that the project sought to address

The ABS Project in the Republic of Fiji was a 3-year initiative and was implemented by UNDP in partnership with the Ministry of Environment. Other partners were the Institute of Applied Sciences of the University of the South Pacific, the Ministry of I-Taukei Affairs and the Ministry of Fisheries.

The goal of the project is to discover active compounds for pharmaceutical and agro-chemical uses; and to operationalize agreements and benefit sharing. In essence, the purpose of the project is to increase the national capacities in national research and technical capacities to operationalize the Nagoya Protocol Obligations. In addition, the project is also to raise awareness among Fijian communities on the benefits of biodiversity areas and genetic resources. Therefore, the project's main approaches and strategies were to discover nature-based products, build national capacities and facilitate technology transfer on mutually agreed terms.

The project design identified three main barriers that have been preventing the maximization of benefits from genetic resources in Fiji. These three barriers were:

Barrier 1: Limited scientific research, technological and development capacity prevents national stakeholders from adding value to Fiji's genetic resources;
Barrier 2: Limited capacity to implement and operationalize ABS Agreements and Benefits Sharing mechanisms with communities, including insufficient human resource capacity and piecemeal operation of draft bio-prospecting policy and guidelines.
Barrier 3: Limited national capacity to institutionalize and operationalize the Nagoya Protocol and with this a lack of understanding of ABS and the link to biodiversity conservation.

2.3. Immediate and Development Objectives of the Project

The Fiji ABS Project has assisted in addressing barriers that have motivated increased investment in protecting biodiversity areas and the genetic resources they contain. This has been achieved by the following:

a) Investment in technology transfer to assist with bioprospecting and discovery of compounds for pharmaceutical and agro-chemical use;
b) Operationalization of ABS agreements related to fair and equitable access and mutually agreed terms;
c) Increase in national research and technical capacities and human resources dedicated to ABS management;
d) Raising awareness among Fijian communities of the benefits of biodiversity areas and genetic resources;
e) Increasing national capacities to institutionalize and operationalize the Nagoya Protocol on access and benefit sharing.

2.4 Baseline Indicators Established

Baseline indicators were as follows:

- Lack of political commitment to have an ABS policy in place

- Lack of local community interest in the conservation of biodiversity areas and involvement in ABS related research and development
- Problem of identification of invertebrate species for advanced drug discovery which requires recollection of invertebrate species as environment conditions can change their chemistry
- Threats to coral reef ecosystems can affect benefits of ABS policy and system
- Climate change threat can also affect long term conservation of coral reef ecosystems and ABS

2.5 Main Stakeholders

The main stakeholder involved in the project is the Ministry of Environment. Other stakeholders include the Institute of Applied Sciences of the University of the South Pacific and the Ministry of I-Taukei Affairs (MTA).

A list of project stakeholders and their roles and responsibilities are provided in Table: 2.2.

Stakeholder	Roles and Responsibilities

Ministry of Environment	Responsible for overall project management. Roles in community engagement, and technology transfer oversight. Coordinate ABS policy and institutional strengthening.
Fiji ABS Committee	Responsible for providing technical support and advice on conservation activities with linkages to ABS. Multi-stakeholder role and provides input into ABS policy development. Provide advice on Component 3 activities. Also provide overall policy guide on the implementations of Component 1 and 2.
National Environment Council	Responsible for environmental policy formulation and provision of direction with regards to national priorities. Oversee and endorse ABS policy and legislative framework before submission to Cabinet
International Cooperative Biodiversity Group	Role is to be a lead international partner and will coordinate input of other partners in assisting with technology transfer, collection & screening and compound identification.
Institute of Applied Sciences at the University of the South Pacific	Role is to assess the commercial potential of plant and marine organisms. The Institute of Applied Sciences (IAS) at the University of the South Pacific will guide technology transfer under Outcome 1. Responsible for advising resource owner communities on sampling, database samples and advice on ABS. Responsible for technology transfer at the national level.
Local communities	Primary local beneficiaries for the project. Role is to facilitate access agreement based on mutually agreed terms.
Fiji Intellectual Property Office	Role is to review proposed ABS policy or legislations.
Ministry of I Taukei	Role in protecting the customary roles of communities within Fiji, including traditional knowledge, roles in governance and the strong linkages between natural resources and community livelihoods. Responsible for ensuring intellectual property rights of indigenous communities is respected.
Pacific Heritage Hub	Role is a communications and information facility for cultural heritage. It will help Fiji stakeholders to link efforts with other Pacific Island Countries. Responsible in information dissemination of lessons learned from the ABS project.

Table 2.2: List of project main stakeholders and their roles and responsibilities

2.6 Expected Results

The goal of the project was to discover active compounds for pharmaceutical and agro-chemical uses; and to operationalize agreements and benefit sharing.

Further, the project objective was to discover nature-based products and build national capacities that facilitated technology transfer on mutually agreed terms; private sector engagement, and investments in the conservation and sustainable use of genetic resources.

The interventions to support the ABS Project in Fiji were as follows:

i) Strengthen the political commitment by raising awareness of the ABS project benefits to support conservation efforts locally, strengthen international cooperation and coordination, and contribute to global knowledge;
ii) Strengthen institutional and technical capacities to discover active compounds for pharmaceuticals and agrochemical uses from organisms collected within Fiji
iii) Increase institutional capacities, policies on operationalization of ABS agreements and benefit sharing
iv) Increase national and local capacities to implement the Nagoya Protocol obligations

3.0 Findings

This section assesses project formulation; project implementation; and project results in accordance with the Terminal Evaluation Terms of Reference (Annex 7) and related key questions as presented in the Evaluation Criteria (Annex 3). The assessments of the key evaluation components (project design and formulation; project implementation; and project results) are also presented here.

3.1 Project Formulation

This section assesses whether the overall project design has remained valid. The key evaluation criteria questions addressed the validity of project assumptions; whether the project responded to the needs of Fiji; and whether the project design is adequate and suitable. This section also includes an assessment of the current level of comprehension of the project concept.

3.1.1 Analysis of Project design and Logical Results Framework

The project focusing on the coral reef ecosystem in the project design is a good choice as most of the conservation work in Fiji has been focused on marine biodiversity conservation where there are less complex issues when compared to the terrestrial biodiversity conservation. Fiji is also one of the five outstanding coral eco-regions' hotspot in the world and this has been supported by this project because of its globally significant marine biodiversity. The marine biodiversity in Fiji has also national significant recognition for protected areas as part of Fiji's Locally Managed Marine Areas (FLMMA).

Component 1 focused its activities on discovering active compounds from marine-based organisms. More than 60% of the budget was allocated to the activities under component 1. The second component was designed to develop ABS agreements and benefit sharing through legal and customary protocols. The activities under the third component were designed to increase national capacity to raise awareness at the government level and at the community-based level. The activities were also to strengthen institutions and relevant parties in the ABS agreement negotiations and implementation guidelines.

The strength in project design is that it has strengthened capacity building even further for an institution that has existing infrastructure in capacity building and laboratory facilities for the nation of Fiji and for other Pacific Island countries. Fijians and many Pacific Islanders' (mainly Solomon Islanders) capacity for discovering active compounds were developed and enhanced. New equipment was purchased and training sessions were undertaken to provide modern laboratory facilities for discovering compounds.

Raising awareness on ABS was also strengthened at all levels of governance. The two implementing partners, Ministry of Environment and the Ministry of I-Taukei Affairs were provided with opportunities to work together on ABS agreements and policies for the first time through this project.

There were a few shortcomings with respect to project design. The linkages between the rural communities and the partners for collecting marine organisms were not clearly defined at the project design phase. This was, however, resolved through the joint missions with all partners visiting collection sites as a team and also raising awareness on ABS for the communities visited. A specific strategy could have been developed at the project design phase on engaging partners and raising awareness at the grass root level.

Objective-level indicators and Targets: The project objective was to discover nature-based products and build capacities that facilitate technology transfer on mutually agreed terms, private sector engagement and investments in the conservation and sustainable of genetic resources was relevant and practicable within the timeframe of the three-year project. However, the indicator that at least one lead compound for pharmaceutical and agro-chemical uses were to be discovered to assist with biodiversity conservation was too ambitious for the project lifetime.

According to the project manager for Outcome 1, this project objective indicator and end of project target would take them 10 years to undertake. Therefore, the target to have at least one lead compound discovered was too ambitious because of the bio-prospecting nature of the project within a limited timeframe. However, three screening facilities and processes were established for future ABS work in the nation. The SMART criteria for the project objective was specific (S), measureable (M) and relevant (R) for the life time of the project (Table 3.1a). The project objective's time-bound (T) was not attained as a longer time frame of 10 years will be required to establish facilities, collect samples and purify compounds. The project objective was also not achievable (A) according to the SMART criteria.

Projecti Objective: To discover nature-based products and build capacities that facilitate technology transfer on mutually agreed terms, private sector engagement and investmens in the conservation and sustainable of genetic resources						
Indicators	**End of Project Target**	**S**	**M**	**A**	**R**	**T**
Number of lead compounds for	At least one lead compound					
for pharmaceutical and	8 compunds were purified					
agro-chemical uses discovered that	(5 compounds purified & identified)					
assist with biodiversity conservation	(3 compounds purified but yet to be identified)					
using capacity based in Fiji	Baseline: Nil technology					
	3 creening facilities established					

Table 3.1a Smart Analysis of Project Objective

Outcome 1 Indicators and Targets: The indicators and targets under Outcome 1 conformed to the SMART criteria. Bio-prospecting, knowledge and technology transfer have been strengthened under this component. The target to establish one screening facility for selecting and storing active compounds was established at the national level at the University of the South Pacific. Three screening facilities were established for antibacterial, antifungal and anticancer bioassays. This was a 300% achievement under this target (see Table 3.1b). The storage facilities were also established and this was an achievement of 200%. There was also an increase in the level of national capacity (more than 14 people, 11 people were Fiji nationals) to undertake scientific surveys and analyses. There were more than 5 pure active compounds that were purified and their structures elucidated during the project period. Three more were compounds were purified and their structures are still yet to be identified. However, the relevance of having a lead compound discovered as an indicator during the project timeframe was too ambitious as this is a bio-prospecting project and it is highly unlikely that this could have been achieved during the project lifespan.

Outcome 1: Discovering active compounds for pharmaceutical and agro-chemical uses from organisms within the ecosystem of Fiji

Indicators	End of Project Target	S	M	A	R	T
Numbers of laboratories	3 Screening Facilties established at national					
established in Fiji and state of the	level (antibacterial, antifungal & anticancer)					
art technology (hardware, software,	300% of target (one facility)					
and know-how) transferred for	2 Storage facilities established					
bioprospecting to Fiji with assistance	200% of target (one facility)					
of private sector partners	1 DNA laboratory established					
Level of capacities at the national level	14 scientists trained and 11 Fiji nationals					
to undertake scientific surveys	110% Fiji nationals - scientists					
on bio-chemicals, apply						
chemical techniques, generate disease						
bioassays, and manage collections						
Number of active compounds	5 Pure Compounds isolated and purified					
purified and their structures	3 Pure Compounds purified but yet to be					
elucidated during the	isolated					
project period	27% of Pure Compound against 30 Pure Comp.					

Table 3.1b Smart Analysis of Outcome 1

Outcome 2 Indicators and Targets: There were more than 16 Free Prior Informed Consent forms that were signed by 16 communities. The guidelines established were undertaken to satisfy the Nagoya Protocol and the existing laws of Fiji. Under this Outcome, the target to have at least one mechanism to facilitate the distribution of benefits. There is an existing mechanism identified on royalties being paid to the Ministry of I-Taukei Affairs (MTA) to benefit conservation and communities. Draft policies have been submitted to provide guidelines on bio-prospecting policies for communities, government and other

relevant stakeholders. The indicator on monetary and non-monetary benefits received by the State and communities from bio-prospecting have produced guidelines. The target for this indicator is not clearly defined. The SMART criteria (Table 3.1c) for the indicators for this Outcome 2 were specific (S) and measureable (M) and mostly relevant (R). The time-bound (T) criteria was not feasible as more time is required to achieve the indicators.

Indicators	End of Project Target	S	M	A	R	T
Outcome 2: Operalization of ABS agreement and Benefit Sharing						
Number of baseline ABS agreements (prior informed consent, mutually agreed terms) for project development and the biodiscovery process	16 FPIC Consent Form signed by 16 communities ABS guideliens established Draft Policy on ABS for the nation established					
Monetary and non-monetary benefits received by the State and local communities	No monetary or non-monetary benefits received. But process identified in the consultancy report and also during consultations. Guidelines established.					
Number of mechanisms to facilitate the distribution of benefits and biodiversity conservation in local communities	Mechanism identified with existing trust fund for communities and government in consultancy reports					

Table 3.1c Smart Analysis of Outcome 2

Outcome 3 Indicators and Targets: Under this component, there has been a good level of understanding among government officials (more than 80%) and community members visited (90%) of ABS principles, procedures and agreements. An electronic database was also established at the University of the South Pacific as per indicator for this Outcome 3. More than 14 scientists (including female scientists) have been trained. Under this component, legislation and supporting policy for ABS have been reviewed and harmonized.

Indicators	End of Project Target	S	M	A	R	T
Outcome 3: Increased national capacity to operationalize Nagoya Protocol obligations.						
Existence of ABS laws, policies, guidelines and processes for institutionalization of Nagoya Protocol obligations under the leadership of relevant agencies	Draft ABS policy established and several consulations undertaken Guidelines for ABS processes and community involvement					
Existence of Administrative systems such as procedures and permits for access, designed checkpoints, certificates of compliance, clear roles & responsibilities, & standards for screening & approval processes in accordance with the Nagoya Protocol provisions	Permits system recommended for consultations roles & responsibilities clearly specified Standards of Operation Procedures developed Standards for Screening established Certificates of compliance developed					
Indicators	**End of Project Target**	**S**	**M**	**A**	**R**	**T**
Existence of an electronic database system to facilitate ABS operationalization including data on: biodiversity, natural products details; capacities and roles of relevant national institutions; data exchange protocols; status tracking of samples collected & scientific results - linked to the cultural mapping of the Ministry of I-Taukei Affairs	Electronic database on the internet and now functional to facilitate ABS work (100% from 0% baseline) Relevant data on Electronic Database					
		S	**M**	**A**	**R**	**T**
Number of Fijian scientists trained in drug or agro-chemical discovery	11 Fiji nationals 110% Fiji nationals - scientists (baseline- 10)					
Level of understanding & actions of the national ABS Committee on access & benefit sharing promotion in Fiji	80% level of understanding of government agencies, administrators & private sector 90% level of understanding of communities (resource owners, communities youth & women					

Table 3.1d SMART analysis of Outcome 3

3.1.2 Project Assumptions and Risks

The underlying problem of threats to Fiji's biodiversity is that the local communities and the development sectors do not consider them as economically significant. Biodiversity conservation in Fiji, therefore, needs to make a meaningful contribution to the livelihood of local communities if it needs to have proper recognition in the country.

The project document has defined a series of assumptions as root causes of barriers for maximizing benefits from genetic resources. These have been logical and clearly identified as a) limited scientific research, technological and development capacity prevents national stakeholders from adding value to Fiji's genetic resources; b) limited capacity to implement and operationalize ABS agreements and Benefits Sharing mechanisms with communities, including insufficient human resources capacity and piecemeal operation of draft bio-prospecting policy and guidelines; and c) limited national capacity to

institutionalize and operationalize the Nagoya Protocol and a lack of understanding of the link between ABS and biodiversity conservation (Fiji ABS Project Document).

The project assumption and risks have been robust with capacity planning, scientific research, ABS agreements and understanding of ABS in government agencies and in the communities. Capacity in planning and understanding of ABS is much stronger at the national level within government and at the university level among researchers. The awareness on ABS remains as an accurate assumption, however, the project has increased awareness and had made greater impact in the communities visited because of the joint missions with partners at the community level.

Risks Identified at entry point (from Prodoc)	Risk Rating	TE Comments
Uncertainty in policies for ABS because of ad hoc system in government restructure and also government personnel and policy changes.	Medium	The project has been strengthened because of the political commitment in raising awareness of the national level amongst government administrators and policy makers. Raising awareness on ABS has also taken place at the grass root level. These awareness have been on opportunities that the ABS project has offered to the country to generate economic resources, support conservation in-country, build international cooperation and coordination, as well as to contribute to global knowledge.
Community interest in conservation of local biodiversity and involvement in ABS related research and development is not maintained.	Medium	Engaging communities through joint missions with partners strengthened community awareness to maintain community interest and disseminate information on ABS.
For invertebrate species, advanced drug discovery requires recollection of the organism. Environment conditions can affect the chemistry of an organism, especially if the active principal compound is produced by a symbiont. In addition, identification of the organism to recollect can also sometimes be a problem.	Medium	Project scientists have good knowledge of collection sites. Invertebrate taxonomy workshop provided scientific training in taxonomy of marine samples and these were also sent overseas for confirmation of identity of samples with relevant partners.
Assumption that ABS and bio-prospecting will lead to conservation benefits. There are many threats to coral reef ecosystems that may counter the benefits of a successfully implemented ABS policy and system.	Low	DoE and USP have core commitments to lead conservation efforts in Fiji. Communities have been supported throughout the project. Communities have have benefitted from ABS policy and systems in place. The joint missions with partners to raise awareness with partners at the community level were very effective.

Table: 3.2 Analysis of Project Risks

Consideration on Risks and Assumptions on Future Projects

For future projects taken on board by UNDP's careful considerations over risks and assumptions should be carefully considered. It is important to note that the signing of the project document is not sufficient commitment. It took longer to recruit staff and it needs repeated UNDP follow-up to recruit staff. Assumptions should include cultural issues and political sensitivity that resulted in project delays. Therefore, assumptions need to be reviewed and appropriate responses put in place at least bi-annually

because the responses from the Terminal Evaluation is quite late to address some of these issues. The absence of a Mid-Term Review also could have provided some responses to address some of the issues well before the Terminal Evaluation.

Across all UNDP projects, greater investments are required of UNDP to invest resources in countries where there is a high turnover of staff at the Ministry of Environment (the GEF focal point). This will further require UNDP to prioritize risks and assumptions management. The strength of on-going UNDP monitoring and oversight will also contribute to managing some risks and assumptions on a case-by-case basis. Sometimes personality dynamics and issues may play a role in addressing issues.

3.1.3 Lessons from other Relevant Projects Within the Sector

The project is relevant to the national priorities of Fiji. Fiji signed the Convention of Biological Diversity in 1992 at the United Nations Conference on for Environment and Development (Rio Conference, 1992). It further signed the Nagoya Protocol in 2010. In 1997, Fiji drafted an ABS policy, which is consistent with the UNCBD requirements that needs to be aligned with the Nagoya Protocol.

However, Fiji's NBSAP (2007, as amended in 2010) led to the development of a Guiding Framework for ABS. The NBSAP contains a significant Principle stating that "The intellectual property rights to biodiversity, genetic resources, bio-derivatives and knowledge about biodiversity be recognised and that appropriate mechanisms adopted to ensure, henceforth, fair remuneration, credit or other benefits are received by local communities, the discoverer or developer, and the nation." The Fiji ABS project's three Outcomes are relevant to Fiji and several of the recommended actions under the two Focus programmes were identified in the NBSAP.

As part of the Fiji National Biodiversity Strategy and Action Plan (NBSAP) review in 2010, a Guidance Framework for ABS was formulated but not formally approved. The Sustainable Development Bill of 1997, had sections on bioprospecting that could be utilised to formulate the relevant institutional systems for ABS in Fiji. The Ministry of Environment and the ABS Committee formed by Cabinet had agreed that these three key documents will be the basis of the formal ABS policy development and legislation in the country and to align it to the the Nagoya Protocol which Fiji has ratified in 2011.

In 1997, Fiji developed an ad-hoc ABS policy which was aligned to the Convention on Biological Diversity. This ad-hoc policy was used to facilitate access by the ICBG to Fiji's genetic resources for

research and conservation purposes. Subsequently, as part of the follow-up to the NBSAP review in 2010, an ABS Guidance Framework was developed by the Ministry of Environment. This has not been endorsed by Cabinet and is used only to guide ad-hoc administrative processes. The draft policy frameworks will be used as the foundation for future formal ABS institutional development and legislation in the country.

3.1.4 Planned Stakeholder Participtiion

The responsibilities and accountabilities for achieving the project Objective, Outcomes and Outputs rested with the implementing partners. The project document clearly indicated the planned stakeholder participation through a Stakeholder Involvement Plan to ensure the effective and efficient use of resources. They are also responsible to ensure the effective and efficient use of donor resources.

The DOE took the lead as an Implementing Partner and had the overall responsibility for the project. Other planned stakeholder implementing partners as outlined in the project documents included the University of the South Pacific, the Ministry of I-Taukei Affairs, communities, Ministry of Fisheries and the NGOS. Consultants were also hired and Terms of References for each consultant was provided as agreements for specific tasks to be undertaken.

These planned stakeholder participation arrangements were provided in detail in the project document and was also finalized in the project's inception phase. These were further aligned with the project's annual work plan. The DoE facilitated the required inputs and oversaw the implementation and delivery of planned project Outcomes and Outputs. The lead implementing partners were the Ministry of Environment, the University of the South Pacific and the Ministry of I-Taukei Affairs. They led the delivery of Outcomes and Outputs within their mandate and jurisdiction as specified in the project document and during the inception workshop phase.

3.1.5 Replication Approach

The ABS project in Fiji was built on models of existing bioprospecting guidelines, agreements and research activities. It was also closely linked to the locally managed marine areas strategies (LMMA) on the successful model in managing community-based marine protected areas by the Fiji Locally Managed Marine Areas (FLMMA) network. The replication approach was evident in the ABS project.

There were also obvious but practical lessons that other countries in the region and development partners can learn from. The systematic and participatory approach in conducting awareness at the community level is a model for the Pacific region in implementing project activities on ABS. The process of engaging communities in a participatory fashion for the FPIC process of the project is worth noting and can be broadly applied in other communities in Fiji and across the Pacific Region.

The ABS approach is very much relevant to the Pacific Region and partnering with higher research institutions such as the Institute of Applied Sciences (University of the South Pacific) and the various stakeholders in government to provide technical expertise in implementing project activities and awareness that are highly technical in nature. The laboratory facilities established at the Institute of Applied Sciences can be replicated in any laboratory at the Fiji National University or any laboratory in the South Pacific Region.

3.1.6 UNDP Comparative Advantage

According to the project document, this project is fully aligned with UNDP's new Global Strategic Response Framework for Biodiversity "Signature Program 1: Integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human well-being." Key activities under this Framework is the promotion of sustainable use of biodiversity and the facilitation of agreements on Access and Benefit-Sharing (ABS) for genetic resources.

UNDP's comparative advantage as the GEF implementing partner is based on their expertise in addressing the environment sector and the multiple productive sectors in Fiji. UNDP has good reputation

working with national stakeholders, NGOS and communities in supporting GEF biodiversity projects in Fiji and elsewhere in the Pacific Region and globally.

UNDP has a very strong partnership with Fiji's national government agnecies and semi-government agencies to support, design and implement GEF-financed biodiversity projects. It has implemented UNDP-GEF projects that has supported the development of the National Biodiversity Strategy and Action Plan and Country Report to the COP; and the National Capacity Self-Assessment for Global Environmental Management (NCSA).

The Pacific Office, located in Fiji, has taken the leading role for the regional "South Pacific Biodiversity Conservation Programme" financed by GEF. UNDP has significant project implementation experience in Fiji and in the Pacific Region and their work has involved national and regional government agencies and also the participation of the private sector.

UNDP also has in-house expertise on general human development issues such as gender mainstreaming, social inclusion and governance. UNDP's comparative advantage has gone beyond just providing management support during the project implementation. The UNDP staff from the Pacific Office have provided timely backstopping, technical and strategic support for the project.

3.1.7 Linkages between Project and other Interventions

Previous interventions linking the project in the environment sector by the Ministry of Environment included awareness raising, institutional and policy development, networking with government agencies and communities. Other project interventions on technology transfer have been based on partners' activities in bioprospecting, conservation and marine biodiversity work in Fiji.

The project is also linked to other relevant international project community conservation interventions in Fiji like the Asian Development Bank's Coral Triangle Pacific Program. There is also linkage of the project to the FAO-GEF PAS Forestry and Protected Area Management project. There are also other community-based projects implemented in Fiji by the UNDP-GEF small grants program that have useful lessons relevant to the Fiji ABS project.

The Fiji ABS project was also built on additional support from Fiji government on technical capacity, education and awareness raising on the ABS platform in the past years. In addition, the Ministry of I-Taukei Affairs have been actively undertaking cultural mapping and its policies and mapping tools are initiatives also closely linked to the ABS project.

Other Pacific Regional project activities that support the Nagoya Protocol and are linked to the ABS interventions include the following:

- Activities of the ABS Capacity Development Initiative in Micronesia
- Lessons Learned from the "The South Pacific Access and Benefit Sharing Workshop" in Nadi, Fiji, 19-22 March 2012. The follow up Workshop in Nadi, Fiji in July 2013 on ABS and WIPO by SPREP in partnership with the ABS Capacity Development Initiative for the Pacific
- Green Growth and Sustainable Development projects managed by IUCN and funded by the Government of France.
- UNEP– GEF medium size project 'Ratification and Implementation of the Nagoya Protocol in the countries of the Pacific' – delivered in partnership with SPREP.

3.1.8 Management Arrangements

The Fiji ABS Project has been executed by the Ministry of Ministry of Environment. The Director of Environment is the Project Manager. UNDP serves as the GEF Implementing Agency. The Project Assistant is located at the DoE. Responsible Parties are the Institute of Applied Sciences (University of the South Pacific) and the Ministry of I-Taukei Affairs (MTA).

The Project Board (PB) is responsible for making executive management decisions for the Fiji ABS Project and is also to provide guidance to the Project staff members and partners when needed. The membership of the PB are the following: the Permanent Secretary of the Ministry of Environment as the Chair, the Permanent Secretary of the Ministry of I-Taukei Affairs, the Director of Environment, a Program Analyst from UNDP, the Manager of Research and Policy, a Senior Research Officer and a Conservation Officer from the Ministry of I-Taukei Affairs, two Senior Environmental Officers, an Environmental Officer and a Project Assistant from the Ministry of Environment, and the Project Manager from the Institute of Applied Sciences (University of the South Pacific).

The PB was originally envisioned (in the project document) as comprising of the Director of the Ministry of Environment as the Executive to chair the group and UNDP as Senior Supplier to provide guidance on the technical feasibility of the project. According to the project document, the Ministry of i-Taukei Affairs are the Senior Beneficiaries to ensure the realization of project benefits. The Project staff at the Ministry of Environment consisted of a Project Assistant. This officer provided the general coordination and oversight for the project.

However, Outcome 1 of the project was executed through the Institute of Applied Sciences (University of the South Pacific) while Outcome 2 and 3 were managed by the Ministry of Environment in consultation with the Ministry of I-Taukei Affairs and other relevant stakeholder. The UNDP Pacific Office was the implementing entity.

The Fiji ABS Project objective was to discover nature-based products and build national capacities, facilitate technology transfer on mutually agreed terns, private sector engagement and investments and conservation and sustainable use of genetic resources. Strengthening the participatory planning, budgeting and execution of the project was done in partnership with relevant stakeholders.

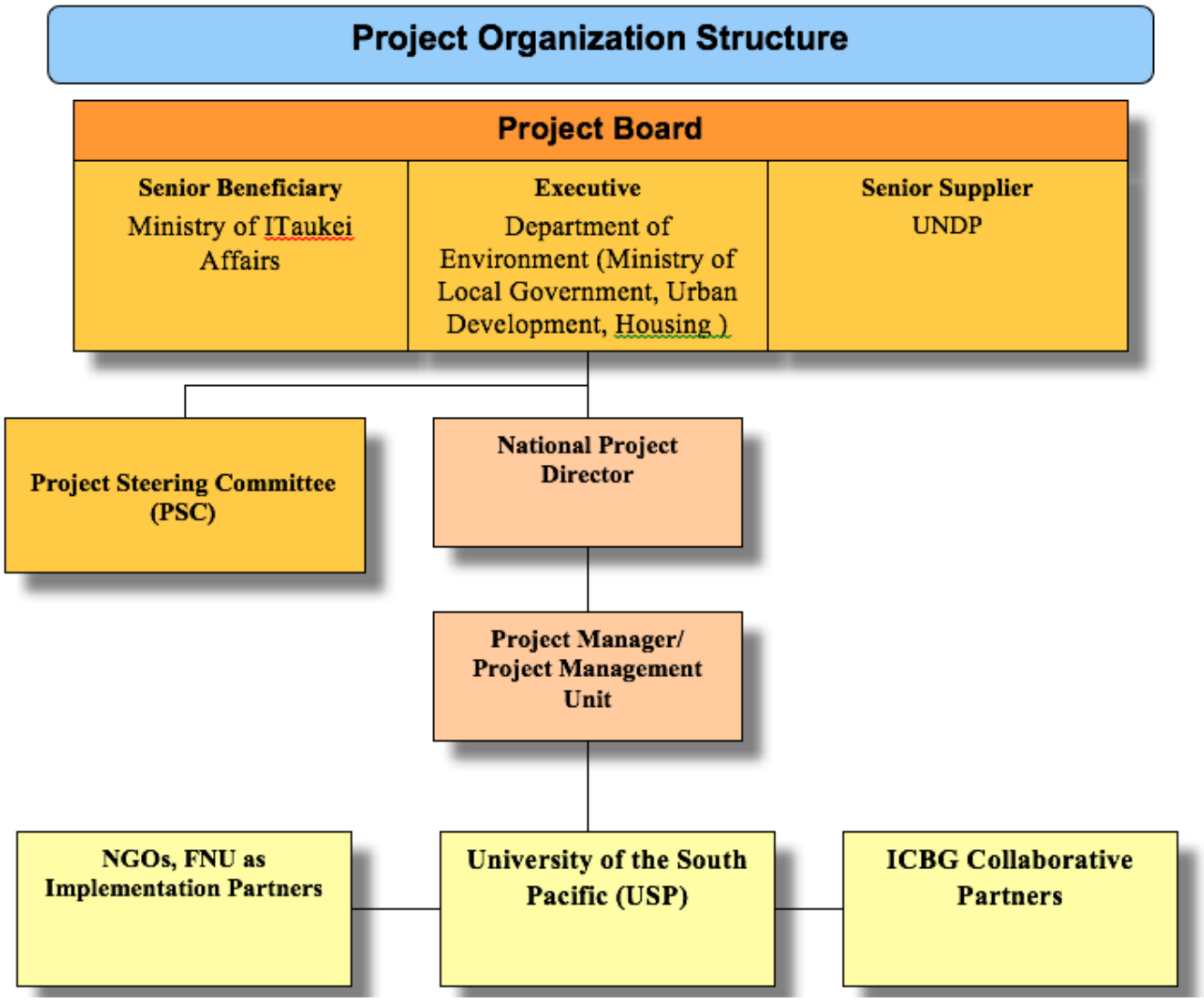

Figure 1: Fiji ABS Project Organization Structure

3.1.9 Level of comprehension of project concept

The Project Assistant at the Ministry of Environment has a good understanding of the project concept, including how it is structured, its objectives and outputs, institutional arrangements, as well as UNDP reporting and financial requirements. The Project Assistant has a clear understanding of the log frame and results-based management approach.

The presence of a dedicated Project Assistant at the Ministry of I-Taukei Affairs could have benefitted the project because of the physical presence of a Project Assistant. This person could have been paid for by the project and would have a good level of understanding of project concept, objectives, outputs and

activities, institutional arrangements and UNDP's reporting and financial requirements. This person would have been focused on the project and would have also been directly linked with the Project Assistant at the Ministry of Environment on the implementations of Outcomes 2 and 3 and their respective outputs and activities.

3.2 Project Implementation

This Project Implementation section addresses the extent to which the Fiji ABS Project has been achieving its Overall Objectives, Outcomes and Outputs (3 project outcomes and 12 project outputs). These have been assessed according to the achievements of Objectives, Outcomes and Outputs. These have been rated and the status of delivery has been assessed in accordance to the Strategic Results Framework.

The key evaluation criteria addressed the extent to which the project is achieving its Overall Objectives, Outcomes and Outputs; whether the cross-cutting issues of human rights and gender equity have been considered; and whether the overall institutional arrangements have been effective.

Key evaluation questions addressed in this section includes: how the project is being monitored; how project reporting is carried out; how project finances are managed; whether there are any financial variance or adjustments; and whether co-financing has been leveraged.

3.2.1 Adaptive Management

There has been significant progress in terms of project achieving its Overall Objectives, Outcomes and Outputs during the course of the project. The project team has been using adaptive management during the project implementation. One good example of adaptive management is the joint mission to visit communities, instead of individual partners visiting communities, three joint missions were implemented with all partners to conduct raising awareness, collecting samples and having the prior consent form signed. These joint missions were cost-effective and also effective in raising community awareness as all stakeholders were available to answer questions on ABS.

Training workshops were also provided on complex scientific research concepts and skills. These were skills in chemical analysis, microbiological analysis, identifying samples and scuba diving. These highly technical skills were available to as many people as possible through the workshops and those who were interested were mentored further. The knowledge and technology transfer were undertaken further through workshops and mentoring.

The project extension was an adaptive project management strategy that contributed to the success of this project. The hiring of consultants to undertake some of the project outputs and activities for the various Outcomes advanced the project deliveries of its remaining Outputs and Activities.

3.2.2 Partnership Arrangements

The partnership arrangement with the Institute of Applied Sciences at the University of the South Pacific to lead and implement Component 1 of the project was exceptional. The Institute of Applied Sciences has the basic laboratory facilities that were later equipped by the ABS project to a "state-of-the-art" facility for Fiji and the 12 countries in the Pacific Region. The human resources for the project were also recruited from undergraduate and graduate students studying at the University of the South Pacific and had basic skills and understanding of natural sciences. They supported the project and replicated knowledge and technology transfer. The Institute of Applied Sciences was also an effective partner on focusing and ensuring that the project results were achieved in a timely manner.

A project assistant was recruited for the Ministry of Environment and the capacity for project management for the executing agency was increased because of the Project Assistant. The Project Assistant was dedicated and committed to the project management of the Fiji ABS Project. However, it took a while for this person to learn all the processes of project management, reporting and coordination with relevant partners.

There were challenges between the two government agencies, Ministry of Environment (the executing agency) and the Ministry of I-Taukei Affairs (the senior beneficiary). The two ministries were caught up in which of the government agency is competent to be the National Competent Authority on ABS in Fiji. There was an analysis of stakeholders on the competency for each of the agencies for National Competent Authority for ABS in Fiji during the extension period and future relevant consultations will still have to be undertaken to choose a National Competent Authority.

In the project document, the partnership arrangement for Outcomes 2 and 3 were not very specific on roles and responsibilities of relevant partners. A Memorandum of Understanding (MOU) between the executing agency (Ministry of Environment) and the senior beneficiary (Ministry of I-Taukei Affairs) should have been in place as soon as the project inception workshop was completed. It is too late to resolve issues on partnership arrangements while implementing the project. These issues on partnership arrangements, roles and responsibilities should have been clear from the beginning. The MOU should have included the implementations of outputs and activities for Outcomes 2 and 3. Roles and responsibilities should have been clearly defined in the MOU.

There were also challenges associated with the high turnover of the government staff over the course of the project. For example, the position of the Director of Environment, who is the National Project Manager, was served by several individuals during the lifetime of the Fiji ABS Project. Similarly, there were also changes in the Permanent Secretary of the Ministry of I-Taukei Affairs because of retirement. The change in leadership provided new challenges as they have to be briefed and updated on the project and this can cause delay in the decision-making process. But some of these challenges were beyond the scope of the project and adaptive management was used where relevant.

The composition of the Project Board included government department representatives and representatives from implementing partners and the UNDP program analyst. The Project Board guided the overall directions of the project. The meeting minutes of the Project Board were made available to the TE consultant and were an important source of information in assessing the effectiveness of the Board. The Project Board has been weak and has not captured the progress in each component of the project and some key decision making has not been made, particularly on Outcomes 2 and 3 and their outputs.

3.2.3 Feedback from M&E Activities for Adaptive Management

The project monitoring and evaluation (M&E) have been carried out in accordance with the established UNDP and GEF procedures. This was provided by the project team and the UNDP Pacific Office and some support were provided by the UNDP/GEF Regional Coordination Unit (RCU) in Bangkok.

In the Strategic Results Framework for the project, the performance and the impact indicators were tabulated with their means of verification. The M&E plan included the following: an inception report, project implementation reviews, quarterly and annual review reports, and mid-term and final evaluations.

The feedback from M&E activities was used for adaptive management. The formal extension request from the government that UNDP supports the recruitment of multiple consultancies to help progress policy, capacity and bioprospecting activities (PIR 2017). The request also included an appointment of a government officer as a project coordinator with the agreement of the Project Board (Project Board minutes, August 2017). The recruitment of multiple consultancies and the appointment of a project coordinator were used as adaptive management strategies to progress the Fiji ABS project during the extension period.

In addition, the establishment of a Ministerial Task Force on ABS by the Permanent Secretary of Environment to help facilitate inter-agency discussions and agreement on bioprospecting and FPIC was vital to the Fiji ABS project during the extension period. As a result, implementing awareness through joint missions to communities by several government ministries and stakeholders accelerated project delivery during the extension period and it was also an adaptive strategy from the PIR and the Project Board meetings. The Project Board also had regular meetings with a commitment to address the project's limited progress.

3.2.4. Project Finances and Co-financing

The Fiji ABS Project has a total budget of USD 3,682,778. Funding is provided by the GEF administered Trust Fund to the amount of USD 970,000. In addition, Fiji Government has given USD 60,000 as co-financing contribution to the project. Table 3.3 provides the breakdown of Project budget and Co-financing contribution of other partners.

Total resources required:	USD$3,682,779
Total allocated resources:	USD$3,682,779
GEF:	USD$970,000
Co-financing:	
Government in cash	USD$60,000
Institute of Applied Science (University of the South Pacific)	USD$1,100,000
Georgia Tech	USD$1,231,779
University of California, San Diego	USD$321,000
Total Co-financing	USD$2,712,779

Table:3.3 Project Budget and Co-financing

The accounting and financial systems for managing the project have been adequate. Both Quarterly and Annual Financial Reports have been prepared and submitted. Funds have been received from UNDP by the Ministry of Economy. The Project Assistant has to make requests by Payment Vouchers and these needs to be approved by the Permanent Secretary of the Ministry of Environment. The cumulative disbursements for the Fiji ABS Project is shown in Figure 2. The very low disbursement of funds during implementation from 2015 to 2017 is also shown in Figure 2. These low disbursements are also reflected in Table 3.4 on the Breakdown of Project Expenditure per Outcome per Year. The low delivery rates for project implementation from 2015 to 2016 are also shown on Table 3.6 Project Delivery per Component per Year.

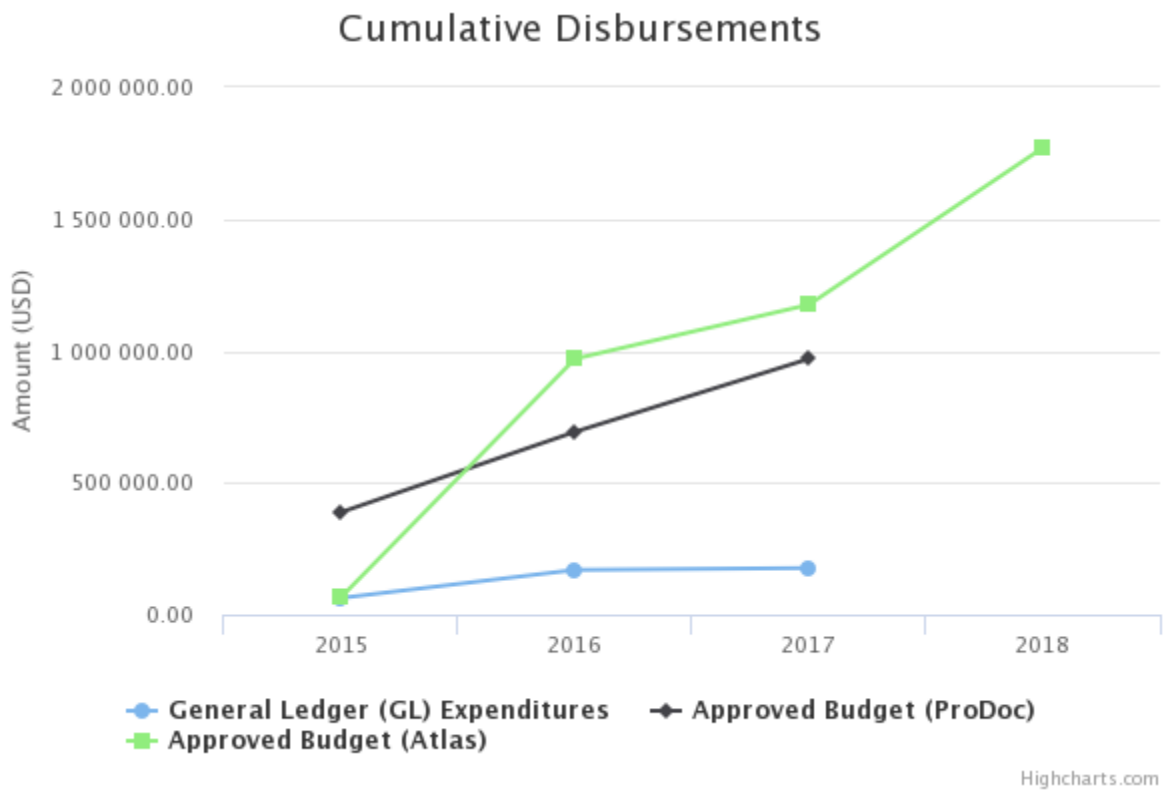

Figure 2: Cumulative Disbursements for the Fiji ABS Project

According to expenditure records documented in the combined delivery reports provided by the UNDP Pacific Office, USD632, 365 or 65% of the GEF grant of USD970,000 was incurred during the extension period through to August 2018. The breakdown of financial expenditures per Outcome per year is provided on Table 3.4. Spending under Outcome 1 (USD439,163) and Outcome 2 (USD51,927) which was equivalent to 45% and 5% respectively for the lifetime of the project (Table 3.5). This is in contrast to the GEF project budget of USD660,000 for Outcome 1 and USD132,000 for Outcome 2 or 68% and 14% respectively (Table 3.5). Alternatively, spending for Outcome 3 was USD120,029 and spending for Project Management was USD51,927 and which was equivalent to 12% and 11% respectively.

Component	Year	Year	Year	Year	
	2015	2016	2017	2018	Total
Outcome 1	54,810.42	74,134.62	139,293.09	170,925.63	439,163.76
Outcome 2	2,422.32	2,537.59	0.00	46,967.50	51,927.41
Outcome 3	5,678.39	24,831.27	87.8	89,431.99	120,029.45
Project Management	0	0	4,224.85	7,177.59	11,402.44
Other	0	4951.33	2,202.00	2,688.64	9841.97
Total	62911.13	106454.81	145,807.74	317,191.35	632,365.03

Table 3.4 Breakdown of Project Expenditure per Outcome per Year

Component	GEF Grant Prodoc Budget	*Actual Expenditures
	% of Total	% of Total
Outcome 1	USD660,000	USD439,163.76
	68%	45%
Outcome 2	USD132,000	USD51,927.41
	14%	5%
Outcome 3	USD94,000	USD120,029.45
	10%	12%
Project Management	USD84,000	USD11,402.44
	8%	11%
Unrealized Loss	N/A	N/A
Unrealized Gain	N/A	N/A
Total	USD970,000	USD632,365.03

Table 3.5 Breakdown of Project Budget and Actual Expenditures

(Source: Prodoc & CDRs, * Actual Expenditures reported for the period 2015 to Aug. 2018)

The project delivery rates for each component varied throughout the project lifetime (Table 3.6). The project delivery rates increased for each component in the final year. About 50% of actual expenditures was reported for all components in the final year. The rate of delivery for Outcome 1 and Outcome 2 were 39% and 90% respectively in 2018. Outcome 3 had a delivery rate of 75% while project management had a delivery rate of 63%.

Component	Year	Rate of delivery	Year	Rate of delivery	Year	Rate of delivery	Year	Rate of delivery	TOTAL
	2015		2016		2017		2018		
Outcome 1	54,810.42	13%	74,134.62	17%	139,293.09	32%	170,925.63	39%	439,163.76
Outcome 2	2,422.32	5%	2,537.59	5%	0.00	0%	46,967.50	90%	51,927.41
Outcome 3	5,678.39	5%	24,831.27	21%	87.8	0.10%	89,431.99	75%	120,029.45
Project Management	0	0%	0	0%	4,224.85	37%	7,177.59	63%	11,402.44
Other	0	0%	4951.33	50%	2,202.00	19%	2,688.64	27%	9841.97
Total	62911.13	10%	106454.81	17%	145,807.74	24%	317,191.35	50%	632,365.03

Table 3.6 Project Delivery per Component per Year

According to the Ministry of Environment, there was a variance between planned and actual expenditures as there were more government staff facilitating project activities during the extension period. The co-financing by government increased from USD$60,000 to USD 62,305. The co-financing from consisted mainly of staff time incurred during meetings, field visits and workshops. Other contributions to co-financing from government were for equipment, transportation, office space and telecommunications. The co-financing for Outcome 1 is presented on Table 3.7. According to USP staff, the co-financing contributions have not changed since the project document was developed.

Institute of Applied Science (University of the South Pacific)	**USD$1,100,000**
Georgia Tech	USD$1,231,779
University of California, San Diego	USD$321,000
Fiji Government	USD$62,305
Total Co-financing from USP and Partners	USD$2,652,779
Total Co-financing from Government, USP and Partners	USD$2,715,084

Table: 3.7 Co-financing from various agencies and government

3.2.5 Monitoring and Evaluation

Rating for Overall Quality of Monitoring & Evaluation: Moderately Satisfactory (MS)

Supporting Evidence:

+The M&E plan was well prepared and the plan used the standard template for GEF-financed projects

+ M&E budget was sufficiently budgeted for

+ Inception report completed

+PIR Reports provided well-articulated feedback from partners and provided detailed information on project performance

+Some adjustments were made after the preliminary findings of the TE

+The Technical Group and the Project Steering Committee provided positive feedback

-Absence of MTR

- Challenges stated in PIR Reports

Rating for Monitoring and Evaluation design at entry: Satisfactory (S)

The M&E plan was well designed in the project document and was prepared using the standard template for GEF-financed projects. In the project document, the monitoring roles and responsibilities were clearly specified for each stakeholder. The partnership arrangements and responsibilities for M&E were re-evaluated during the inception workshop. The budget was also sufficient for monitoring and evaluation. The indicative costs for each M&E activity was included

in the budget.

Rating for Implementation of Monitoring and Evaluation is: Moderately Satisfactory (MS)

One of the key monitoring opportunities is the Project Implementation Report (PIR) process that takes place every year. This technical monitoring is part of GEF requirements. The Project Assistant at the Ministry of Environment jointly develops the PIRs with UNDP (Pacific Office) in Fiji and the UNDP (Regional Technical Advisor) in Bangkok. The support by UNDP has been provided through face to face discussions, phone calls and e-mails. The PIR reports are of good quality and they have provided an overview on project progress in 2016 and 2017. These PIR reports have been very useful to the terminal evaluation and have provided some of the issues that the project has challenges with.

The indicators for monitoring project progress are provided in the log frame/Strategic Results Framework (SRF). The Sources of Verification in the log frame/SRF have also been developed to include interviews and questionnaires. The annual work plan and budget played an important role in monitoring the project deliverables annually by all stakeholders and partners. As previously stated that having no Project Coordinator has posed some serious problem for the Fiji ABS Project as the project Coordinator should have focused on the log frame to guide the project implementation.

The Institute of Applied Sciences has been delivering reports on time. Reports on field trips and training workshops have also been published on the University of the South Pacific website. The reporting on the documentation processes of FPIC and permitting processes have been undertaken. The Institute of Applied Sciences has been actively delivering progress reports, field trip reports and technical reports on Outcome 1.

PIR ratings were poor and were not in line with the TE ratings. The TE ratings had improved slightly because there were follow-ups on implementing the suggestions from the PIR reports. In addition, during the TE, most stakeholders were interviewed and stakeholders highlighted positive project performances and results.

The extension period for the project also provided opportunities for accelerated deliveries of project activities. A new work plan was developed for the extension period with details of tasks prioritized within the timeframe. In addition, a detailed action plan to improve performance was developed for the project within the extension period. The extension period of the project also accelerated project activities implementation. These project performances and results greatly improved ratings during the TE.

During the extension period, the Technical Group was also meeting more often to track project performances. The establishment of the Joint Ministerial Task Force for the ABS project during the extension period also provided a high level oversight on communication and project performance tracking and accountability.

3.2.6 Implementing Agency (IA) and Executing Agency (EA) Execution

Rating for Overall IA-EA Execution: Moderately Satisfactory (MS)

Supporting Evidence:
+Strong commitment of key stakeholder throughout lifetime of project
+Constructive guidance provided by Technical Group, Joint Ministerial Task Force Group and Project Steering Committee
+Guidance by UNDP staff were consistent
+Effective project management and qualified technical experts engaged in the project
+PIR reports and technical reports
+Joint Ministerial Task Force
-delay in recruitment of Project Coordinator
-delay in disbursements and procurement process
-absence of MTE

Rating of Quality of Execution by Executing Agency: Moderately Satisfactory (MS)

A Project Coordinator was recruited from one of the government officers within the Ministry of Environment. This has improved project performances and execution specifically during the extension period. The improvement in project execution during the extension period was also the result of a new detailed action plan to improve project performance and constructive guidance from various Groups. For example, the Technical Group and the Joint Ministerial Task Force were meeting more frequently to improve communication and also to track action plan during the extension period. This was key to improvement project execution during the extension period.

There are often delays in the procurement process. The process can be as long as several approvals required by relevant personnel who are often away on duty travel. There are also delays in the procurements processed by UNDP because of its stringent requirements, and the delays can also be due to the time taken in processing procurements.

Rating of Quality of UNDP Implementation: Satisfactory (S)

UNDP has given its full support to improve project implementation throughout the project's cycle. UNDP staff members have often provided an oversight of the project implementation and have assisted in whatever is needed. The UNDP project staff members have also facilitated communications between project staff and with government agencies. The UNDP staff members have been proactive in facilitating the establishment of a Ministerial Task Force on ABS by the Permanent Secretary of Environment. The Ministerial Task Force has facilitated inter-agency discussions and agreement on bioprospecting and FPIC processes.

UNDP staff members have also supported the Project Board to meet regularly. The meeting of the Project Board has also been supported with an enhanced schedule and commitment from its members with the influence of UNDP staff members because of the project's limited progress. In addition, the meetings of the Technical Group for ABS were also supported and enhanced by the commitment from UNDP staff members.

A UNDP project environment analyst was also a member of the Project Board and provided open communication channels between various stakeholders. UNDP has been effective in using UNDP's team leaders to start conversations with the Permanent Secretary and the Director of Environment if there are urgent matters to be expedited. This was UNDP's response to solving significant implementation problems especially between government agency and partners. There were some delays in the disbursements and sometimes this was beyond UNDP's control. Financial management and procurement have been effective by UNDP and has been undertaken in accordance to the project budget.

UNDP has also been effective in communicating to partners about timeliness in reporting and monitoring and evaluation reporting. It was supportive on project team focusing on project results

and project delivery. UNDP has been effective in risk management and especially in consultations with government partners to recruit consultants to address some of the gaps in the project implementation and project results during the extension period. The PIR has also provided a good overall assessment of UNDP's views on project reporting and project progress.

The government's formal extension request was supported by UNDP for the recruitment of multiple consultancies to progress policy, capacity and bioprospecting activities (PIR 2017). This was critical in advancing and accelerating project results during the extension period. UNDP also facilitated the hiring of consultants as UNDP-recruited consultants with the approval of the Project Board.

The absence of the MTE which was budgeted for in the project document reflected the importance of UNDP in guiding the Department of Environment in implementing M&E processes which would have helped the project. If the M & E would have been undertaken, may be some of the problems encountered later in the project could have been resolved earlier on. The TE was too late to highlight some of the problems to be resolved to help the project earlier on in its implementation problems. If the project document specifically mentioned MTE as part of the M&E work plan and has a budget allocated, then, it must be carried out to resolve some of the issues for the project.

3.3 Project Results

3.3.1 Overall Results (Achievements of Objectives, Outcomes and Outputs)

Project outputs for Outcome 1 such as the discovery processes of active compounds for pharmaceutical and agricultural purposes have been established for the nation at the Institute of Applied Sciences at the University of the South Pacific. Scientific surveys have been carried out and screening facilities for selecting and storing active compound have been done. Capacities have also been built for taxonomic work for marine invertebrate and for analytical techniques, bioassays, data handling processes, marine sample collection and for storage of marine samples.

Active compounds were purified and their structure determined using NMR techniques. Compounds were also tested using stringent scientific methods locally and overseas with partners. National capacities for scientific work have been built for students and researchers for Fiji and for the Pacific Region (namely Fiji and the Solomon Islands).

Overall, the capacities of government agencies and communities have improved during the project implementation. This is basically through project awareness in three districts and three Provinces in Fiji through joint missions with partners (Institute of Applied Sciences, Ministry of Environment, Ministry of I-Taukei Affairs and Ministry of Fisheries). There have been challenges with the implementations of Outcomes 2 and 3 but these have improved during the extension period interventions with the hiring of consultants to deliver some of the activities for these Outcomes.

The tour visit was part of an outreach to donors and stakeholders to showcase the laboratory work undertaken by CDDC staff after samples were collected from the field. This was a very useful exercise to display the laboratory facilities bought by the project and to show complex scientific work to partners and donors.

A Training Workshop on Taxonomic Identification of Marine Invertebrates was held by the Institute of Applied Sciences (IAS). The workshop focused on developing skills in Taxonomy and also in the identification of specimens collected under the Global Environment Facility-Access Benefit Sharing (GEF-ABS) Project trip to Beqa.

There were three joint FPIC missions undertaken by collaborating partners to Nacula Island in the Yasawas, Beqa Island and the District of Ono (islands of Dravuni and Buliya, Ono Islands (Naqara, Nabouwalu, Narikoso, Nawaisomo and Vabea villages). These joint missions were undertaken for FPIC awareness processes and also for collections of marine samples for further taxonomic identification and chemical processing in the laboratory at the Institute of Applied Sciences.

Objective-level indicators and Targets: The project objectives were clear, relevant and practicable within the timeframe of the three-year project. The indicator that a number of lead compounds for pharmaceutical and agro-chemical uses were to be discovered to assist with biodiversity conservation was not achievable during the project lifetime. The target to have at least one lead compound discovered was questionable because of the bio-prospecting nature of the project within a limited timeframe. However, the facilities and processes were established for future ABS work in the nation.

Outcome 1 Indicators and Targets: The indicators and targets under Outcome 1 conformed to the SMART criteria. Bio-prospecting was strengthened under this component. The knowledge and technology transfer have also been particularly strengthened under this component. One of the targets was to establish one screening facility for selecting and storing active compounds and this was established at the national level at the University of the South Pacific. Three screening facilities were established.

The laboratory facilities have been equipped with the "state-of-the-art" hardware, software and know-how) equipment. In addition, there is an increase in level of national capacity (more than 14 people, 11 people are Fiji nationals) to undertake scientific surveys on sample collections, apply chemical and microbiological techniques, generate bioassays and manage sample collections. There were more than 30 active compounds that were purified and their structures elucidated during the project period. However, the relevance of having a lead compound discovered as an indicator during the project timeframe was questionable as this is a bio-prospecting project and it is highly unlikely that this could have been achieved during the project lifespan.

Outcome 2 Indicators and Targets: There were more than 16 Free Prior Informed Consent forms that were signed by the communities for project bio-discovery process and for project development during joint missions with project partners and also during field visits for marine

sample collections. The guidelines established were mutually agreed and legal and customary protocols were followed that were consistent with the Traditional Knowledge and Expression of Culture Act. These agreements, guidelines and processes were undertaken to satisfy the Nagoya Protocol and the existing laws of Fiji.

Under this Outcome, the target to have at least one mechanism to facilitate the distribution of benefits was discussed with stakeholders and partners during community meetings and with the Ministry of I-Taukei Affairs (MTA) during joint missions to communities. There is an existing mechanism identified on royalties being paid to the Ministry of I-Taukei Affairs (MTA) to benefit conservation and communities. Discussions have been undertaken on monetary and non-monetary benefits received by the State and the local communities for biodiversity conservation. Draft policies have been submitted to provide guidelines on bio-prospecting policies for communities, government and other relevant stakeholders. The indicator is unclear as there are no monetary and non-monetary benefits received by the State and communities from bio-prospecting. The target for this indicator is also questionable because it is not clearly defined.

Outcome 3 Indicators and Targets: Under this component, there has been a good level of understanding among government officials (more than 80%) and community members visited (90%) of ABS principles, procedures and agreements. Further, an electronic database was established at the University of the South Pacific and this has generated information on data handling protocols, tracking of samples from collection sites, scientific results of compounds, taxonomic information etc. More than 14 scientists (including female scientists) have been trained in drug or agro-chemical discovery, diving to collect samples, microbiological analyses, chemical analyses, etc. Under this component, legislation and supporting policy for ABS have been reviewed and harmonized with the Environment Management Act, 2005 and the Traditional Knowledge and Expressions of Culture Act, 2013. The target to include the formation of the competent national authority on ABS in Fiji was questionable. Further consultations are required in the future to establish the competent national authority on ABS and also to institutionalize the Nagoya Protocol obligations under the relevant agency. The process of using existing administrative systems to document processes and procedures for permit access, designate checkpoints, produce certificate of compliance, clear roles and responsibilities, standards of screening and approval processes amongst stakeholders and government agencies are currently

being undertaken. Further discussions with the stakeholders are required to satisfy the provisions of the Nagoya Protocol.

Outcome 1: Discovering active compounds for pharmaceutical and agrochemical uses

The Institute of Applied Sciences (IAS) through the Center of Drug Discovery and Conservation (CDDC) implemented Component 1. Sampling of marine products were undertaken with external partners from Suva, Nacula in the Yasawas, Ono Islands in Kadavu and from Beqa Island. The FPIC consultations also occurred in those communities and those islands. Samples were processed and screening of samples were undertaken with collaborating partners. Natural products isolation and purification ere also undertaken. Equipment were procured from overseas. There were also new collaborations with external partners to fill in technology gaps.

All these activities require full-time engagement of staff members. The FPIC and sampling for example required logistical support and coordination between the various participating stakeholders. Processing of a sample can take up to a month to purify, seed, culture and extract while purification of an active compounds can take several months. Staff members have been engaged on a full time basis in the generation of databases of extracts library and generation of databases on the chemical library, FPIC visit and field collections, procurement of equipment and the continual engagement with international collaborators.

Supporting evidences:

- FPIC reports for each joint mission show supporting evidences of work undertaken in communities
- There were also evidences of work undertaken contained in the application of extracts export permits
- Memorandum of Understanding (MOU) showed evidences of work
- The NMR of pure compounds data also showed evidences of compounds extracted to date
- Consultant reports were evidence undertaken on policies and agreements
- Technical reports, videos, photos and websites showed evidences of scientific work achieved to date and also evidence of field trips

Output 1.1 Scientific surveys undertaken on bio-chemicals from the coastal environment of Fiji

Good practice processes of scientific surveys were documented. Scientific surveys have been undertaken on bio-chemicals from marine environment of Fiji. The existing procedures for obtaining permits from MTA to access project communities/sites have been followed. MTA has been assisted in vetting some of the bioprospecting related applications from overseas-based research institutes and researchers. All samples and specimens collected have been labelled and taxonomically identified and delineated to genus and to species level where possible. This information has been added to the database of samples collected in Fiji for the last 10 years.

Processing of new and existing samples: Marine invertebrate samples previously collected in Namarai were extracted giving a total of 63 invertebrate extracts. For microbial samples, a total of 835 isolates were preserved from which 372 extracts were prepared. A total of 435 extracts were prepared from both micro and macro samples. A total of isolates and extracts prepared gave a grand total of 1494 extracts to date.

Brine Shrimp Toxicity Assay (BSA) was conducted as a surrogate of cytotoxicity for potential anticancer drugs. All of the extracts were sent to ICBG collaborators for assessments of antimicrobial activity and also for additional bioassays. Disease bioassays performed by ICBG collaborators included antimicrobial (drug resistant microbial strains), for cancer, tuberculosis, malaria, *Wollbachia* (Genus of bacteria involved in onchocerciasis and elephantiasis), hook worm (parasitic blood sucking roundworm) and neurodegenerative and psychoactive diseases.

Output 1.2 Screening facility for selecting and storing active compounds is established at the national level

Bioassays: The bioassay testing of samples was done in-house. Testing was done against the following in-house panel of drug resistant pathogenic microorganisms for potential new antibiotics. These were as follows:

MRSA- Methciliin-Resistant *Stapylococcus aureus*
RRSA- Rifampicin-Resistant *Stapylococcus aureus*
WTSA – Wild Type *Stapylococcus aureus*
VREF – Vancomycin-Resistant *Enterococcus faecium*
ARCA – Amphotericin-Resistant *Candida albicans*
WTCA – Wild Type *Candida albicans*
MDREC – Multi-Drug-Resistant *Escherichia coli*

Procurement of equipment for screening facility: Major requisitions were undertaken and these were for solvent, molecular chemical purchase and equipment purchase. A -80° Celsius freezer for long term storage of libraries was purchased. This has enhanced the work output of Component 1 by increasing its long term storage capacity and maximum production of strains and has acted as a conduit for a national library of beneficial microorganisms in Fiji.

Assessment of Screening Facility and Database System

- Assess the current status of screening facility and document Standard Operating Procedures (SOP) undertaken
- Data compilation is ongoing; so far there are 106 active micro extracts from the total collections. This is based on bioassay results that have been received from overseas collaborators and the number is expected to increase as more results are still coming.
- Information in the data system includes but not limited to the sample source, sampling sites, number of strains/isolates/invertebrates, morphological descriptions, number of total extracts collected, number of active extracts and in the near future will also include taxonomic identification of strains/invertebrates.
- SOPs are continually renewed and ongoing.
- Recruitment of an IT staff was conducted in November and the staff has joined IAS as of January 2018.

Ongoing Activities

- Production of extracts and these included seeding, mass culturing, extraction, shipment, bio-assays.
- Identification of at least 20 active strains through DNA sequencing which involved plating, retesting, DNA extraction, shipment overseas and DNA sequencing overseas.
- Production of extracts from macro samples collected from various sites.
- Compound purification.
- Data compilation and management.
- Three major procurement of laboratory equipment, apparatus and chemicals.
- Other daily and weekly laboratory tasks as scheduled by the project team.
- Planning and arrangement of a *microbiology workshop*

Output 1.3 Capacities for state of the art analytical chemical techniques, disease bioassays, data handling and collection, culture and long-term storage of samples installed in Fijian institutions

Increased Capacity of Laboratory Facilities Installations of the following:

Chest Freezer, Autoclave, Camera, Antibase chemicals database, Mnova software for NMR analysis, Ultra-Low Temperature Upright Freezer, Rotary Evaporator with Vertical Condenser, Flask glass condensation for Speed Vac, Buchner funnels, Deuterium lamps for HPLC and consumable to ensure needed for production of strains, extracts and chemicals.

Collaborations to Fill CCDC Technological Gaps: New collaborations included partnerships with Associate Professor Rohan Davis (Griffith University, Australia) Institute of Applied Sciences Laboratory Services Unit (University of the South Pacific), Chemistry Division, School of Biological and Chemical Sciences (University of the South Pacific), World Data Center for Micro-organisms (Institute of Microbiology, CAS, Beijing, China), Professor Joe Pogliano, Division of Biological Sciences (University of California, San Diego, US) and Gifu University (Japan)

Tour Visit to the Laboratory Facilities by Stakeholders: The Centre for Drug Discovery and Conservation (CDDC) of the Institute of Applied Sciences hosted the Global Environment Facility (GEF)-Access Benefit Sharing (ABS) project stakeholders to tour analytical laboratory facilities. The tour visit was an outreach to donors and stakeholders to showcase the laboratory work undertaken by CDDC staff after samples were collected from the field.

A major outcome of the GEF-funded Fiji ABS Project was to build capacity of Fijian institutions to perform natural product drug discovery and development activities in the country. One of the outcomes of the Fiji ABS Project was to discover and develop new pharmaceuticals from natural sources and to conserve the resources from which these pharmaceuticals were derived. The GEF funded Fiji ABS Project built on activities implemented by a bio-discovery initiative known as the International Cooperative Biodiversity Group (ICBG) in Fiji. The project also addressed gaps in working with the local and national governments in securing access to marine samples and establishing benefit-sharing protocols and mechanisms that support in-country research activities.

Output 1.4 In-country technology and competencies applied to identify 30 active compounds which are purified and their structure elucidated. ***Bioassay:*** Bioassay guided isolation of the active compounds from several active extracts is ongoing. A number of staff members and students conducted chemistry related research projects on samples that had interesting biological activity from the screening program. The research is on-going and the status of research and some of the bioactive compounds isolated have been collected. Also, chemical processes to process and isolate a pure compound can take months to complete. The microbial processes are also quite laborious.

Output 1.5 At least one lead compound is identified for commercial purposes: The project was ambitious to try and discover at least one lead compound**.** This is a bioprospecting project where partnerships and collections have to be developed and undertaken. This output should have been revised and eliminated from the project during the inception workshop.

Outcome 2 Operationalization of ABS Agreements and Benefit Sharing

There are three Memorandums of Understanding (MOUs) between government agencies and the Institute of Applied Sciences have been developed and are with the Fiji Solicitor General's Office for vetting. There has been recent review of existing Trust Fund mechanism for ABS work by consultants and this needs to be implemented. The FPIC processes have also been documented for future reference for relevant partners.

Supporting Evidences:

- Memorandum of Understanding (MOU) between government agencies and relevant partners
- FPIC forms
- FPIC guidelines
- Review documents of Trust Fund mechanisms for ABS work
- FPIC agreements

- Consultant reports on policy documents, agreements and guidelines

Output 2.1 ABS agreements, interim guidelines, negotiation procedures and legal/customary protocols developed in accordance with the Nagoya Protocol and the Traditional Knowledge and Expressions of Culture Act: The capacity building within government departments (at all levels) particularly on ABS related issues have been done. There has been MOUs (Memorandum of Understanding) between the Ministry of Fisheries, Ministry of Forests, Ministry of I-Taukei Affairs, Ministry of Environment and the Institute of Applied Sciences (University of the South Pacific). Three MOUs have been submitted to the Fiji Government's Solicitor General's Office (SG) for review. These MOUs will guide the bioprospecting research activities of the Institute of Applied Sciences and field collections in Fiji.

Output 2.2 Benefit sharing mechanism for ABS strengthened by use of Trust Fund mechanisms such as that to be established for the FLMMA: A review of existing Trust mechanisms has been undertaken and this work work will be completed by consultant before the project ends.

Outcome 3. Increased national capacity to operationalize Nagoya Protocol Obligations

There has been increased awareness on the ABS national capacity to operationalize the Nagoya Protocol Obligations through the awareness workshops for three joint missions with the partners for the Fiji ABS Project. These joint missions have been undertaken jointly with the Ministry of I-Taukei Affairs, Ministry of Environment, Ministry of Fisheries and the Institute of Applied Sciences.

The awareness workshops have been undertaken in three districts of Nacula in the Yasawas, Ono in Kadavu and Raviravi in Beqa. These districts are located in three Provinces of Ba, Kadavu and Rewa. The awareness workshops have been carried out on the FPIC processes, marine sample collections, ABS information. FPIC awareness materials have included visuals designed to assist stakeholders in their presentations. Training has increased capacity of stakeholders and this training has included dive training, microbiological training and taxonomic training. Other relevant workshops on NMR analyses, OHS and good laboratory practices have taken place.

Supporting Evidences:

- Awareness workshop reports
- Field trip reports
- Scuba Diving Training
- Joint Mission reports
- FPIC reports, awareness materials and presentations
- Reports on University of the South Pacific websites
- Technical reports on scientific training
- PIR reports
- Inception workshop reports
- Training workshop reports
- Consultant reports

Output 3.1 National law and implementation guidelines on ABS developed: The FPIC processes have been implemented and awareness workshops on the FPIC processes have been conducted in over 17 communities and three districts and three Provinces. The implementation guidelines for the FPIC processes have been documented for future reference and for formulating the implementation guidelines.

Output 3.2 Administrative systems / Procedures for ABS agreement negotiations between the government and relevant parties and institutions strengthened: The procedures for ABS agreements are now in place. The permitting process have been established and have also been documented in relevant reports and specifically for the FPIC process. The permitting process will now have an agreement process in which stakeholders can agree to for any ABS permitting in the country. The permitting process will have to be clearly defined in the agreement process.

Output 3.3 A monitoring and evaluation system generated to monitor application of the laws, policies, guidelines and agreements: Policies of ABS, agreements and guidelines for ABS were developed during the project. The consultants during the extension period for the project developed policies for bioprospecting for ABS work in Fiji. Discussions are still being held with partners on the monitoring evaluation system for ABS in Fiji. A 3-day retreat was held in April to bring stakeholders together to discuss ABS policies, agreements and guidelines relevant to ABS in Fiji.

Output 3.4 Training programme developed and institutionalized on bio- discovery techniques in national laboratories

- Dive Training
- Microbiology Training
- Workshops and Seminars
- Taxonomic Training Workshop

Dive training was facilitated for 6 people (3 males and 3 females). The dive training was mainly for sample collections. Research students were specifically chosen to undertake dive training for the project. The Microbiology training workshop on techniques and bioassays were conducted for laboratory assistants (3 females and 1 male). Workshops and seminars were organised and attended by staff and students for Capacity Building in Microbiology and Chemistry of marine samples. An NMR workshop was conducted to introduce researchers and students to NMR Analysis. A seminar on Drug Discovery by PharmaSea, a UK based drug discovery company, was also conducted. There were two further workshops on NMR and MS analysis of natural products for staff and students. Staff also organized seminars on OHS procedures; on Microbiology Analysis; and good laboratory practices; and Advance 2-Dimensional NMR interpretations. The Institute of Applied Sciences (IAS) held a Training Workshop on Taxonomic Identification of Marine Invertebrates. The workshop focused on developing skills in Taxonomy and also identifying specimens.

Output 3.5 Awareness programme for national stakeholders on Nagoya Protocol obligations

Three joint missions were undertaken with major stakeholders and these are listed here. The TE consultant sighted reports on these joint missions. In addition, the Ministry of I-Taukei Affairs (MTA) and the Institute of Applied Sciences (IAS) also conducted independent awareness raising through MTA's cultural mapping and through IAS's collection trips at various locations and communities within the country.

- First Joint Mission on Free Prior Informed Consent (FPIC) in the Yasawas – 6 communities
- Second Joint Mission on Free Prior Informed Consent consultation on Beqa Island – 3 communities
- Third Joint Mission on Free Prior and Informed Consent for research and marine sample collections in the Tikina of Ono, Kadavu – 7 communities

3.3.2 Relevance

Rating for Relevance of Project: Relevant

The project is relevant to Fiji's national priorities. It is particularly relevant to Fiji's commitment and obligations to the United Nation's Convention of Biological Diversity. It also contributes to the Nagoya Protocol which was signed by Fiji in 2011. The project developed relevant instrument to strengthen Fiji's draft ABS policy of 1997 which is aligned to Fiji's National Biodiversity Strategic Action Plan (NBSAP) of 2007.

Fiji's NBSAP (2007, as amended in 2010) developed a Guiding Framework for ABS. The NBSAP stated that "The intellectual property rights to biodiversity, genetic resources, bio-derivatives and knowledge about biodiversity be recognised and that appropriate mechanisms adopted to ensure, henceforth, fair remuneration, credit or other benefits are received by local communities, the discoverer or developer, and the nation." Fiji ABS project's three Outcomes, Outputs and Acttiities are therefore relevant to Fiji.

The Sustainable Development Bill of 1997, contained sections on bioprospecting that is useful in formulating relevant institutional systems for ABS in Fiji. The Ministry of Environment and the ABS National Steering Committee had agreed that these three key documents will be the basis of the formal ABS policy development and legislation in the country and to align it to the Nagoya Protocol which Fiji has ratified in 2011.

The draft policy developed by Fiji in 1997 have been used in this project to facilitate access to Fiji's genetic resources for research and biodiversity conservation. The ABS enabling environment framework has been particularly strengthened because of this project. Knowledge and technology transfer on ABS have been relevant to all parties and especially government agencies, FLMMA, academic institutions and communities.

The project is also relevant to other Pacific Island Countries and Pacific Regional Organizations that support the Nagoya Protocol. The project's lessons learned is relevant to the ABS interventions in Micronesia and other Pacific Islands on ABS Capacity Development Initiative. It is also relevant to the UNEP – GEF medium size project 'Ratification and Implementation of the Nagoya Protocol in the countries of the Pacific,' a project delivered in partnership with SPREP.

3.3.3 Effectiveness and Efficiency

Rating for Project Effectiveness: Moderately Satisfactory (S)

The project has effectively delivered Outcome 1 and especially Outputs 1.1, 1.2, 1.3 and 1.4. Output 1.5 was not delivered as expected. It should be but quite understandable as this particular Output 1.5 relied heavily on the progress of the other outputs in Outcome 1. The outputs of Outcome 1 have, therefore, contributed to significant progress towards the achievement of Outcome 1 although Output 1.5 have experienced severe delays.

Outcome 1 and its outputs have been effectively implemented by the Institute of Applied Sciences through its scientific work and through its training and awareness programs. The screening processes have been established and scientific surveys have contributed to enhanced understanding of ABS work in Fiji. The partnerships with international universities have raised the level of competency in the area of discovery of natural compounds and bioassays. These scientific processes are laborious and involved long hours of laboratory work for processing samples.

Three screening facilities were established for the nation for antibacterial, antifungal and anticancer assays. There were also storage facilities for storing active strains (-80 degree freezers) and for storing active compounds and collection samples (-20 degree freezers). A DNA laboratory was also equipped and established for natural products identification processing. Eight pure compounds were purified (5 purified and identified and3 purified but yet to be identified). There were also 14 scientists trained undertake analytical chemical analyses, disease bioassays, data handling and collections and storage of compounds. Out of the 14 scientists, 11 were Fiji nationals.

The project has been effective in delivering Outputs 2.1 and 2.2 for Outcome 2. Some of these outputs were delivered by consultants during the extension period. The FPIC processes have been documented and the permitting processes have been established after further consultations with stakeholders. The ABS ad-hoc policies were also reviewed by consultants during the project extension period.

Outcome 3 has been delivered effectively on training and workshops in relation to Outcome 1 and

during field visits. The awareness on FPIC and during field collections have been effectively implemented. These have specifically contributed to the enhanced capacities of communities and government agencies to have a good understanding of the ABS work in the country.

The Project Board have strengthened collaborations with partners and community representatives. The Fiji ABS had previously a weak Project Board and the Project Board was strengthened during the extension period because of the entry of higher decision makers in government (Permanent Secretary of Environment and Permanent Secretary of I-Taukei Affairs).

Rating for Project Efficiency: Satisfactory (S)

The project has been delivered efficiently and in accordance with the project budget. This has led to better delivery of results for Outcome 1 and its outputs. The overall assessment of the TE is that the Fiji ABS Project has been delivered efficiently for Outcome 1 and its outputs. The scientific work has been established and laboratory facilities are one of the best in the Pacific Region. The capacities of researchers to carry out scientific surveys, scientific taxonomic work and laboratory testing and analysis have been implemented efficiently with its dedicated and committed staff. The actual expenditures for Outcome 1 or the lifetime of the project was 45%. The budget had an allocation of 68% of the total budget for Outcome 1.

Consultants were hired for Outcomes 2 and 3 during the project extension to undertake work on the policies and review some of the project work that was previously not implemented. The inputs from the consultants were adequate and necessary and consultants have been utilized effectively as part of the project interventions during the extension period. Consultants have also been hired to do desktop review of ad-hoc policies on ABS, review the permitting processes and also the FPIC processes.

The extension period was important for the project as 50% of the total budget was spent during the extension period. The delivery rate was 90%, 75% and 63% respectively for Outcome 2, 3 and for project management during the extension period. Although, there has been very low delivery rates in the early years of the project.

3.3.4 Country Ownership

Country ownership for the Fiji ABS project has been highly satisfactory. The project design has been consistent with Fiji's commitment to several international conventions such as the Convention of Biological Diversity that Fiji signed in 1992. The Nagoya Protocol was also signed by Fiji in 2010. As part of the Fiji NBSAP (2007), the Guiding Framework for ABS was developed. The three Outcomes of this project have been relevant to the NBSAP.

Senior government officials have been actively involved in the project board and in decision-making processes. More than 16 communities have supported the ABS project for workshops and collections of marine sample from their fishing rights areas. Their awareness, understanding and involvement have also improved.

Knowledge and technology transfer have also taken place at the Institute of Applied Sciences at the University of the South Pacific, a prime research institution in Fiji and in 12 countries of the Pacific Island countries. Knowledge has improved on ABS in Fiji and a "state-of-the-art" laboratory has been established in the country to undertake ABS activities and this can be replicated in other research laboratories and institutions in Fiji.

Further, policies, agreements and guidelines have increased since the ABS project was implemented. Although some of these policies, guidelines and agreements are still in draft form and will need to approval and consultations with various stakeholders, there has been major progress to date on ABS work in Fiji. One of the major highlights of this project is that it incorporated the outcomes of a 2-day workshop on community consultation forum on ABS in 2010 into the project design to refine the Outcomes, Outputs, targets and indicators for the Fiji ABS project. Therefore, this project addressed the needs for ABS work in Fiji and the country took ownership in advancing ABS work in the country.

3.3.5 Mainstreaming

A gender assessment for the project was not undertaken although reporting has specifically provided sex-segregated data for the workshops and training. Involvement of males and females in all aspects of the project has been reported as sex segregated data. The project stakeholders during the workshops and training have been well represented by both men and women.

The awareness raising on ABS has provided knowledge on ABS to both men and women. The co-management of conservation sites by both men and women as users of those sites have been highlighted during community meetings. The Fiji ABS project has not specifically targeted females or males but both males and females have been targeted during dive training workshops which is a male dominated activity. In terms of communities' participation during FPIC meetings and awareness raising on ABS, all men, women and youth were targeted.

Apart from the ABS project achievements and Fiji's obligations to the CBD requirements, the project has ensured the protection of indigenous traditional knowledge. It has also ensured an equitable and fair sharing of benefits from the development of natural resource products because of policies in place by the ABS project. In the past, there was no protection of indigenous rights to traditional knowledge on the development of nature-based products. The bio-discovery activities are also consistent with the Nagoya Protocol and will contribute to significant socio-economic benefits to communities in the future. The equitable distribution of benefits to communities and government has been addressed through the development of capacities in government and in the indigenous communities for ABS.

As stated in the PIR 2017, it is too early to assess the contribution of the project to improve people's livelihood. The discovery of nature-based compounds and the engagement of the private sectors to assist the project in achieving its impact on the livelihood of people have yet to be realized. It is relatively early for the Fiji ABS project to make significant contributions to people's livelihood. However, the project has contributed significantly to people's knowledge on ABS and the processes that need to be followed to prevent exploitation of the local communities and their resources.

Significant contributions have been delivered by the project on the knowledge and technology

transfer of ABS in Fiji. The "state-of-the-art" laboratories facilities have been established and the human resources capacity have been strengthened. Therefore, the institutional capacities have been enhanced at the Institute of Applied Sciences (IAS) at the University of the South Pacific. Facilities have been upgraded and new equipment have been purchased to sustain future research capability. The library of extracts and storage facilities for microbiological and marine samples are in place. The laboratory facilities are the best in the South Pacific and capacities among students and staff have been strengthened.

Progress made to date in the ABS process has supported governance. The ABS agreements and permitting processes has guaranteed that customary and cultural protocols are used through the Ministry of I-Taukei Affairs to ensure that communities are engaged in all processes including negotiations and collaborations as equal partners in the development of nature-based products.

The extraction activities for collection of samples from the marine environment or from the terrestrial environment have ensured that relevant measures are in place to protect the biodiversity of natural resources and not to over-exploit them. These have been done in accordance with the permitting processes and approval issued by the Ministry of Environment.

The partnerships between relevant government ministries (Ministry of Environment, Ministry of I-Taukei Affairs and Ministry of Fisheries) have significantly improved during the three-year period of the project implementation and particularly after the three joint missions for the FPIC processes (awareness processes and collections of marine samples). The FPIC processes have been documented to help sustain the process in the future.

3.3.6 Sustainability

Rating for Overall Likelihood of Sustainability: Likely (L)

The TE has rated the Overall Likelihood of Sustainability for this project as Likely (L). The main reason for this is that there are negligible risks that outcomes will be sustained after project closure. Furthermore, work on Fiji ABS will continue at the Institute of Applied Sciences at the University of the South Pacific where laboratory facilities have been established.

One would expect the outcomes 2 and 3 and their outputs to have moderate risks in sustaining them after the project closure because these are already in place at the various institutions. The adaptive approach during the extension period and the TE recommendations should also help the project to be sustained and have directions in the future.

The project was designed in close consultation with key stakeholders (government agencies, NGOS, communties and indigenous people) through a two-day forum on ABS in 2010. It has the unwavering support of the Government of Fiji through the Ministry of Environment and the Ministry of I-Taukei Affairs. Both the Permenanet Secretaries of the two Government Ministries are Project Board Members.

The ABS project has successfully engaged relevant government agencies, research institutions and indigenous communities in ABS work in Fiji through this project. The project has also focused on the benefits of conservation, sustainability and equity in terms of biodiversity resources for the resource owners. Regulations, agreements, policies, good practices, lessons learned and national and international negotiations are focused to guarantee environment sustainability.

Therefore, the ratings of the TE is addressed through several principles of sustainability which are rated and discussed separately here. The sustainability risks listed are environmental risks, instutional and governance risks, socio-political risks and financial risks.

Environmental sustainability

Rating for Environment Risks to Sustainability: Likely (L)

The ABS project has made contributions towards conservation and the sustainable use of globally significant biodiversity in Fiji. Future ABS work will help Fiji's national contribution towards the three objectives of the CBD (Objective 3 on Access and Benefit Sharing). The project will contribute immensely; it will add value to Fiji's natural resources' sustainable management.

Environment Impact Assessment (EIA) will be undertaken for rapid assessment at all sites where all bio-prospecting activities will occur. This system of conducting EIA is in existence for logging and other extraction activities such as gravel extraction is monitored by the Ministry of Environment and the Ministry of I-Taukei Affairs for EIA application, extraction monitoring and payment of royalties to landowners and fishing right owners.

The extraction activities for collection of samples from the marine environment or from the terrestrial environment will ensure that relevant measures are in place to protect the biodiversity of natural resources and not to over-exploit them. These will be done in accordance with the permitting processes and approval issued by the Ministry of Environment.

Financial sustainability

Rating for Financial Resources Risks to Sustainability: Likely (L)

The project has advanced technological capacities in Fiji for the exploitation of genetic resources and for national and resource owners' stakeholders to participate in the extraction of genetic resources in a sustainable way. The financial risks are low because four government agencies will be supporting and resourcing the application process, monitoring and royalty payments. The communities will also be able to contribute to the sustainable exploitation and conservation of resources through conservation.

The ABS project has strengthened the partnerships between government agencies and there is political will for this national initiative to have financial allocation of government budgets for

biodiversity conservation through the Ministry of Forests, Ministry of Fisheries and Ministry of Environment. This will pose a low financial risk for resourcing ABS work in Fiji.

There are also international grants for conservation work and financial resources for communities that are available through the FLMMA Trust Fund and also through the GEF-Small Grants Program. International conservation NGOS are also located in Fiji and could provide grants to local communities for conservation and ABS work. In essence, the two identified sources of funding are international bilateral and multi-lateral funding and national funding from government. Private businesses and communities can also provide funding.

Institutional Framework & Governance Risks to Sustainability

Rating for Institutional Framework & Governance Risks to Sustainability: Likely (L)

The institutional capacities have been enhanced at the Institute of Applied Sciences (IAS) at the University of the South Pacific. Facilities have been upgraded and new equipment have been purchased to sustain future research capability. The library of extracts and storage facilities for microbiological and marine samples are in place. The laboratory facilities are the best in the South Pacific and capacities among students and staff have been strengthened.

The partnerships between relevant government ministries (Ministry of Environment, Ministry of I-Taukei Affairs and Ministry of Fisheries) have significantly improved during the three-year period of the project implementation and particularly after the three joint missions for the FPIC processes (awareness processes and collections of marine samples). The FPIC processes have been documented to help sustain the process in the future. This has helped sustain FPIC processes after the documentation of the process and also after the guidelines were established. This has helped sustain the ABS work in Fiji for the future.

The policies developed by consultants and stakeholders during the three-year period for the Fiji ABS project has further enhanced the sustainability of ABS work in Fiji. In particular, the policies

developed have been submitted to the relevant Ministry in consultation with other relevant Ministries to be taken to Cabinet for endorsement. The permitting process has been also documented and reviewed and guidelines developed. All these policies and guidelines and processes established have helped sustained and will support ABS work in to the future.

Socio-Political Risks to Sustainability

Rating for Socio-Political Risks to Sustainability: Likely (L)

Apart from the ABS project achievements and Fiji's obligations to the CBD requirements, the project will also ensure the protection of indigenous traditional knowledge. It will also ensure an equitable and fair sharing of benefits from the development of natural resource products. Currently, there is no protection of indigenous rights to traditional knowledge on the development of nature-based products.

Progress made to date in the ABS process will support the likelihood of socio-political sustainability. In addition, the ABS agreements and permitting processes will guarantee that customary and cultural protocols are used through the Ministry of I-Taukei Affairs. This will also ensure that communities are engaged in all processes including negotiations and collaborations as equal partners in the development of nature-based products.

It is envisaged that the bio-discovery activities will be consistent with the Nagoya Protocol and will contribute to significant socio-economic benefits to communities. The equitable distribution of benefits to communities and government will be addressed through the development of capacities in government and in the indigenous communities.

3.3.7 Impact

Rating for Project Results Impact: Significant (S)

The impact of the project was assessed during stakeholder consultations and interviews during the TE, and the impact was also assessed from documents reviewed. The project has shown an increase in capacities for the discovery of active compounds for pharmaceutical and agricultural uses. Scientific laboratory facilities for scientific work have been established and enhanced with new equipment and facilities. The capacities of researchers and students have increased for analytical chemical techniques, bioassays, data handling, collections and storage of marine samples have been built and implemented. Taxonomic works and databases for library of extracts and collections have been undertaken and the facilities are in operation.

The training in scientific work, dive training for marine collections, microbiology training and awareness have been implemented successfully. The project has visibility through the Institute of Applied Sciences websites and the awareness on ABS have been undertaken successfully through three joint missions for FPIC processes and awareness on ABS in the country. Marine collections have also been undertaken during the awareness and monitoring have been done jointly by stakeholders from the communities, Institute of Applied Sciences, Ministry of I-Taukei Affairs, Ministry of Environment and the Ministry of Fisheries.

4.0 Conclusions, Recommendations and Lessons learned

4.1 Conclusions

Rating for Overall Project Outcome: Satisfactory (S)

Overall, the project has progressed well towards its objective of discovering nature-based products and building national capacities in facilitating technology transfer on mutually agreed terms, private sector engagement and investments, and conservation and sustainable use of genetic resources. These outputs have been successfully implemented for Outcome 1 which is the main Outcome budgeted (USD$600,000) for this project. The national capacities have been built and facilities and processes have been established.

The capacities of Fiji government agencies on ABS have been increased through the participation of the Ministry of Environment, Ministry of I-Taukei Affairs and the Ministry of Fisheries. Awareness on ABS have also increased in communities where workshops have been undertaken and also where collections of marine samples have been undertaken. The FPIC processes have been introduced and processes facilitated during the awareness workshops in over 17 communities in three districts (Nacula in the Yasawas, Ono in Kadavu and Raviravi district in Beqa) and three Provinces (Ba, Kadavu and Rewa).

There has been slow progress in the outputs of Outcome 2, but the hiring of consultants during the extension period of the project delivered some of the outputs for this Outcome. In particular, the consultants have undertaken consultations with stakeholders and have reviewed some relevant documents on stakeholder analyses and policies on ABS. Some processes on permitting and FPIC processes were also documented and were reviewed by the consultants during the extension period of the project.

Further progress has also been achieved under Outcome 3 with training and workshops. These have been mainly at the Institute of Applied Sciences on the marine invertebrate taxonomy, diving training for collecting samples and microbiological workshops. All partners had to raise awareness on ABS in communities during joint missions to field sites.

The project assumptions have remained valid and the lack of capacity, lack of plans and policies,

lack of coordination and lack of awareness on ABS have been adequately reflected by the Fiji ABS Project. The project design and approach has responded well to government and donor needs, and to local community needs.

Overall, the amount of planned outputs has been adequate for Outcomes 1, 2 and 3. For Outcome 1, five outputs have been implemented well. Outcome 2 has two outputs and Outcomes 3 has five outputs and these were implemented as expected.

There have been delays in project execution because of the weakness in project decision making in the Ministry of Environment. The Project Management Unit (PMU) was not established earlier on during the project implementation. The Project Coordinator was not recruited and was only working part-time for the project. A Project Assistant was able to assist in the project implementation. Further project delays were on the implementations of Outcomes 2 and 3 because of problems with the executing agency working together on these two Outcomes with the senior beneficiary, the Ministry of I-Taukei Affairs (MTA).

The project has also been suitable and appropriate with time and resources available. The comprehension of the project concept by the ABS Project Board members, the implementing agencies members and the local communities interviewed is considered to be satisfactory.

Project monitoring has been strong although there were only two PIR reports for 2016 and 2017. Project reporting has been undertaken in a timely manner and have raised some issues that was corrected in the Fiji ABS Project. Project reporting on Outcome 1 has been extraordinary and has been comprehensive. The Fiji Government has provided an office space for the Project Assistant.

4.2 Recommendations

The following section provides recommendations for actions to reinforce initial benefits from the project or to correct issues of design, implementation, monitoring and evaluation of the project.

Continue to Build National Collection for Extract Libraries & Microbial Strain Libraries

The National collection for extract libraries and microbial strain libraries have been established at the Institute of Applied Sciences at the University of the South Pacific from the Fiji ABS Project. This will need to continue and there is an urgent need to have the FPIC process and also the ABS permitting process to be both in place in order for these activities to continue in the future. There will be challenges if the processes and agreements are not established and clearly defined. The proposed responsible parties for this recommendation are the Institute of Applied Sciences and the Ministry of Environment.

Continue building the National Database for Tracking Samples and Historical Collections and Site Specific Samples

The National Database for Extracts and for Microbial Strains, the National Database for Tracking samples (Herbarium and Marine Invertebrate Collections), historical collections and site-specific samples have been established and are currently operating at the Institute of Applied Sciences at the University of the South Pacific.

There has to be an agreement formulated to decide as to who can have access to the National Database and Microbial Strains and the relevant arrangements that need to be formulated to access such a database by government agencies. The National Database for Natural Compound Extracts has yet to be established and should be established in the near future. The proposed responsible parties for this recommendation are the Institute of Applied Sciences and the Ministry of Environment.

Continue building the National Sample Collections eg. Herbarium and Marine Invertebrate Collections

The herbarium and marine invertebrate collections are currently located at the Institute of Applied Sciences at the University of the South Pacific. These collections need to be continued as national sample collections for Fiji ABS project. A MOU needs to be in place for Fiji government agencies

to have access to the collections. The proposed responsible parties for this recommendation are the Institute of Applied Sciences and the Ministry of Environment.

Continue national and international collaborations on Access Agreements to Database of Library of Extracts and Microbial Strain Library

The collaborations of national and international collaborators need to be continued on access agreements to database of library of extracts and microbial strain library. The database will be useful for ABS work in Fiji and especially for researchers and communities. A specific requirement for research permit for ABS work will be to contribute to the library of extracts and microbial strain library. The proposed responsible parties for this recommendation are the Institute of Applied Sciences and the Ministry of Environment.

A database to be created on Natural Compound Extracts

A newly created database will be required to deposit all information on natural compound extracts for all ABS work in Fiji. The proposed responsible party is the Institute of Applied Sciences.

The Permitting Process are to be Streamlined and a Clearing House Created for different categories of Permits

The permitting process needs to be assessed and streamlined. Guidelines need to be formulated and a Clearing House created for different categories of permits and fees for the permits. There is no size that fits all. Permit fees must be aligned to the permitting guidelines and categories for different permits must be defined clearly. The proposed responsible parties are the Ministry of Environment, the Ministry of I-Taukei Affairs, the Department of Immigration and the Ministry of Education.

Further consultations on the FPIC Process for legal drafting are to be undertaken and submitted to Cabinet for approval

The Free Prior Informed Consent (FPIC) process has been carried out in three districts and three Provinces in Fiji. The documents for the three joint missions need to be compiled and the processed needs to be streamlined through the Roko Tui or Ministry of I-Taukei Affairs (MTA).

Further consultations need to be done with the relevant communities and government agencies and other stakeholders. The proposed responsible parties are the Ministry of I-Taukei Affairs and the Ministry of Environment.

Legal Drafting of National ABS Legislations and Policies to be undertaken and submitted to Cabinet for Approval

The national ad-hoc ABS policy has not been further addressed in this project. However, the extension period for the project ensured that a consultant was engaged in improving the ad-hoc policy for submission to relevant authorities and to be further submitted to relevant government agency. This policy will address ABS in Fiji and provide guidelines for Fiji ABS work in the future. The proposed responsible parties are the Ministry of I-Taukei Affairs and the Ministry of Environment. Further stakeholder consultations in the three (Northern, Western and Central) Divisions on the draft policy is recommended. This is to ensure consultations and feedback from various stakeholders. This would be a pre-requisite before submitting ABS policy for clearance through the National Environment Council and to Cabinet.

Further Analyses and Consultations on the Establishment of Mechanisms for Setting Up the Trust Fund for ABS needs to be undertaken

An analysis of all current mechanisms for the setting up of a Trust Fund for ABS in Fiji has been undertaken and needs further consultations. Consultations will need to be done with partners and financial institutions in Fiji. The proposed responsible party are the Ministry of I-Taukei Affairs and the National Trust of Fiji.

Further Assessment and consultations on institutional stakeholder and the establishment of a National Competent Authority for Fiji ABS is to be undertaken

Further assessments and analysis of stakeholders that have partnered in ABS work in Fiji should be done. This will allow for a recognition of the National Competent Authority or Institution for National ABS work in the country. Consultations will also be done to discuss the National Competent Authority for the nation and agreements need to be set up for directions, roles and responsibilities for ABS work. A clearing house also needs to be in place for permitting processes, FPIC processes and for reporting and enforcement. The proposed responsible parties are the Ministry of I-Taukei Affairs, the Ministry of Environment, the Department of Fisheries and the

Department of Forestry.

Continue Commitment of Implementing Agency and Implementing Partners to ensure proactive responses to urgent interventions

There is a need to continue the commitment of Implementing Agency (Ministry of Environment) and Implementing Partners (Ministry of I-Taukei Affairs and the Institute of Applied Sciences of the University of the South Pacific) to ensure proactive responses to situations requiring urgent interventions and/or decision making.

4.3 Lessons Learned

Every Project must have a Project Coordinator Appointed

A major problem for the Fiji ABS Project is the fact that there was no Project Coordinator to oversee the project implementation. The Project Coordinator that was implementing the Fiji ABS Project was also responsible for other work in the Ministry of Environment.

Significance of Establishing a PMU for Projects and dedicated project staff

It is important to have a Project Coordinator and a Project Management Unit within the Executing Agency. It is vital to have a successful project implementation. In order to have this, a Project Coordinator, a Finance person and a Procurement person are minimum requirements for PMU establishment for any project within an executing agency. For the Fiji ABS Project, it would have been also relevant to have a Project Coordinator also attached to the Ministry of I-Taukei Affairs (MTA).

International Partnerships with Universities has strengthened complex scientific work

The partnerships with international universities have built a strong network for ABS work in Fiji and in the Pacific. The Fiji ABS has been internationally recognized through the Institute of Applied Sciences (IAS) partnerships with international universities to strengthen its scientific work and also its international recognition for ABS work.

Joint Missions to Communities for the FPIC Process were successful

The three joint missions to communities to the districts of Nacula (Yasawa), Ono (Kadavu) and

Raviravi (Beqa) communities were undertaken successful and also provided avenues for relationships between partners to be established and for partners to work together on the project. In general, the joint missions resolved some of the problems in communications between implementing partners. The FPIC processes needs to be documented for future guidelines.

Tour Visits to Laboratory Facilities and Workshops were useful and improve knowledge

The tour visit to the Institute of Applied Sciences (IAS) laboratory to observe the facilities and the screening of samples were useful and to improve knowledge for a complex process. The stakeholders and partners observed facilities and also took time to learn about the processing and screening of samples. The workshops on taxonomy and microbiology processes were also useful in improving knowledge on the ABS for the partners.

Memorandum of Agreements (MOA) for Budgets and Project Implementations of Project Activities should have been done after the Inception Workshop

An important lesson for any GEF funded project is for the Executing Agency and UNDP to develop MOA after the inception workshop with partners and consultants. For example, as a Senior Beneficiary for the Fiji ABS Project, a MOA should have been developed with the Ministry of I-Taukei Affairs. This would have helped to implement jointly Outcomes 2 and 3 with the executing agency (Ministry of Environment). Roles and responsibilities should have also been clearly defined. A Project Assistant could have been recruited to be at MTA to help coordinate project activities in partnership with the Ministry of Environment.

The Absence of MTE did not Help the Project

The MTE was budgeted in the project document and the absence of having an MTE undertaken impeded the success of the Fiji ABS Project. If an MTE was carried out, then it could have addressed some of the issues earlier on in the project implementation. The TE is too late to address any interventions for the project.

5.0 Annexes

Annex 1. Acknowledgements

The consultant wishes to thank the many people who have contributed to the Terminal Evaluation Mission through face-to-face meetings, interviews, discussions, email correspondence, skype calls and telephone conversations. I wish to express my sincere thanks to all the people who specifically set particular times during their busy schedule to meet and discuss the Fiji ABS Project.

In particular, I wish to acknowledge the support from Floyd Robinson, Vasiti Navuku and the staff from the UNDP Pacific Office in Suva Fiji. I also would like to acknowledge the useful comments from the staff from the Regional Office of UNDP in Bangkok and New York. These comments have been very useful to the TE report to address some of the issues raised in the report and also to provide evidences to substantiate and validate statements in the report.

The project staff deserve special acknowledgement. In particular, I would like to thank Michelle Baleikanacea from DOE for her assistance. I would also like to specifically thank Dr. Katy Soapi for her assistance in organizing meetings at the University of the South Pacific with her staff and this was invaluable to the TE mission. I am also grateful to the other partners (MTA) and consultants who were generous with their time to meet during the evaluation period.

Annex 2. Project Logical Framework

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: UNDAF Sub Regional Program Outcome 4 (UNDAF Outcome 1.1): (i) Improved resilience of PICTs, with particular focus on communities, th sustainable environment management, climate change adaptation/mitigation and disaster risk reduction; and (ii) To elevate to the level of State environment to strengthen economic growth, tourism development and wellbeing in general.					
Country Programme Outcome Indicators: % Terrestrial and marine areas protected (MDG7)					
Primary applicable Key Environment and Sustainable Development Key Result Area : 1. Mainstreaming environment and energy					
Applicable GEF Strategic Objective and Program: Objective 4: Build Capacity on Access to Genetic Resources and Benefit Sharing					
Applicable GEF Expected Outcomes: Outcome 4.1: Legal and regulatory frameworks, and administrative procedures established that enable benefit sharing in accordance with the CBD provisions					
Applicable GEF Outcome Indicators: Indicator 4.1: National ABS frameworks operational score as recorded by the GEF tracking tool (to be					
	INDICATOR	**BASELINE**	**END OF PROJECT TARGETS**	**SOURCE OF INFORMATION**	
Project Objective[1] **:**To discover nature-based products and build national capacities that facilitate technology transfer on mutually agreed terms, private sector engagement, and investments in the conservation and sustainable use of genetic resources	Number of lead compounds for pharmaceutical and agro-chemical uses discovered that assist with biodiversity conservation using capacity based in Fiji. INDICATORS	0 BASELINE	At least one lead compound END OF PROJECT TARGETS	ABS Fiji database SOURCE OF INFORMATION	Cor pro RIS
Outcome 1[2]**:** Discovering active compounds for pharmaceutical and agrochemical uses from organisms within the ecosystems of Fiji.	Numbers of laboratories established in Fiji and state of the art technology (hardware, software, and know-how) transferred for bio-prospecting to Fiji with assistance of private sector partners.	Nil technology to screen samples and analyse for prospect active compounds	One screening facility for selecting and storing active compounds is established at the national level.	Inspection of screening and storage facilities	Tha the com
	Level of capacities at the national level to undertake scientific surveys on bio-chemicals, apply chemical techniques, generate disease bioassays, and manage collections.	Nil capacities at the national level for chemical analysis, bioassays, sample handling, collection & storage.	10 staff in national institutions have the capacity to apply state of the art analytical chemical techniques; disease bioassays; data handling and collection, culture and long-term storage of samples.	Reports and manuals on approaches, methods, tools, applications, facilities and procedures.	Cor pilo nati sect the sect
	Number of active compounds purified and their structures elucidated during the project period.	0	30 active compounds	ABS Fiji database	Sam acti
	Outputs1.1 Scientific surveys undertaken on bio-chemicals from the coastal environs of Fiji. 1.2 Screening facility for selecting and s national level.1.3 Capacities for state of the art analytical chemical techniques, disease bioassays, data handling and collection, culture installed in Fijan institutions.1.4 In-country technology and competencies applied to identify 30 active compounds which are purified 1.5 At least one lead compound is identified for commercial purposes.				

[1] Objective (Atlas Output) monitored quarterly ERBM and annually in APR/PIR
[2] All outcomes (Atlas Activity) monitored annually in the APR/PIR

Outcome 2: Operationalization of ABS Agreements and Benefit Sharing	**INDICATORS** Number of baseline ABS agreements (prior informed consent, mutually agreed terms) for project development and the biodiscovery process.	**BASELINE** No agreed formal or informal agreements incorporating PIC, MATs, engagement protocols for ABS.	**END OF PROJECT TARGETS** At least 10 ABS agreements with communities following agreed guidelines, legal & customary protocols consistent with the Traditional Knowledge and Expressions of Culture Act	**SOURCE OF INFORMATION** Document accepted by the Environmental Management Committee (Environment Management Act, 2005)	**RIS** Tha com and
	Monetary and non-monetary benefits received by the State and local communities	Monetary: a) State: $0; b) Communities: $0 Non-monetary: a) State: there are no monetary benefits; b) communities: there are no non-monetary benefits	Monetary: a) State: to be defined during the first six months of project implementation; b) communities: to be defined during the first six months of project implementation. Non-monetary: a) State: to be defined during the first six months of project implementation; b) communities: to be defined during the first six months of project implementation.	Payment records and relevant provisions of ABS agreements	
	Number of mechanisms to facilitate the distribution of benefits and biodiversity conservation in local communities.	0	At least one mechanism facilitates the distribution of benefits and biodiversity conservation in 15 communities. This mechanism could be a Trust Fund, such as that to be established for the FLMMA.	Community agreements on contributions to Trust Funds or other financial modality for conservation and development.	Inte com con
	Outputs:2.1 ABS agreements, interim guidelines, negotiation procedures and legal/customary developed in accordance with the Nago Knwledge and Expressions of Culture Act. 2.2 Benefit sharing mechanism (e.g. Trust Fund) for ABS strengthened contributes to the c				
Outcome 3: Increased national capacity to operationalize Nagoya Protocol obligations.	I**NDICATORS** Existence of ABS laws, policies, guidelines and processes for institutionalization of Nagoya Protocol obligations under the leadership of relevant agencies.	**BASELINE** No formal ABS legislation, policy or guidelines, with the Dept of Environment acting in the role of competent national authority.	**END OF PROJECT TARGETS** Legislation and supporting policy for ABS is harmonized with the Environment Management Act, 2005 and the Traditional Knowledge and Expressions of Culture Act, 2013 – and includes the formation of the competent national authority (CNA).	**SOURCE OF INFORMATION** Cabinet approval. Reports.	**RIS** ABS sup
	Existence of Administrative systems such as procedures and permits for access, designated checkpoints, certificates of compliance, clear roles and responsibilities, and standards for screening and approval processes in accordance with the Nagoya Protocol provisions.	Informal administrative system.	An agreed Administrative system and Procedures for ABS implementation in accordance with the Nagoya Protocol provisions.	Cabinet approval. Reports.	
	Existence of an electronic database system to facilitated ABS operationalization including data on: biodiversity, natural products, ABS agreements, project details; capacities and roles of relevant national institutions; data exchange protocols; status tracking of samples collected and scientific results - linked to the cultural mapping of the Ministry of I Taukei	Nil database focusing on ABS.	Electronic database is generated and linked to the cultural mapping of the Ministry of I Taukei Affairs: including data handling protocols, status tracking of samples collected and scientific results.	ABS Fiji database	

	Affairs.				
	Number of Fijian scientists trained in drug or agro-chemical discovery.	0	At least 10 scientists (including female scientists) from relevant national institutions trained to enhance national human research capacities in drug or agro-chemical discovery.	Reports Training Programme review Record of Training events	Tha in F
	Level of understanding and actions of the national ABS Committee on access and benefit sharing promotion in Fiji.	Limited knowledge and understanding of ABS across government and community.	At least 60% of government officials and community members have a good understanding of ABS principles, procedures and agreements.	Results of structured interviews and/or questionnaires at start of awareness activities. Survey of Stakeholders. Network established with the Pacific Heritage Hub, Tertiary Institutions (e.g. USP & FNU), Secretariat of the Pacific Community (fishery section based in Noumea).	Con agen syst
	Outputs3.1 National law and implementation guidelines on ABS developed.3.2 ABS administrative systems, including permits for ac designated checkpoints and standards for screening and approval process in developed in accordance with the Nagoya Protocol provis system generated to monitor application of the laws, policies, guidelines and agreements.3.4 Training programme developed and instit national laboratories.3.5 Awareness programme for national stakeholders on Nagoya Protocol obligations.				

Annex 3. Evaluation Questions

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
• Review country ownership of the project, its objectives and processes. Was the project concept in line with the national sector/ development priorities and plans of the country?	•	• Quarterly Progress Reports	•
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
•	•	• Project Implementation Review • Quarterly progress reports	•
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
•	•	• Quarterly Progress Reports	•
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
•	•	• Quarterly Progress Reports	•
• **Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project's implementation**			
• Were there any major unanticipated challenges? If so, what were the implications and how were these addressed? • What is the level of communication and collaboration between Key Government Ministries implementing the project?	•	•	•
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
To what extent have the expected outcomes and objectives of the project been achieved thus far?			
•	•	• Quarterly Progress Report • Project Implementation Review Reports	•

Annex 4: List of reviewed documents

UNDP Project Document
UNDP Environmental and Social Screening results
Project Implementation Report 2016 **Project Inception Report 2015**
Project Implementation Report 2017
Progress reports
Audit reports
Progress Reports (IAS)
All monitoring reports prepared by the project
Strategic Results Framework
Project operational guidelines, manuals and systems
UNDP country/countries program document(s)
Minutes of the Project's Board Meetings and other meetings
Fiji NBSAP, 2009
UNDP Q & A for the Fiji ABS Project

Annex 5. Mission Itinerary

Date	Work Plan and Schedule	Location
28th March	Signing of contract. Submission of Work Plan and Acceptance of Work Plan	Suva, Fiji
28th March -9th April	Share Schedule with UNDP/Fiji ABS team. UNDP/Fiji ABS Team shared reports (PIR Reports, 2016 & 2017; Pro Doc., MTR report, M & E report) with Consultant. Desk Review of Documents (quarterly reports, financial reports, technical report etc.). Meetings with Mr. Floyd Robinson and Ms. Vasiti Navuku at UNDP and discussions on Fiji ABS Project.Preparation of Methodology for the TE. Questionnaire Developed. Schedule of Interviews Proposed and Finalized. PMU to work with Consultant in preparing schedule, logistics (including field visits) within Suva and other parts of Fiji. Notifications to stakeholders	Suva, Fiji
10th April-20th April	Fiji Field Mission Trip. Meetings and Interviews with UNDP/Fiji ABS Team (Mr. Floyd Robinson & Ms. Vasiti Navuku) Interviews with USP-IAS staff (Laboratory Manager, laboratory based technical staff (Seruwaia Tuilau, Ilaisa Kacivakanadina, Talemo Waqa), IAS Administration staff (Loata Qorovarua). Staff dive training team (Miri, James Sinclair, Adi Kula, Wayne Kavora). Interview with Dr. Johan Poinapen (Director IAS), Dr. Katy Soapi (Chemist, IAS), Dr. Sasmon Viulu (Microbiologist) Joape Ginigini (Senior Staff, IAS), Klaus Feussner (Senior Staff IAS), Interviews with Ministry of Environment (Permanent Secretary (Joshua Wycliffe), Director of Environment (Sandeep K Singh), and Fiji ABS Project staff at DOE, Eleni Tikoduadua, Michelle Baleikanacea), Interviews with the Ministry of Fisheries staff (Permanent Secretary of Fisheries (Sanaila Naqali), Director of Fisheries (Aisake Batibasaga), Other fisheries staff members (Pitila Waqainabetem Saras Sharma), Interviews with ITAB staff on policies and intellectual property rights etc. (Director Research, Elisapeci Tamanisau, Project staff, Sophy Buinimasi). Interview with Naipote (PS of ITAB), Presentation to Fiji ABS Project Stakeholders on Preliminary Findings (19th April). Interviews with ABS Consultants, Katy Soapi, Alifereti Tawake and Sepesa	Suva, Fiji
21st April-26th April	Report Writing. Questionnaire Evaluation Matrix compilation,	Suva, Fiji
27th April	Submission of Draft TE Report	Suva, Fiji
11th May	Submission of Feedback on Draft TE Report	Guam, USA
27th July	Submission of Final Report	Guam, USA

Annex 6: List of people Met or Interviewed

Katy Soapi, Consultant
Alifereti Tawake, Consultant
Lavenia Volavola, Consultant
Lilian Fay Sauni, IUCN, Suva
Lavenia Tawake, Consultant
Floyd Robinson, Environment Programme Analyst
Vasiti Navuku, Environment Programme Associate
Akisi Bolabola, SGP UNOPS
Losana Mualaulau, SGP, UNOPS
Marilyn Tagicaki, MTA
Michelle Baleikanacea, Project Coordinator, Ministry of Environment
Elisapeci Tamanisau – MTA
Sophy Buinimasi, MTA
Beverly Sadole, R2R, DOE
Eleni Tokaduadua, DOE
Aisake Batibasaga, Director of Fisheries
Pitila Waqainabete, Department of Fisheries
Saras Sharma, Department of Fisheries
Joape Ginigini, USP
Klaus, USP, Samson Viuli, USP, Johan, USP, Jone Fereti, UNDP and Laitia Tamata, Consultant

Annex: 7. Terms of Reference

Location	Home based with mission to Suva, Fiji
Application deadline	15th of February, 2018
Type of Contract	Individual Contractor
Post Level	International Consultant - Terminal Evaluation for the Project on : *Discovering Nature- Based Products and Building Capacity for the Application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) in Fiji* .
Languages required:	English
Duration of Initial Contract:	Starting no later than ***February 28*** and completion no later than ***20 April 2018.***

BACKGROUND

The Fiji ABS Project was designed to discover nature-based products and build national capacities that facilitate technology transfer on mutually agreed terms, private sector engagement, and investments in the conservation and sustainable use of genetic resources:

Outcome 1: Discovering active compounds for pharmaceutical and agrochemical uses from organisms within the ecosystems of Fiji.

Outcome 2: Operationalization of ABS Agreements and Benefit Sharing

Outcome 3: Increased national capacity to operationalize Nagoya Protocol obligations.

The Fiji ABS Project commenced in 2014 and was implemented over 3 years. A no cost extension was granted until April 2018 to ensure that benefits were fully realised. Through the Global Environment Facility (GEF) a funding of 970,000 was made available for the project. The ABS Project is executed by the Ministry of Environment. Other agencies including the Ministry of I Taukei Affairs and University of the South Pacific also key roles in executing the components of the project.

The barriers for maximizing benefits from genetic resources have been identified as: (a) limited scientific research, technological and development capacity prevents national stakeholders from adding value to Fiji's genetic resources; (b) limited capacity to implement and operationalize ABS Agreements and Benefits Sharing mechanisms with communities, including insufficient human resource capacity and piecemeal operation of draft bio-prospecting policy and guidelines; and (c) limited national capacity to institutionalize and operationalize the Nagoya Protocol and with this a lack of understanding of ABS and the link to biodiversity conservation. This project will assist in addressing these gaps and barriers and motivate increased investment in protecting biodiverse areas and the genetic resources they contain. This will be achieved by: i) investments in technology transfer to assist with bioprospecting and discovery of compounds for pharmaceutical and agro-chemical use; ii) the operationalization of ABS agreements related to fair and equitable access and mutually agreed terms; iii) and increase in national research and technical capacities and human resources dedicated to ABS management; iv) raising awareness among Fijian communities of the benefits of biodiversity and genetic resources; and v) increasing national capacities to institutionalize and operationalize the Nagoya Protocol on access and benefit sharing.

DUTIES AND RESPONSIBILITIES

Scope of Work

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects. The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming

Expected Outputs and Deliverables:

The Evaluator is expected to deliver the following:

Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission, by February 18.	Evaluator submits to UNDP CO
Presentation	Initial Findings	End of evaluation mission on March 14	To project management/Board, UNDP CO
Draft Final Report	Full report, (per annexed template) with annexes	Within 2 weeks of the evaluation mission, by 30 March	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP comments on draft by 30 April	Sent to CO for uploading to UNDP ERC.

* *When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.*

An overall approach and method[3] for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact,** as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (*fill in Annex C*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.
The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission *(locations/logistic to be confirmed by the Ministry of Environment*. Interviews will be held with the following organizations and individuals at a minimum the Ministry of Environment, Ministry of I Taukei Affairs, Ministry of Fishery, Technical consultants, UNDP, University of the South Pacific and Non - Governmental Organizations.

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex A), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact.** Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex D.

Evaluation Ratings:			
1. Monitoring and Evaluation	***Rating***	**2. IA& EA Execution**	***Rating***
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**Rating**	**4. Sustainability**	**Rating**

[3] For additional information on methods, see the Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 7, pg. 163

Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US$)		Government (mill. US$)		Partner Agency (mill. US$)		Total (mill. US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.[4]

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**. Conclusion should build on findings and be based in evidence. Recommendations should be prioritized, specific, relevant, and targeted, with suggested implementers of the recommendations. Lessons should have wider applicability to other initiatives across the region, the area of intervention, and for the future.

Institutional Arrangement

The principal responsibility for managing this evaluation resides with the UNDP Pacific Office in Fiji. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

Duration of the Work:

[4] A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: ROTI Handbook 2009

The total duration of the evaluation will be *30* days according to the following plan:

Activity	Timing	Completion Date
Preparation	4 days	**28 February 2018**
Evaluation Mission	10 days	**16 March 2018**
Draft Evaluation Report	7 days	**30 March 2018**
Final Report	9 days	**20 April 2018**

Duty Station

- The consultant will be home-based with one travel to Suva, Fiji.
- The consultant will be required to stay in Fiji for 10 days.
- The consultant will be required to report to UNDP Pacific Office in Fiji on a need basis based on the progress and deliverables.

COMPETENCIES

- Experience working in South Pacific Region
- Project evaluation/review experiences
- Experience working with the GEF or GEF-evaluations
- Strong analytical, reporting and writing abilities skills;
- Openness to change and ability to receive/integrate feedback;
- Ability to plan, organize, implement and report on work;
- Outstanding communication, project management and organizational skills;
- Excellent presentation and facilitation skills.
- Demonstrates integrity and ethical standards;

REQUIRED SKILLS AND EXPERIENCE

Educational Qualifications:

A Master's degree in ***Natural Resource Management, Environmental Studies and/or Sustainable Development,*** or other closely related field

Experience:

- Work experience in relevant technical areas for at least 5 years
- Demonstrated understanding of issues related to conservation, property rights, access and benefit sharing and traditional environmental knowledge
- Experience applying SMART indicators and reconstructing or validating baseline scenarios
- Previous experience of project evaluations as a Team Leader is essential

Language requirements

- Fluency of English language is required;

Price Proposal and Schedule of Payments

Consultant must send a financial proposal based on a lumpsum amount. The total amount quoted shall be all-inclusive and include all costs components required to perform the deliverables identified in the TOR, including professional fee, travel costs, living allowance (if any work is to

be done outside the IC´s duty station) and any other applicable cost to be incurred by the IC in completing the assignment. The contract price will fixed output-based price regardless of extension of the herein specified duration. Payments will be done upon completion of the deliverables/outputs and as per below percentages:

%	Milestone
20%	Following signing and contract and approval of work plan
10%	Following submission and approval of pre –mission inception report
30%	Following submission and approval of the 1ST draft terminal evaluation report
40%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

In general, UNDP shall not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources

In the event of unforeseeable travel not anticipated in this TOR, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and the Individual Consultant, prior to travel and will be reimbursed.

Evaluation Method and Criteria:

Individual consultants will be evaluated based on Cumulative analysis method.
The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as a) responsive/compliant/acceptable; and b) having received the highest score out of set of weighted technical criteria (70%). and financial criteria (30%). Financial score shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal received by UNDP for the assignment.

Technical Criteria for Evaluation (Maximum 70 points)

- Criteria 1: Educational Qualification - A Master's degree in *Natural Resource Management, Environmental Studies and/or Sustainable Development*, or other closely related field (Max 10 points)
- Criteria 2: Work experience in relevant technical areas for at least 5 years (Max 20 points)
- Criteria 3: Demonstrated understanding of issues related to conservation, property rights, access and benefit sharing and traditional environmental knowledge (Max 20 points)
- Experience applying SMART indicators and reconstructing or validating baseline scenarios (Max 10 points)
- Previous experience of project evaluations as a Team Leader (Max 10 points)

Only candidates obtaining a minimum of 49 points (70% of the total technical points) would be considered for the Financial Evaluation.

Documentation required

Interested individual consultants must submit the following documents/information to demonstrate their qualifications.

- **Letter of Confirmation of Interest and Availability** using the template provided in Annex II.
- **Personal CV or P11**, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references.
- **Technical proposal**, including a) a brief description of why the individual considers him/herself as the most suitable for the assignment; and b) a methodology, on how they will approach and complete the assignment.
- consultants must quote prices in USD. (Financial Proposal)

Incomplete proposals may not be considered.

Annexes

- Annex I - Individual IC General Terms and Conditions
- Annex II – Offeror's Letter to UNDP Confirming Interest and Availability for the Individual IC, including Financial Proposal Template

All proposals must be sent to rbap.icroster@undp.org by **15 February 2018**

ANNEX: 8 UNEG Code of Conduct for Evaluator/TE Consultant:

ii. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.

iii. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.

iv. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.

v. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.

vi. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.

vii. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.

viii. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation. **TE Consultant Agreement Form** Agreement to abide by the Code of Conduct for Evaluation in the UN System: Name of Consultant: **Dr. Veikila Curu Vuki**

Name of Consultancy Organization (where relevant): **Oceania Environment Consultants**. I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation. Signed at Suva, Fiji Place) on the 27th July 2018 (Date)

Signature: _____

Annex 9: Terminal Evaluation Report Reviewed and Cleared By: Commissioning Unit

Name: Kevin Petrini

Signature: 12/12/18

Date: _____

UNDP-GEF Regional Technical

Advisor

Name: _____

Signature: _____

Date: 12/12/2018