



United Nations Development Programme

Country: Fiji

PROJECT DOCUMENT¹

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

UNDAF Outcome(s): Environmental Management, Climate Change, Disaster Risk Reduction Management

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

Development Plans and programs integrate environmentally sustainable solutions in a manner that promotes poverty reduction, MDG achievements and low emission climate –resilient development

UNDP Strategic Plan Secondary Outcome: National and local governments have the capacities to adapt to climate change and make inclusive and sustainable environment and energy decisions benefiting in particular underserved populations

Expected CP Outcome:

Sub Regional Program Outcome 4 (UNDAF Outcome 1.1.) Improved resilience of PICTs, with particular focus on communities, through integrated implementation of sustainable environmental management, climate change adaptation/mitigation, and disaster risk management

Expected CPAP Output (s): Strengthened national capacity for biodiversity conservation and waste management

Executing Entity/Implementing Partner: UNDP

Implementing Entity/Responsible Partners: Department of Environment, Ministry of Local Government, Urban Development, Housing and Environment in partnership with the Ministry of I' Taukei and the Centre for Drug Discovery and Conservation, University of South Pacific.

Brief description

Fiji's terrestrial and marine ecosystems contain significant levels of biodiversity and make up a key part of the Polynesia – Micronesia Hotspot (Critical Ecosystem Partnership Fund & Conservation International, 2007). This biodiversity hotspot contains a wide range of ecosystems with 12 principal vegetation biomes and associations that include mangroves, coastal wetlands, tropical rainforests, cloud forests, savannas, open woodlands, and shrublands. It also contains the unique and sensitive marine ecosystems being part of the Western Pacific which is recorded as having the highest marine biodiversity along with the most extensive coral reef system in the world. Assessments of global marine ecosystem diversity have identified a number of sites of global significance, with WWF's Global 200 list including Fiji among the five outstanding coral ecoregions in the hotspot. A number of ecosystems and habitats within these globally recognized marine areas have been identified as having national significance and have included in protected areas or part of the Fiji Locally Managed Marine Areas (FLMMA) network. Fiji has undertaken considerable measure for environmental protection by adopting or promulgating number of laws, regulations and policies governing the protection and management of the ecosystems. However despite this there continues to be increased pressures on remaining biodiverse systems from socio-economic pressures that include population growth, urbanization, resource extraction and the lack of economic value placed on habitats, species and communities. There has been little focus on the value of genetic resources that are accommodated in Fiji's biodiverse areas, and the means by which payment for ecosystem services could be used to stimulate conservation at the local level, while providing avenues for improved livelihoods. It is clear that there are gaps and work is needed for instituting relevant legislation, policy and institutional systems to assist with regulating the collection, storage, exchange, development and use of genetic resources to maximise opportunities for alternative livelihoods. There is also a need to improve technological capacity at the national level. 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

¹ For UNDP supported GEF funded projects as this includes GEF-specific requirements

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.

Programme Period:	2014- 2016	Total resources required	3,682,778
Atlas Award ID:	00076545	Total allocated resources:	
Project ID:	00087868	o GEF	970,000
PIMS #	5148	o Government	60, 000
		o Other Co-finance	2,652,778
Start date:	2014	University of South Pacific	1,100,000
End Date	2016	Georgia Tech	1,231,778
Management Arrangements	NIM	University of California, San Diego	321,000
PAC Meeting Date	25 July 2013		

Agreed by (Government):

Date/Month/Year

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ACRONYMS AND ABBREVIATIONS

ABS	Access and Benefit Sharing
ABWP	Annual Budget and Work Plan
APR	Annual Project Report
BPOA+10	Barbados Programme 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
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
TPC	Tripartite Committee
UNDP	United Nations Development Programme
WSSD	World Summit for Sustainable Development (2002)

I. SITUATION ANALYSIS

Institutional and Policy Context

1. Fiji consists of more than 300 islands and about 100 are inhabited, covering a total land area of 18,376 square kilometres. The two largest islands of Viti Levu and Vanua Levu comprise of more than 85% of the total area. Most of the islands are volcanic. In 2008, the Fiji population stood at 837,271 with annual growth rate of -0.5% in 2007 and -0.1%. Around 51% of the population lives in urban areas. Fiji has a mild tropical climate with plentiful rain. It is however subject to potentially catastrophic climatic events such as cyclones and flooding. During El Nino years droughts can be severe on the western parts of the larger islands especially during the May to October dry season.

2. The Department of Environment (DOE) is the lead government agency for natural resource management and environmental protection in Fiji. While there is no current formal institution, law or process, the DOE with the Ministry of I Taukei (MIT) acts as the national authority for ABS. The Institute of Applied Science (IAS) at the University of the South Pacific (USP) has been the leading local research organizations involved in investigating the uses of genetic resources. However these efforts are very embryonic and fall far behind the drive and resourcefulness of international groups such as the International Cooperative Biodiversity Group (ICBG). This multinational and international group comprises of a number of tertiary, research, pharmaceutical and other industrial collaborators. While their involvement elsewhere about the globe has been worthy it takes much multiplier work out of country.

3. Fiji ratified the Nagoya Protocol in 2011. In 1997, Fiji developed an ad-hoc ABS policy consistent with the Convention on Biological Diversity at the time. 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 DOE. Like the 1997 ad-hoc policy it has not been endorsed by Cabinet and is used only to guide ad-hoc administrative processes. It is expected that these draft policy frameworks will be used as the foundation for future formal ABS institutional development and legislation in the country.

4. Fiji has been manoeuvring to improve its relevant legal and policy frameworks to ensure that access to and use of its genetic resources are regulated and will benefit relevant traditional knowledge holders and local stakeholders. It is clear that there are gaps and a tremendous amount of work is needed for improving relevant legislation and policy making, enabling implementation and ensuring appropriate enforcement. The Government of Fiji (GOF) is cognizant that the best way to encapsulate the local benefits from current genetic resource work and to incentivize biodiversity conservation - is to implement an initiative which involved direct technological and knowhow transfer. The aim is to improve access of genetic resources based on prior informant consent from resources owners and fair and equitable sharing of benefits arising from the use of these resources in either monetary or non-monetary terms.

5. On the broader environmental management front Fiji has been taking considerable measure for environmental protection by adopting or promulgating number of laws, regulations and policies governing protection and management of the environment. The Endangered and Protected Species Act was made in 2002 with the EPS regulation in 2003; the Environmental Management Act 2005 in its subsequent regulations in 2007; the Waste disposal and recycling

regulation in 2007 and litter amendment decree in 2010; the Ozone depleting substances Act in 2000 and its Regulations in 2010.

6. Despite these advancements there is a huge gap in harmonizing laws and policies, ensuring their consistent and practical implementation and engaging the community as partners. It is the intent of this ABS initiative: to garnish considerable support at the local village level; for communities to grasp the opportunities and benefits of payment for ecological services; that traditional knowledge is enshrined in procedures and requirements; and for national capacities to be enhanced to retain knowledge, knowhow, skills and technical ability.

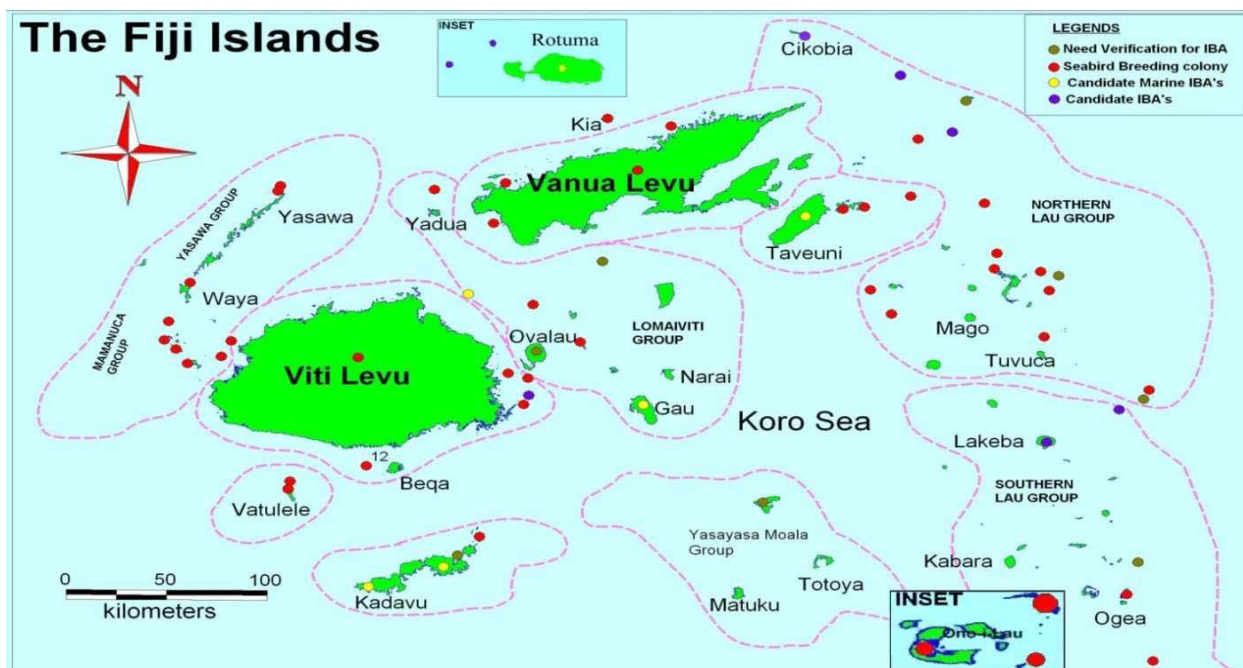
7. The Department of Environment as an obligation under the UN Convention of Biological Diversity (signed in 1992) developed the Fiji National Biodiversity Strategy and Action Plan (FNBSAP) in 1999, which was endorsed in 2003. The FNBSAP was revised in 2010 and an Implementation framework - 2010-2014 was generated. The present FNBSAP has a Guiding 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 project will assist directly with the pursuit of this principle and a number of the subsequent Strategic Objectives of the FNBSAP.

8. The Government of Fiji drafted a Sustainable Development Bill in 1997 to restrict bioprospecting to any activity undertaken to harvest or exploit biological resources for commercial purposes including investigative research and sampling. The Bill outlines a general permission process for biological-diversity prospecting in Art 249, including the requirement of public notification and export controls. Under the draft Bill prospecting is prohibited without prior informed consent. Benefit-sharing is covered in Art 249(1)(c), which requires that ‘a fair return is provided for any commercial exploitation of Fiji’s biological resources’. This draft legislation aims to control the process of granting access for persons wishing to conduct biodiversity research to ensure that:

- no ecological, social or economic harm is caused by the biological research or exploitation;
- taking a biological sample does not have an undesirable impact on Fiji’s biodiversity;
- a fair return is provided for commercial exploitation of Fiji’s biological resources; and,
- prior informed consent from the resource owners is obtained before any collection takes place.

9. The Traditional Knowledge and Expressions of Culture Bill was finalized in early 2013, and is at the time of writing being considered by Cabinet. It provides that a prospective user of traditional knowledge and expressions of culture can seek prior informed consent from either the Cultural Authority or directly from the owners of the knowledge, where the prior informed consent is to be evidenced in the form of an ‘authorised user agreement’. If an authorised user agreement exists between the prospective user and the traditional owners it appears that the traditional owners are deemed to have given their prior informed consent to the proposed use. It was developed with regard to plant genetic resources and does not address all pertinent matters under the Nagoya Protocol.

10. Annex 2 provides a summary of other laws and policies that may be relevant to ABS initiatives.



Biodiversity in Fiji

11. Diverse ecosystems exist in Fiji including significant areas of natural forest and a range of coastal and marine ecosystem including extensive systems of mangrove and coral reefs. These resources form the basis of Fijian culture, employment and food supply, thus the need to be well maintained for future generations. The remaining area of natural forest is approximately 860,000 ha and the current rate of deforestation is moderate. Fiji's EEZ covers 1.3 million square kilometres and contains rich marine resources. Reef systems include barrier, fringing and platform reefs. Some are under pressure from pollution, coral mining and hurricane damage. A significant portion of Fiji's economy is dependent on exploitation of Fiji's natural resource base. This includes agriculture, forestry, fisheries, mining and tourism.

12. Pacific island ecosystems make up one of the world's biodiversity hotspots. The islands of Polynesia-Micronesia have been confirmed by the Critical Ecosystem Partnership Fund (CEPF) as a critical global hotspot with over 476 globally threatened species within a very small aggregated land area of 46, 315 square kilometres (CEPF, 2007). There are very high levels of endemic species -some of which are found nowhere else in the world. They are particularly vulnerable due to their limited land areas, high ratio of coastline to land area and isolation. Many of the unique species are threatened with extinction. Species extinction rates are among the highest in the world and just 21 percent of the original vegetation remains. The Western Pacific is recorded as having the highest marine biodiversity along with the most extensive coral reef system in the world. The diversity of bird, plant and invertebrate species is high whereas terrestrial mammal, reptile and amphibian diversity is relatively low. Rates of endemism are high across all taxonomic groups where all amphibians, 73 percent of mammals (all bats), 68 percent of birds, and 58 percent of vascular plants are endemic species. The ecosystem throughout the hotspot also span a range of ecotypes including rainforests, temperate forests, seasonally dry zones, grassy savannas, and wetlands including mangrove swamps. The threatened species of

this area are critical components of the hotspot's ecosystem functions and provide services fundamental to the livelihoods of Pacific Islanders (UNEP, 2013, CEPF 2007).

13. The complex ecological zones, physical features, hydrologic and coastal marine processes, and variety of micro-climatic conditions, as well as the socio-economic drivers and unique vulnerabilities of many Pacific SIDS hinder the rate at which conservation and sustainable development plans and measures can reduce the threats to biodiversity.

14. The 'smallness', remoteness, exposure and vulnerabilities of Pacific SIDS has also set the context for the biodiversity to be extremely fragile to adverse pressures. The vulnerabilities of the SIDS are extreme. Flora and fauna populations are naturally small, and species often become concentrated in sensitive and limited spaces. They are subject to various natural and anthropogenic pressures that endanger their numbers, distributions and species survival. Islands have the highest proportion of recorded species extinctions and continue to be significantly threatened by invasive alien species, climate change and variability, natural and environmental disasters, land degradation and land based sources of marine pollution (UNEP 2005).

15. The FNBSAP notes that "Much of Fiji's biodiversity is unique to Fiji, species found nowhere else in the world. Fifty per cent or more of Fiji's plants and birds, all 24 palms, 72 of the 76 species of *Psychotria*, both frogs, over 90% of some insect groups such as cicadas and marine insects, are all endemic." Eighty percent of globally threatened species in the Micronesia-Polynesia Biodiversity hotspot area (192 out of the 244 species) are either in Fiji or French Polynesia (See Table 1 below).

16. Fiji in particular has a diverse variety of inland wetlands including distinct sago swamps, peat bogs and pandanus savannas. Large mangrove forests are still found in its coastal areas. Mangrove forests are particularly important for fish, invertebrate and avian diversity, including a number of threatened migratory shorebirds. Freshwater wetlands such as coastal marshes, upland swamps and marshes, crater lakes and rivers cover a very small area overall but have unusual and poorly known floras and fish and invertebrate faunas. Many of the unique waterways, forests and wetlands in Fiji are threatened by development, pollution, invasive species and habitat conversion. It is estimated that more than three quarters of the original vegetation of the Micronesia-Polynesia hotspot has been damaged or destroyed (Allison and Eldredge 1999). Fiji being one of the larger island groups has one of the highest levels of forest loss, with Palau and Samoa (30-60 percent forest cover loss - FAO 2003).

17. Of the 61 native terrestrial reptiles to the Micronesia-Polynesia hotspot, Fiji and Palau have the greatest diversity. The terrestrial species include seven species of snakes and 53 species of lizards, mostly skinks and geckos but also two iguanas that are endemic to the Fiji-Tonga area (Allison and Eldredge 2004). Amphibian diversity in the hotspot is extremely low with only three native amphibians known to occur, all three endemic ranid frogs of the genus *Platymantis* (ibid). Two of the species are endemic to Fiji.

18. Assessments of global marine ecosystem diversity have identified a number of sites of global significance in the Pacific. WWF's Global 200 list includes Fiji among the five outstanding coral ecoregions in the hotspot, with Palau, Tahiti, Hawaii, Rapa Nui -Easter island (Olson and Dinerstein 1998). A number of ecosystems and habitats within these globally recognized marine areas have been identified as having national significance and have been declared as protected areas or part of the Fiji Locally Managed Marine Areas (FLMMA) network.

Table 1: Numbers of Native and Endemic Species in Major Taxonomic Groups by Political Units for Polynesia-Micronesia (Source: CEPF, 2007)

Hotspot Country, State or Territory	Native Vascular Plants(i)		Breeding Birds (ii)		Native Mammals (iii)		Terrestrial Reptiles (ii)		Native Amphibians (ii)		Native Land snails (iv)	
	Species known	Percent endemic	Species known	Percent endemic	Species known	Percent endemic	Species known	Percent endemic	Species known	Percent endemic	Species known	Percent endemic
American Samoa	373	3	34	0	3	0	11	0	0	0	47	-
CNMI	221	37	28	7	2	0	11	0	0	0	-	-
Cook Islands	284	12	27	26	1	0	1(vi)	0	0	0	45 (vi)	-
Easter Island	-	-	-	-	0	0	-	-	0	0	0	0
FSM	782	25	40	45	6	83	-	-	0	0	-	-
Fiji	1,628	50	74	35	6	17	25	36	2	100	-	-
French Polynesia	959	58	60	43	0	0	10	0	0	0	>160**	-
Guam	330	21	18	11	2	0	11	9	0	0	27	-
Hawaii	1,200	83	112 (v)	55 (v)	1	0	3(vii)	0	0	0	763	98
Kiribati	22	9	26	4	0	0	-	0	0	0	-	-
Marshall Is	100	5	17	0	0	0	7	0	0	0	>6	-
Nauru	54	2	9	11	-	0	-	0	0	0	-	-
Niue	178	1	15	0	1	0	4	0	0	0	-	-
Palau	175	?	45	22	2	50	22	5	1	100	68	-
Pitcairn Islands	76	18	19	26	0	0	-	0	0	0	~30	~15
Samoa	770	15	40	20	3	0	8	0	0	0	64	-
Tokelau	32	0	5	0	0	0	7	0	0	0	-	-
Tonga	463	5	37	5	2	0	6	17	0	0	-	-
Tuvalu	44	0	9	0	0	0	-	0	0	0	-	-
US Minor Islands	-	-	-	-	0	0	-	-	0	0	-	-
Wallis & Futuna	475	15	25	0	1	0	-	0	0	0	-	-
Hotspot Total(v)	~5,330	57	242	68	15	73	61	49	3	100	~4,000 vi ii	?

Threats to Biodiversity

19. The threats to the biodiversity of Fiji are multifarious and interrelated by common causal factors and driving forces. The cumulative and combined impacts are often exponential. The major threats are human-induced and include: habitat conversion, degradation and loss, invasive alien species, over-harvesting and consumption of terrestrial and marine natural resources, land degradation from damaging agricultural techniques, poor waste management and pollution control. The impacts of climate change will exacerbate current trends and amplify the pressures upon ecosystems. Vulnerabilities to extreme natural events such as cyclones, drought, flooding, landslips and fire will also be heightened by biodiversity decline.

20. **Habitat Conversion, Degradation and Loss:** This is a key threat to the protection of native species and ecosystems. Loss of habitats for native fauna, pressures on rare flora and fauna species and the undermining of essential ecosystem services will have exponential effects on hydro-geological systems, microclimates, health of reefs and natural vegetation barriers (such as wetlands and mangrove forests) and lead to the loss of forest wood and non-wood forest and marine products. The loss of habitat & ecological health diminishes the buffer capacities and rate of re-establishment after extreme events. The primary driving forces behind habitat conversion and degradation are agriculture expansion, urban and industry development areas, over-harvesting of forest and marine products, tourism development and activities, poor land management techniques and shifts to more extensive and/or intensive cash-crop production. Mangrove areas continue to be filled or subject to dumping - about urban or industrial centres, or are the subject of extensive clearing for tourism accommodation projects. Limited land areas and population pressures exacerbate the threats (CEPF 2007, UNEP, 2005). Habitat loss and modification for “development” such as loss of mangroves, which have been cleared and reclaimed for farming, for tourism and for urban development; dredging of silt from estuaries for construction materials (causing silting on nearby reefs); Dredging for coral sand to be used in the manufacture of cement has been done in the Suva lagoon is also harming coral ecosystems. Sedimentation following large scale clearing of land for agricultural purposes poses an agricultural problem in the wet tropics and a major problem for coral reefs. Many species in heavily populated areas are grossly overfished and the stock severely depleted. Destructive fishing practices are a serious problem in certain parts of Fiji. Dynamiting is a practice that destroys and kills marine organisms indiscriminately. Traditional fish poisons such as duva is a common practice. Sometimes modern pesticides and bleach are also used.

21. **Pollution to Ecosystems:** Mining, shipyards and slipways, moorings, tourist developments, sugar mills, timber mills, cement factories, municipal waste disposal sites, sewage, agricultural pesticides and herbicides, changing land use and various industries are causing pollution of ecosystems. A review of pollution in the Suva Harbour found elevated biochemical oxygen demand, elevated amounts of nutrients (nitrates and phosphates), high suspended solids, pH and high coliform bacterial levels in discharges from a large number of light and medium industries in the city. Levels of heavy metals in Suva Harbour are also high and are equal to the most polluted harbours in Australia. Lagoon sediments and shellfish from the Lami area have high levels of mercury, zinc and lead. Litter is fast becoming a problem in marine and aquatic environments in Fiji. Solid wastes such as plastic bags, metal cans, glass etc are often discarded and indiscriminately dumped on beaches, in mangrove areas and in the sea. Dumps located close to mangrove areas, rivers and the sea elevate the problem. The problem of

high nutrient level may not just be confined to urban areas of Fiji since large amounts of fertilizer applied to sugar cane and rice may increase in adjacent waters.

22. **Invasive Alien Species (IAS):** Degradation of terrestrial and marine systems often upsets the balance of species and leaves an environment that favours exotic or alien invasive species. Species that evolved in island ecosystems have evolved free from the competition of large numbers of other species and are, therefore, susceptible to invasions by alien species. Disturbed ecosystems provide conditions conducive to the spread of invasive weed and fauna species where elsewhere they may be manageable. There are significant gaps in the knowledge, resources and understanding of management techniques to prevent introduction, control or ameliorate the spread of IAS. The impact on sensitive biodiversity areas still requires much research (CEPF 2007, UNEP 2005). Trade and planned/accidental import of organisms have also caused a spread of invasive alien species- at least 21 species of fish (brown trout, bass, mollies, guppies, carps, tilapia etc), four species of prawns, six species of bivalves and one species of seaweed (*Eucheuma* spp.) have been introduced into Fiji.

23. **Over-harvesting:** The issue of overharvesting is key importance in marine ecosystems as coastal communities typically depended on fish, seaweeds, marine invertebrates and turtles for much of their food. Many communities note the growing scarcity of species that were once common (e.g. reef cod, shellfish and turtles) or the sickness that prevails from 'poisoned' waters or infected fish. Over-harvesting of forest products is also a significant factor.

24. **Land Degradation:** Some of the coastal lower hills show the most dramatic example of land degradation with loss of vegetation and soil erosion due to poor land management practices. Sedimentation is also choking waterways and transferring pollution and nutrients to wetlands, lagoons and coastal waters. Elsewhere poor land management practices such as clearance of forests on steep slopes, expansive mining operations have led to loss of soil through erosion and pollution of waterways. Over-cropping has reduced soil fertility in many areas.

25. **Waste Management and Pollution:** Poor disposal of solid and liquid waste is a particular challenge about settled areas with pollution of lagoons by run-off being identified as a significant threat to coastal ecosystems. Mangrove areas have typically been used to dump waste with immediate consequences upon fish nurseries.

26. **Climate Change and Sea Level Rise:** The future impact from climate change, climate variability and sea level rise is uncertain but is likely to be significant on ecosystems that are already stressed and degraded. There is ready evidence already of the impacts from creeping climate change, especially on the smaller low-lying islands and atolls. These impacts could significantly affect both terrestrial and marine ecosystems. Salt-water inundation, coastal erosion, surges and flash floods are threats that will be exacerbated with climate change. Adaptation to climate change is now the focus of the Government. The most practical climate-change adaptation measure available is to improve resilience by protecting and enhancing natural ecosystems. Evidence-based information and scientific knowledge is critical to predict changes in resilience or vulnerability of ecosystems to climate change.

27. **Natural Disasters:** Fiji like many Pacific island countries faces periodic extreme events and natural disasters such as cyclones, tsunamis, floods, heatwaves and fires. Again decline in ecosystem health and habitat conversion minimizes natural resilience to disasters and often exacerbates the processes (e.g. increase uncontrolled runoff, erosion, landslips).

Underlying Problem, Long Term Solution and Barriers

The underlying problem

28. Several threats to Fiji's global biodiversity significance arise from the fact that they are not considered economically important by local communities and development sectors; and economic actions that degrade or cause a loss of biodiversity are more profitable in the short term. As most of Fiji's land and near-shore areas are owned by local communities, there is a strong need to ensure that biodiversity conservation is able to contribute positively to local livelihoods and wellbeing.

The long term solution

29. **The long term solution** to this problem is the acceptance by communities, governments and local stakeholders of the need for biodiversity conservation to protect genetic resources in Fiji to assist with addressing vulnerabilities and realizing tangible economic benefits through related research and business development, employment opportunities and capacity building. This can be stimulated through the transfer of technology and know-how to assist with the discovery and development of key compounds for new medicines or agrochemicals. The improvement in alternative or complimentary incomes will provide the impetus for the preservation of the biological resources that contain the genetic material. This is a paradigm shift from the situation described above, where the short-term economic benefit of resource extraction or modification for profit exploitation only, is conveyed to one of sustainable use and management for longer term incomes and resilience building. Through collaborations between the Government of Fiji, communities, partners, academic and private sector actors, the project will focus on establishing prototype agreements for prior informed consent and mutually agreed terms (inclusive of traditional-knowledge protection), transferring technology and expertise for local biodiscovery process, the enhancement of human and institutional capabilities in the country in order to establish a state-of-the-art drug or chemical discovery program in Fiji.

Barriers

The achievement of the solution proposed above has to date been impeded by a number of barriers.

1. Limited scientific research, technological and development capacity prevents national stakeholders from adding value to Fiji's genetic resources.

30. The overall focus of investment in Fiji for conservation has been through the promotion of aesthetic values (tourism), and through the utilization of natural resources (such as export of nature-based products, including medicinal plants and cosmetics). The vast opportunities offered by Fiji's diversity of genetic resources have not been a focus of the government in practice, although it has been stressed in its policies, many of which are still under formulation. Government is aware that there are very high costs in establishing the technical capacity and know-how as well as very costly transaction costs in forming suitable collaborations for such technology transfer. Consequently, there have been limited investments and efforts by the government in exploring and exploiting the genetic resources in the country. This has led to overall low capacities nationally to undertake such research and development. Outside of the government, too, the local private sector has not been able to generate resources to invest in such ventures on its own, given the uncertainties in the likely successes of such investments.

31. Specifically there is little technological capacity or technical knowhow on bio-prospecting, bio-discovery and active compound purification and enhancement at the national level for Fiji. A Centre for Drug Discovery and Conservation was established at the University of the South Pacific (USP) and a few individuals have been trained in bio prospecting. However this is a regional education and research institution (owned by 12 Pacific Island Countries). Technology use and human resource development is shared among the participating countries. While proximity would enable use of current technical equipment, this itself at USP is far behind international best practice. Many students trained in bio-prospecting have migrated. To facilitate advances in bio-prospecting there is a need for state of art equipment at the USP, but more importantly there is a need for technology transfer to the national level either at the Fiji National University (FNU) or other national entity such as the Ministry of Fisheries and Forestry (MoFF).

2. Limited capacity to implement and operationalize ABS Agreements and Benefit Sharing mechanisms with communities, including piecemeal operation of draft bio-prospecting policy and guidelines.

32. Although many international companies and organizations are interested in exploring Fiji's genetic resources for research and development, the limited clarity in process and procedures to obtain such permissions, coupled with the current ad-hoc policy on ABS have deterred or hindered prospective collaborators. There are also extremely limited capacities within the government agencies, local government and communities to negotiate ABS agreements and to ensure that the research institutions, organizations or companies that are undertaking research and development of products through the utilization of genetic resources and other biological chemicals are abiding by the terms of the agreements. Much guidance is needed in the form of best practice guides for negotiation, means to set up and manage funding modalities (for access, management and disbursement of funds from user pay sources, royalties or longer term biodiscovery proceeds, trust fund accounts for communities etc.). Correspondingly there is little in the way of procedures and best practice to ensure that traditional knowledge is encapsulated into any discovery and enhancement process or terms of agreement. Procedures are lacking in how national agencies and other interested parties engage, negotiate with and collaborate with local communities.

3. Limited national capacity to institutionalized and operationalize the Nagoya Protocol and with this a lack of understanding of ABS and the link to biodiversity conservation.

33. Despite making progress in drafting an ABS policy 10 years ago and a Guidance Framework in 2011, there has been no agreed government-wide process for ABS, nor an institutional and legislative framework endorsed by Cabinet. About the time of the initial ABS policy dialogue, community engagement associated with the aftermath of the WSSD and BPOA+10, saw the generation of the Sustainable Development Bill (1997). This contained sections on bioprospecting and related ABS principles however the focus was on pre-Nagoya Protocol best practice. The Bill was never progressed and reliance has only been made on the Guidance Framework and ad-hoc agreement on process applied on a case by case basis. There is a need for work to proceed from this weak base to have institutional and legislative frameworks put in place. Addressing this barrier needs to involve indigenous parties, through the Ministry of I Taukei, to ensure any entrenched system in the future accommodates indigenous and local communities (ILC) protocols and customary law.

34. In parallel to this institutional capacity development, a range of national government entities need to agree on coordination mechanisms to facilitate the endorsement of relevant guidelines, policies and procedures. Only at this juncture would the government be in a position to move toward formal legislation. Whilst government has confirmed its support for ABS through Fiji's accession to the Nagoya Protocol, to date there has been limited funding available to pursue the decision-making frameworks necessary for successful implementation of ABS processes.

35. The Department of Environment (DOE) is lead agency on implementing Fiji's commitments to ABS, but to date this is by policy directive and not supported by legislative platform. The Department facilitated discussion in 2011 and heads the ABS Committee set up by Government which includes membership of NGOs, research institutions and the private sector. However the DOE is short staffed, lacking a dedicated staff or focus unit to manage ABS related work. There is a lack of skills, knowledge and experience within DOE and other relevant government agencies such as the Ministry of I'Taukei (MIT), the National Trust and MoFF on ABS. Staff within DOE currently working on ABS also undertake other multi-tasking roles. There is a need for enhancement of capacity within DOE, in terms of skills and know-how as well as guidance on the means to secure adequate on-going funding for it to adequately address Fiji's obligations under the Nagoya Protocol.

36. The general awareness of communities, local government and the private sector on ABS and prospect genetic resources developments is low. Communities however are cognizant of past issues with bio-piracy and unethical practices in terms of the use of their ecological resources and traditional knowledge. Awareness-raising on ABS has been limited to discussions amongst stakeholders in the capital, Suva. Two national consultations conducted in 2011 with government departments, non-governmental organisations, tertiary institutions and statutory bodies were also confined to Suva. There is a need to extend this awareness to the wider public including provincial towns, rural areas, outer islands and amongst other community based groups. Corresponding with this there is a need to explore the integration of ABS concepts and principles into educational curriculum.

Stakeholder Analysis

37. The stakeholder engagement associated with the development of this project document has had a long gestation period. There was much community consultation and engagement in the work behind the Sustainable Development Bill of 1997, which contained sections on bioprospecting that were designed to facilitate ABS principles prior to the Nagoya Protocol. In the work on the draft ABS policy some 10 years ago, and the formulation of the ABS Guiding Framework under the auspices of the national led NBSAP review of 2010, there were formative community consultation forums. These occurred in 2011. A 2-day forum on the 3rd to 4th February 2011 particularly focussed on inputs from NGOs. A subsequent 2-day forum on the 5th-6th February, 2011 involved national, provincial and local government representatives. There were also regional based stakeholder forums where ideas on ABS needs for Fiji were crystalized (e.g. Capacity Development Initiative and DSEWPac Regional Consultation Meeting, 19 to 22 March 2012, Nadi, Fiji).

38. In the formulation of this project document forums were held with national and sub-national stakeholders in July, 2013. The outcomes have been used in the refinement of the Outcomes, Outputs, targets and indicators. A stakeholder analysis was undertaken to plan for this

forum and in the finalization of the project design document. The Table 1 below summarizes the current and relevant roles of the key stakeholders.

Table 1: Stakeholder analysis

Key Stakeholder	Current Roles and Responsibilities on ABS	Relevant Roles
Department of Environment	Responsible for facilitating and reporting on implementation of Fiji's obligations under the UN CBD	This is the lead government agency for this project and will be the key responsible party for overall project management of this project. The Department will focus on community engagement, oversight of technology transfer and will coordinate ABS policy and institutional strengthening. It will also act as the coordination agency for the national ABS Committee
Fiji ABS Committee	The ABS committee currently provides technical support and advice on conservation activities with linkages to ABS.	This Committee includes several government agencies, non-governmental agencies, the private sector and the academia. This provides multi-stakeholder input into ABS policy development and can provide advice on strengthening actions under Component 3 specifically, and can also guide overall policy work that will guide the implementation of Components 1 and 2 of this project.
National Environment Council	Environmental policy formulation and provision of direction with regards to national priorities.	This is one of the highest policy making bodies. They will be the penultimate authority for the DOE and therefore the progress of all components of the Project. They especially will oversee and endorse the eventual ABS policy and draft legislative frameworks prior to submission to Cabinet for executive action.
University of the South Pacific (USP) Centre of Drug Discovery and Conservation	The Center of Drug Discovery and Conservation Unit (CDDC) established in 2004 assesses the commercial potential of plant and marine organisms, especially to fight disease. One chemical has been patented and another is in clinical trials in the United States. In 2004 a consortium of Georgia Tech University, Scripps Institute of Oceanography and IAS was formed. Collaboration with Georgia Institute of Technology (Atlanta) was renewed for another 5 years (2010-2014).	USP is a member of the ICBG. The Centre of Drug Discover and Conservation Unit (CDDC as part of the Institute of Applied Science (IAS) at the USP will guide technology transfer under Outcome 1. They with the FNU and other research partners will advise on the technical side of negotiations with resource owner communities, will advise on sample collection and study, database of samples, advice on ABS, and will oversee technology transfer to the Fiji national level.
International	The International Cooperative	This international consortium will be the

Cooperative Biodiversity Group	<p>Biodiversity Groups (ICBG) Program is a collaboration of USA based institutes (NIH, Biological Sciences Directorate of the National Science Foundation and the Foreign Agriculture Service and Forest Service of the USDA) It was formed to address issues of drug discovery, biodiversity conservation, and sustainable economic growth. It is currently run by the NIH Fogherty International Center. Its Fiji chapter, includes the USP. Its current project with USP has the following objectives: (1) coordinate investigations of South Pacific marine organisms as pharmaceutical resources for treating diseases of importance in the Pacific Islands and the USA (2) support sustainable uses of the biodiversity upon which such bioprospecting depends, and (3) understand the processes degrading coral reef ecosystems and initiate locally-appropriate conservation measures, (4) leverage NIH, University of the South Pacific (USP), and other resources to develop the South Pacific Center for Biodiversity Conservation and Drug Discovery (SPCBCDD).</p>	<p>lead international partner and will coordinate the input of other ICBG partners in Outcome 1 namely:-</p> <ul style="list-style-type: none"> -Georgia Tech University: assisting with technology transfer and know-how on collection and screening for compound identification; -Scripps Institute of Oceanography, UC San Diego: assisting with technology transfer and know-how particularly on collection and screening and compound identification from Actinomycetes bacteria. <p>NIH has a separate field laboratory in Fiji.</p>
Douglas Pharmaceutical Ltd	<p>Douglas Pharmaceuticals is a New Zealand owned company but has a presence in Nadi, Fiji. It has a good reputation for high manufacturing standards and quality products targeting the beauty and medicinal industries. It is the only known pharmaceutical company in Fiji.</p>	<p>Douglas Pharmaceuticals will be invited to participate as an applied research and commercial consumer of potential end products of the bio-prospecting and bio-discovery process.</p>
Local communities	<p>Resource owners of all ecosystems, plants and animals.</p>	<p>At least 15 local communities that are managing their local areas will be the primary local beneficiaries of this project based on trial (and eventually formalized) access agreements based on mutually agreed terms.</p>
Fiji Intellectual Property Office	<p>Branch of the Office of the Attorney General which will review any proposed project implementation, policy or</p>	<p>Branch of the Office of the Attorney General which will review any proposed project implementation component, proposed ABS policy or legislation.</p>

	legislation relayed to intellectual property rights	
Ministry of I Taukei	The Ministry has a critical 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.	National government channel of communication/protocol when engaging in indigenous communities and resource owning communities. Government Ministry responsible for ensuring intellectual property rights of indigenous communities is respected.
National Trust for Fiji	The National Trust Act for Fiji [Cap 265], empowers the National Trust to enter into binding conservation covenants with landowners, purchase land for conservation purposes, adopt by-laws for trust properties and maintain a register of nationally significant areas.	The National Trust accommodates the best GIS base layers and spatially orientated data on biodiversity and ecological sensitive areas. There should be a close link between these databases, those of the Ministry of I' Taukei and that developed under this project, to assist with the management of ABS processes. The National Trust should be involved in brokering agreements with communities and landowners.
Pacific Heritage Hub	The Hub is a UNESCO World Heritage Facility managed by Pacific State Parties and currently hosted by the USP. They are a communications and information facility for all things 'heritage' in the Pacific. Their aim is to improve the implementation of the 1972 World Heritage Convention and to safeguard Pacific cultural and natural heritage, including the intangible aspects of culture – like traditional knowledge.	The Hub is about to release their website which will contain a Pacific Heritage Online Portal. This will be invaluable in helping Fiji stakeholders liaise with and link to efforts in other Pacific Island Countries and Territories (PICTs) on community development matters that involve custom, cultural heritage and traditional knowledge. Lessons learned through this project will be conveyed via the Portal.

Baseline Analysis

39. Several threats to Fiji's global biodiversity significance arise from the fact that they are not considered economically important by local communities and development sectors; and economic actions that degrade or cause a loss of biodiversity are more profitable in the short term. For example, habitat loss and modification for "development" include loss of mangroves, which have been cleared and the land reclaimed for farming, for tourism and for urban development. Dredging of silt from estuaries for construction materials have also created silting on nearby reefs. Dredging for coral sand to be used in the manufacture of cement has been done in the Suva lagoon.

40. Similarly, over exploitation of fish and other species (such as turtles, giant clams and coconut crabs) are threatening their survival. Many species in heavily populated areas are grossly overfished and the stock severely depleted. Destructive fishing practices are a serious problem in certain parts of Fiji. Dynamiting is a practice that destroys and kills marine organisms indiscriminately. Traditional fish poisons such as duva is a common practice. Sometimes modern pesticides and bleach are also used.

41. Mining, shipyards and slipways, moorings, tourist developments, sugar mills, timber mills, cement factories, municipal waste disposal sites, sewage, agricultural pesticides and herbicides, changing land use and various industries are causing pollution of ecosystems. A review of pollution in the Suva Harbour found elevated biochemical oxygen demand, elevated amounts of nutrients (nitrates and phosphates), high suspended solids, pH and high coliform bacterial levels in discharges from a large number of light and medium industries in the city. Levels of heavy metals in Suva Harbour are also high and are equal to the most polluted harbours in Australia. Lagoonal sediments and shellfish from the Lami area have high levels of mercury, zinc and lead.
42. Litter is fast becoming a problem in marine and aquatic environments in Fiji. Solid wastes such as plastic bags, metal cans, glass etc are often discarded and indiscriminately dumped on beaches, in mangrove areas and in the sea. Dumps located close to mangrove areas, rivers and the sea elevate the problem.
43. Sedimentation following large scale clearing of land for agricultural purposes poses an agricultural problem in the wet tropics and a major problem for coral reefs. The problem of high nutrient level may not just be confined to urban areas of Fiji since large amounts of fertilizer applied to sugar cane and rice may increase in adjacent waters.
44. Trade and planned/accidental import of organisms have also caused a spread of invasive alien species- at least 21 species of fish (brown trout, bass, mollies, guppies, carps, tilapia etc), four species of prawns, six species of bivalves and one species of seaweed (*Eucheuma spp.*) have been introduced into Fiji.
45. The Government of Fiji is spending approximately around 3 million dollars per year on conservation actions in Fiji. However, very little amount is directed to research on the market potential of genetic resources. The International Cooperative Biodiversity Groups (ICBG) work has been operating in Fiji since 2004 through a collaborating consortium between national and international organizations, and, base agreements have allowed efficient export, study, and collaboration on investigations of bioactive metabolites from Fiji's marine biodiversity.
46. These efforts have resulted in the founding of the "University of the South Pacific (USP) Centre for Drug Discovery and Conservation (CDDC)." This Centre provides capacity building within the south Pacific, and provides a "go-to" infrastructure for biodiversity conservation and natural products discovery for the 12 island nations represented by USP. The current baseline investment by this partnership includes US\$600,000 per year as part of the partnership through to 2014. Activities that are undertaken include the exploration of natural products from overlooked coral reef organisms such as marine algae and sea weed that grow in light limited marine environments. The partnership is using ecological assays to guide the discovery of novel bioactive natural products. Many coral reef organisms are chemically defended against predators, competitors, pathogens, and parasites. These natural defences constitute a source of novel pharmaceuticals. Under this, antimicrobial assays using marine pathogens, allelopathic assays testing coral-algal competition are being conducted, and the assays are being used to provide leads for natural product discovery. Under this sampling efforts have been focused on areas heavily impacted by predators, pathogens, and competitors where plants and invertebrates are most likely to have evolved or up-regulated chemical defences. Furthermore, screening of all extracts and natural products for drug potential against diseases is being undertaken, such as 1) malaria; 2) tuberculosis; 3) cancer; 4) HIV-AIDS; 5) other infectious disease-causing

microorganisms including drug-resistant *S. aureus*, *E. faecium*, and *C. albicans*; and 6) neurological/mental health disorders. The ICBG will apply a chemical-genetic approach to study mechanisms-of-action of novel bioactive natural products. The ICBG partnership is also providing training of South Pacific and American scientists and development of scientific infrastructure in Fiji.

II. STRATEGY

Project Rationale

47. Fiji hosts significant globally important biological and genetic diversity, the conservation of which depends on the assignment of adequate levels of financial resources and, local and national political support to their effective management. In addition to its global existence value, these genetic resources have major option and use value as the source of nature-based products with the potential to contribute significantly to disease control and food supply worldwide. The Government of Fiji and the Fiji ICBG (a group of academic and private sector institutions from both Fiji and the United States) have established a solid basis of experience and understanding for the exploration, testing and use of this biodiversity, based on the principles of equity enshrined in the Convention on Biological Diversity. The incremental support to be provided under the present project will create the additional levels of capacities and awareness that are required to scale up and consolidate this situation, allowing Fiji to enjoy full control and ownership of these processes, which will in turn come to generate benefits for the country (in terms of investment and employment) that will motivate increased levels of investment in the protection biodiversity.

Policy Conformity

48. In 1997 Fiji drafted an ABS policy, which is consistent with the UNCBD requirements but needs to be aligned with the Nagoya Protocol. As part of the Fiji National Biodiversity Strategy and Action Plan review in 2010, a Guidance Framework for ABS was generated but has not yet been formally approved. The Sustainable Development Bill of 1997, contained sections on bioprospecting that could be used to formalize the essential institutional systems for ABS in Fiji. Through the Department of Environment and the ABS Committee formed by Cabinet it has recently been agreed that these three key documents will form the basis of the formal ABS policy development and legislation in the country, especially now Fiji has ratified the Nagoya Protocol.

49. The GEF investment will support national efforts to expand biological collections, strengthen scientific research and development efforts, facilitate benefit-sharing and streamline administrative procedures for the national ABS framework. The project is consistent with the eligibility criteria and priorities of the fund as it will support the Government of Fiji to implement actions on ABS consistent with the Nagoya Protocol, including drug discovery and technology transfer on mutually agreed terms. In addition the project will facilitate private sector engagement and projects targeting investments in the conservation and sustainable use of genetic resources in-situ. Lessons from this project will be used to develop ABS laws and regulations and to improve the capacities in Fiji to facilitate ABS agreements and handling of issues under the Nagoya Protocol.

50. The project is consistent with the following objectives of the Nagoya Protocol Implementation Fund (NPIF). The objective of the NPIF, as stated in the GEF Council Document “Outstanding issues related to the Nagoya Protocol Implementation Fund” (GEF/C.40/11/Rev.1 of May 26, 2011) is to facilitate and support effective and efficient implementation of the decisions made at the 10th CoP of the CBD related to the Protocol. The primary objective of the NPIF is to facilitate the early entry into force and create enabling conditions at national and regional levels for implementation of the Protocol”.

51. The NPIF was approved by the GEF Council on February 18, 2011. Further to the creation of the fund, the GEF Council approved the arrangements proposed for the operation of this new multi donor trust fund in the spring meeting of 2011. The terms of the NPIF are in the document GEF/C.40/11/Rev.1, *Outstanding Issues Related to the Nagoya Protocol Implementation Fund*. Key activity areas to be funded through the NPIF include: a) Support Parties in reviewing their own capacities and needs on ABS and to strengthen the enabling environment with a focus on the provisions of existing national policies, laws, and regulations; b) Support Parties to implement national and regional projects to promote technology transfer on mutually agreed terms, private sector engagement, and projects targeting investments in the conservation and sustainable use of genetic resources; c) Support Parties to build capacity as appropriate with the aim of ensuring that traditional knowledge associated with genetic resources held by indigenous and local communities is accessed, d) Support Parties to undertake activities to increase public awareness on needs and opportunities of the Nagoya Protocol, e) Support Parties to further the knowledge and scientific-base for the implementation of the Nagoya Protocol.

52. This project is also in line with Objective 4 of the Biodiversity Focal Area Strategy for GEF-5: “Build Capacity on Access to Genetic Resources and Benefit Sharing (ABS)”.

53. The project will build on an on-going initiative involving the ICBG and the USP, which is based on a legally binding agreement that was put in place among the collaborating universities (GIT, USP), the Fiji Ministry of Fisheries, and Forests, Department of Fisheries, and an industrial partner (BMS). This agreement provided access by the ICBG consortium to Fiji’s genetic resources. The objective of the ICBG was to investigate the country’s plant, freshwater and marine coral reef organisms in order to discover new therapeutic agents and promote biodiversity conservation.

54. The approach adopted by the project is in line with UNDP comparative advantage, as it addresses multiple productive sectors and the environment sector, with a landscape-wide perspective. This project is fully aligned with UNDP’s new Global Strategic Response Framework for Biodiversity “Signature Programme 1: Integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human wellbeing.” Promoting sustainable use of biodiversity and facilitating agreements on Access and Benefit-Sharing (ABS) for genetic resources and traditional knowledge has been noted as a key activity under this Framework. In Fiji, UNDP has a very strong partnership with the government to support to design and implement biodiversity projects with GEF support. It implemented UNDP-GEF projects that supported the development of the National Biodiversity Strategy and Action Plan and Country Report to the COP; National Capacity Self-Assessment for Global Environmental Management (NCSA); and an enabling activity for Clearing House Mechanism development. The Fiji Multi-Country Country Office has also been the lead office for the regional “South Pacific Biodiversity Conservation Programme” funded by the GEF. Thus it has significant project implementation actions that include several government agencies and even the participation of the private sector.

Country Ownership: Country Eligibility and Country Drivenness

55. Fiji signed the Convention of Biological Diversity in 1992 at the United Nations Conference on Environment and Development (Rio Conference, 1992). It signed the Nagoya Protocol in 2010.

56. 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." This project's three Outcomes will be relevant to several of the recommended actions under the two Focus programmes identified.

57. Under "FOCUS 1: COMMUNITY SUPPORT – AWARENESS, INVOLVEMENT AND OWNERSHIP", the NBSAP has identified "Objective 1.2 Ensure that the nation and, in particular, Fiji's natural resource-owning communities receive fair, just and economic remuneration from the use of genetic material and products." It calls for the development and adoption of guidelines and/or legislation for bioprospecting and economic use of genetic material and products which incorporate fair provision for traditional knowledge and ownership. It also calls for "Encouraging collaborative research and exploration for economic uses of genetic material and products; Development and adoption of guidelines for all research activities which, amongst other requirements, ensure that the community owners have an understanding of and approve of the research; and the institution of joint collaboration between the business community, government resource owners and researchers to establish economic values of the resources used by the business community".

58. These are further stressed under FOCUS 2: IMPROVING OUR KNOWLEDGE, under "Objective 2.5 Establish mechanisms which encourage and facilitate biodiversity research and enable Fiji to access relevant international findings and developments." The actions recommended under this include a review of Government's and USP's role in biodiversity research; encouraging international and private sector collaborative research on Fiji's biodiversity; identifying priority research requirements for biodiversity management and opportunities for developing national expertise; adoption of a National Protocol drawing on the current USP Guidelines for Biodiversity Research and Bioprospecting regarding conduct and publication of research, and the export, buying and selling of biodiversity materials and findings; and the establishment a central professionally administered facility to house and manage the various existing biodiversity collections and to actively encourage the collection and deposition of new materials.

59. In addition to work on a draft policy some 10 years ago, and the formulation of the ABS Guiding Framework under the auspices of the national led NBSAP review of 2010, there have been formative community consultation forums on ABS in 2010 and 2011. A 2-day forum in August 2010 particularly focussed on inputs from NGOs. A subsequent 2-day forum involved national, provincial and local government representatives. In the formulation of this project design additional forums were held with national and sub-national stakeholders in July, 2013. The outcomes have been used in the refinement of the Outcomes, Outputs, targets and indicators.

Design Principles and Strategic Considerations

60. This ABS project will build on and expand the capacity building work commenced by the DOE in terms of awareness, institutional and policy development, and networking across government and community. Components targeting technology transfer will build on the activities of the International Cooperative Biodiversity Groups (ICBG) project “Exploration, conservation, and development of marine biodiversity in Fiji”². This ABS project will build additional support for technical capacity, training and education which will aid the Government of Fiji in its development of a sound and equitable ABS platform. Database development and monitoring, reporting and verification systems will be generated to help monitor the effectiveness of the ABS platform, to track bioprospecting processes and link initiatives and decisions with the Cultural mapping tools and policies of the Ministry of I Taukei. The focus of all partners is to provide an environment to allow conservation and drug discovery efforts (and short, medium and longer term benefits) to be expanded to rural and coastal communities about Fiji, which in turn will stimulate better community.

61. The objective of the project is to build national capacities to implement a biodiscovery programme that: is consistent with customary community protocols; promotes access and technology transfer on mutually agreed terms; involves private sector engagement and leads to good levels of investment. It is these targeted investments in the conservation and sustainable use of in-situ genetic resources that are necessary to accelerate the communities understanding of the need to conserve sensitive bio-diverse areas for their and the country’s benefit.

62. The Department of Environment, Ministry of Local Government, Urban Development, Housing and Environment will implement the Project. The ABS Committee, under the guidance of the DOE will oversee implementation. The Centre for Drug Discovery and Conservation, University of South Pacific, will be a key implementation partner with the Department of Environment with regard to technology transfer and training. The Government of Fiji will manage all aspects of development of ABS policy and laws and their implementation.

63. The project will coordinate with other relevant projects working to support community conservation actions in Fiji such as the Asian Development Bank’s Coral Triangle Pacific Program, which is working in Ra Province to apply the Fiji Locally Managed Marine Area community-based management model as well as the FAO-GEF PAS Forestry and Protected Area Management project. Relevant coordination and lessons learnt will also be promoted with UNDP-GEF Small Grants Projects.

64. This project will build on other activities and initiatives that are currently underway in support of the Nagoya Protocol in the Pacific. These include:

- the exploratory work by the ABS Capacity Development Initiative to support ABS activities in Micronesia;
- the lessons learned at "The South Pacific Access and Benefit Sharing Workshop" in Nadi, Fiji, 19-22 March 2012 and the follow up Workshop in Nadi, Fiji, July, 2013 on ABS and WIPO - The Secretariat of the Pacific Regional Environment

² The ICBG is an international partnership managed by the NIH Fogherty International Center composed of the Georgia Institute of Technology, Scripps Institution of Oceanography among others. The University of the South Pacific is a member of the ICBG through the ICBG Fiji Project, 2004+ which aims to examine plant, freshwater and marine coral reef organisms of Fiji to assess conservation priorities and discover new therapeutic agents

Programme (SPREP) in partnership with the ABS Capacity Development Initiative for the Pacific – now part of the BIOPAMA project (EU/GIZ and AusAID);

- the Pacific Regional Collaboration for the Implementation of the Nagoya Protocol, focussing on Green Growth and Sustainable Development, managed by IUCN and funded by the Government of France. A pilot project will review the institutional systems in both Fiji and New Caledonia for ABS, as part of an aim to increase dialogue and collaboration between the two countries. This initiative is now encapsulated under the EU BIOPAMA project;
- the UNEP – GEF medium size project ‘Ratification and Implementation of the Nagoya Protocol in the countries of the Pacific’ – to be delivered in partnership with SPREP (this project will cover a number of Pacific countries, including Fiji). This project will undertake a scoping study of the existing laws and regulations related to ABS in the countries, develop a strategy and action plan for the implementation of ABS measures, and build capacity among stakeholders with particular emphasis in the Government agencies in charge of making the protocol operational. The project will also have an emphasis of learning from other countries in their implementation of the Nagoya protocol. Strong coordination between the two projects will be required.

Project Objective, Outcomes and Outputs/Activities:

Objective: 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.

65. Bioprospecting in Fiji will be strengthened under this Component. The transfer of state of the art technology and knowledge building will be based on demonstration and pilot sites and bioprospecting activities closely involving communities with oversight by the Ministry of I’Taukei to ensure cultural mapping and customary processes is not compromised. The practical work will focus on marine ecosystems and give support to describing, preserving, and exploring seaweeds and deep sea microbe biodiversity for potential active compounds for eventual pharmaceutical or agro-chemical use. There will be the screening of compounds that are active against dengue, cancer, TB, drug-resistant microbes, or that show promise in psychoactive screening from marine areas throughout Fiji.

66. Under the guidance of the Department of Environment and the Ministry of I’Taukei, the USP will lead the project activities under this Outcome. Initially it will assist with the set up the database with Department of Environment on all organisms tested to date by all stakeholders. They will organize collections and do extraction and initial screening of bioactivity for both marine invertebrates and bacteria and fungi. The on-the-ground activities will be based on trial ABS agreements containing mutually agreed terms, with application of those terms. Active extract results will be then discussed with Georgia Tech (for marine invertebrates) and Scripps (for microorganisms). Based on this, a decision will be made on which samples will be further

studied by the partner institutions and which will be studied by USP or other partners such as the Fiji National University and Douglas Pharmaceuticals.

67. Under existing agreements with the USP, each of the three institutions performs isolation and identification of potential active compounds. Final arrangements with research and pharmaceutical companies for the project will be as agreed between the DOE, the USP and the Ministry of I'Taukei. At the USP research will be initially done by Liquid Chromatography/Mass Spectrometry which will indicate which compounds are already known. For potentially new compounds the structural information will be obtained from GIT or Scripps. GIT and Scripps also perform more advanced bioactivity tests and liaise with other project partners that may include Douglas Pharmaceuticals (Nadi, Fiji) or the University of California at Riverside for anti-malarial testing and anti-cancer testing (undertaken at BMS). The GEF project will add psychoactivity testing with University of North Carolina, based on mutually agreed terms. Once engaged research partners will analyse further anything that has an attractive cancer or disease screen profile. Biological samples showing other type of activity will be tested by partners that have the relevant expertise. The focus of the project will be to build on the baseline work being done by the present ICBG partnership but with focus on new collections and some additional bioactivity tests which are not currently covered under the ICBG agreement.

68. The primary focus of the project will remain on less explored seaweeds and deep-water marine microbes, and will use ecological and evolutionary insights to increase the production of bioactive metabolites that are missed by traditional approaches. These would include chemicals that are activated or induced as defensive metabolites when first challenged with damage, consumer attack, or microbial attack. The biological resources will be obtained from areas that communities have an interest in conserving; are currently subject to locally-managed marine areas (i.e. status as a Fiji Local Marine Managed Area - FLMMA) or where communities have expressed an interest in establishing a LMMA. Prospect sites include locations on Viti Levu, Taveuni, Kadavu, and the Mamanuca, Yasawa, and Lau Island groups. The project will also support the establishment of a screening facility at the national level in Fiji under the project and enhance the efficiency of local based extraction and purification processes.

Output 1.1: Scientific surveys undertaken on bio-chemicals from the coastal environs of Fiji.

69. The practical work will focus on exploring marine ecosystems and in particular seaweeds and deep sea-microbes. It will involve working with communities to survey, collect samples, describe and preserve them, as well as record information that will assist with biodiscovery and longer term management of the outcomes of research. Capacity building initiatives and provision of user pay (or PES) benefits to the targeted communities will be as guided by the prototype or interim agreements generated under Output 1.1.

70. The microbial samples collected by the USP and ICBG partners with the involvement of local communities and representatives from the Government national agencies may include host plants, coral or marine invertebrates – where the microbes show signs of host reliance.

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

71. The credibility of Fiji's ABS medicinal and agro-chemical bio-discovery project and the maximization of community and broader government awareness of the biodiversity conservation

benefits is contingent on there being an ability to demonstrate national level capacity to identify, purify and characterize potential active compounds. A screening facility is needed at the national level and should have the capacity to also facilitate storage of active compounds and host materials being researched.

72. The project will aid the transfer of state of the art technology (hardware, software, and know how) for bioprospecting to Fiji with assistance of the private sector partners. Hardware, software and knowhow will be transferred to the national level with the screening facility housed within a national institute or the Fiji National University. Dependent on the level of investment garnished from the private sector during the project life, the USP may house the technology until suitable accommodation is found at the national level.

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

73. This output will capitalize on the technology transfer in Output 1.3, being the set-up of the screening facility in-country. USP will be contracted to assist staff from relevant national agencies, national research institutes like FNU and potential local partners such as Douglas Pharmaceuticals to use the facility and technologies to undertake analytical chemical analysis, assemble disease bioassays, organize and manage data, to develop cultures and to manage long-term storage of samples. Some initial technical training may use the USP Liquid Chromatography/Mass Spectrometry capabilities. For potentially new compounds the structural information provided by the ICBG partners will be used to guide more advanced bioactivity tests. The activities will assist with the set-up of a database within the Department of Environment.

74. Within the life of the project it is expected that staff within national institutions will have the ability to organize collections and do extraction and initial screening of bioactivity for both marine invertebrates and bacteria and fungi and eventually be able to perform isolation and identification of potential active compounds. Staff will also be involved in negotiations with off-shore partners on technical matters, approaches and methods; how to perform more advanced bioactivity tests; how to manage research partner's analytic including understanding disease screening profiles. Biological samples showing other type of activity will be tested by partners that have the relevant expertise.

Output 1.4: In-country technology and competencies applied to identify 30 active compounds which are purified and their structure elucidated.

75. The competencies achieved through training (Output 1.4) will be applied with the Bio-discovery technology to identify 30 active compounds which will be purified and their structure elucidated. Once at least 30 highly active compounds are identified this will form the basis for the identification of at least one lead compound to be considered for the development process for agrochemical and pharmaceutical products for commercial purposes

76. The ICBG partners will assist USP with this work as microbes and host materials are cultured to provide sufficient mass to make extracts that can be tested in bioassays. Where significant activity is discovered, the samples will be re-cultured in larger quantities to allow bioassay-guided fractionation, purification and structure elucidation of the active compound. With the input from the various partners, using technology at the national level with competencies gained by local staff, it is expected that it will be possible to purify 30 active

compounds. The evaluation of these will identify the best candidates for the next stages of research.

77. GEF resources will be used to evaluate bioassays for activity against bacterial infections, cancer as well as diseases such as dengue, malaria, leishmaniasis, tuberculosis, HIV-AIDS among others. Tests will also be performed to consider agriculture pests and diseases. GEF resources will be used to send samples to private sector partners to the project.

Output 1.5: At least one lead compound is identified for commercial purposes.

78. For the 30 active compounds elucidated, the ICBG partners will be involved in performing more advanced bioactivity tests. They may in turn liaise with potential future private partners for advanced testing – and this will in turn need to be accommodated by the package of interim agreements agreed in Output 1.1. Once engaged these private research partners will analyse further anything that has an attractive cancer or disease screen profile. The aim will be to identify at least one lead compound during the life of the project.

Outcome 2. Operationalization of ABS Agreements and Benefit Sharing

79. The institutional, policy and systemic capacity of government agencies managing genetic resources and research, as well as national and Fijian based academic institutions, local businesses and the community will be enhanced under this Outcome. This will instil the appropriate platforms to operationalize the practical aspects of ABS. It will focus on ensuring the early operationalization of ABS prototype agreements such that some benefit sharing occurs during the course of the project. The possibilities of commercial development of some chemicals for potential anti-cancer use will also be explored under Outcome 1, while this Outcome will explore the options for benefit sharing for such development and lessons learned will be detailed.

80. The project will use existing agreements with the Government of Fiji, to prototype ABS agreements with the communities that satisfy the Nagoya Protocol and the existing laws of Fiji. The present collaboration between the USP³ with the ICBG involving the Scripps Institution of Oceanography (SIO) and the Georgia Institute of Technology (GIT), with an industrial partner will be promulgated to extend prospect partners such as the Fiji National University to the satisfaction of the local stakeholders.

81. The bioprospecting work will be linked strongly to biodiversity conservation through existing or prospect protected areas or locally-managed marine areas (i.e the FLMMA). It is expected that the project will support about 15 communities actively involved in biodiversity conservation, or who have expressed an interest in establishing a protected area or LMMA. During bio-prospecting, the project will also further conservation awareness and education in communities and training will be provided to selected students from collection areas to develop appropriate skills in drug discovery and/or conservation. During the collection trips researchers will also discuss the importance of sustainable resource management and will assist in resource management planning with local communities.

82. The taxonomy of the collections will also be determined and information and annual screening results will be housed in databases with government and communities. The project will explore additional income generating opportunities along with user-pay principled payments or in-kind contributions to the communities involved in ‘on-the-ground’ bioprospecting activities.

³ This university serves Fiji and 11 other Pacific Island nations - Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu

This may involve a range of funding modalities such as conservation trusts or the institutionalization of an ‘Adopt-A-Coral Reef’ or ‘Adopt a Mangrove’ Foundation involving the private sector.

83. The DOE will work with other Government agencies, stakeholder communities, the Ministry of I’ Taukei and the project partners to determine a fair and equitable share of income streams through the bioprospecting and compound development process. The current ad-hoc agreement the ICBG has with the Government of Fiji will be used as a prototype to determine the share of any income from bioprospecting and compound discovery between community stakeholders, the Government, the partners in biodiscovery and proposed or future private prospector. This work will also determine how best the funds are aggregated and distributed within country whether by ‘fees for service’ mechanisms, permit based fees/cost collection, trust fund modalities, proportion of development funds applied to communities, national versus provincial versus local government finance modalities or existing purpose built trust/foundation mechanisms, such as the soon to be set up Fiji Locally Managed Marine Area Network Trust Fund. Different finance and development modalities may be applied at different times in the biodiscovery process or be dependent on whether marine based or terrestrial based genetic resources are to be capitalized.

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.

84. In the absence of any agreed formal process and administrative procedures for ABS related activities and investments at the national level, existing agreements used previously by Government and the USP will provide a prototype or template upon which to negotiate with stakeholders, especially the targeted communities. In terms of process the Guidance Framework for ABS produced in 2010 (but not endorsed by Government) will be enhanced as an implementation guide from its present form as an information resource. Work will lead to the government endorsement of this framework.

85. The legal framework that exists with USP and the present ICBG partners (GIT and Scripps) shall provide an appropriate model to develop interim ABS type agreements between communities (as customary usehold owners of the genetic resources), the Department of Environment, the Ministry of I Taukei, the USP, ICBG collaborators and new partners (such as Douglas Pharmaceuticals, Fiji National University or University of North Carolina). The present agreements between communities and the USP predate the Nagoya Protocol and will need to be expanded to contend with a range of matters that are pertinent to compliance with the principles and ethos of the Nagoya Protocol.

Output 2.2: Benefit sharing mechanism (e.g. Trust Fund) for ABS strengthened contributes to the conservation of biological diversity.

86. There is a good community development network that has great success in tying biodiversity conservation benefits to local governance mechanisms. It is the Fiji Locally Managed Marine Areas programme (FLMMA), which is currently managed by NGOs with major contributions by the USP. While it currently targets marine areas, it is a model approach that could be expanded to incorporate terrestrial protected areas. This would necessitate the

involvement of the National Trust, responsible for current major landholdings incorporated as protected areas. The MIT will also need to be involved as customary use hold, traditional knowledge and land matters are far more complex than marine protected areas.

87. Either through use of FLMMA or similar mechanisms it is expected that the project will support about 15 communities actively involved in biodiversity conservation, or who have expressed an interest in establishing a protected area or LMMA. Trust fund or similar support mechanisms tied to the use of PIC and MAT in ABS interim and final ABS agreements will be used to ensure communities have access to short-term, medium-term and longer term benefits from biodiscovery research and processes. The shorter term benefits may include payment for ecological services (PES) based on user pay principles for access to sites, for permits for bioprospecting, training of local community members or provision of materials and tools for biodiversity conservation research and management of environmentally sensitive areas. The longer-term benefits will obviously include benefits from successful drugs or agro-chemicals derived from the genetic resources the subject to the ABS agreements and legal frameworks.

Outcome 3. Increased national capacity to operationalize Nagoya Protocol Obligations

88. National and local government capacity to implement the Nagoya Protocol obligations will be enhanced under this Outcome. In 1997, Fiji developed an ad-hoc ABS policy consistent with the Convention on Biological Diversity at the time. This ad-hoc policy was used to facilitate access by the ICBG to Fiji's genetic resources for research and conservation purposes. 1997 also saw the development of a draft Sustainable Development Bill, which included provisions on bioprospecting. Subsequently as part of the follow-up to the NBSAP review in 2010, an ABS Guidance Framework was developed by the DOE. Like the 1997 draft policy it has not been endorsed by Cabinet and is used only to guide the ad-hoc administrative processes. These draft policy frameworks will be used as the foundation for the formal ABS institutional development and generation of legislation in the country.

89. The project will strengthen the overall national capacities on: negotiations; instituting engagement processes; advertising bioprospecting initiatives; satisfying the customary requirements for development; and, monitoring of benefit-sharing and bio-prospecting projects.

90. As the focal environmental institution, a primary target for capacity building will be the Department of Environment (DOE), under the Ministry of Local Government, Housing and the Environment. The DOE plays the key coordinating role on ABS and is the secretariat for the National ABS Committee, which includes other relevant government agencies such as the Ministry of Foreign Affairs, National Planning, Solicitor General, the I'Taukei, Fisheries and Forests and Agriculture as well as the private sector, NGOs and academic institutions. The establishment of this Committee has been endorsed by the Cabinet of Ministers. During the life of the project the DOE will act as the competent national authority (CNA) on ABS matters, until a Cabinet approved authority is formed.

91. The project will support an awareness building programme for both the Department of Environment and the members of the national ABS Committee on relevant institutional requirements and international best practice with regards to ABS. The project will assist Government develop and clarify relevant roles, procedures and administrative systems for ABS agreement negotiations between the government, communities and relevant institutions, including roles and responsibilities of the government institutions at the sub-national level. This will also include the development of: business standards for screening and approval processes

(duration to be taken, steps to be followed etc.); the process of review of prior informed consent (from communities); the process and review of mutually agreed terms; the clarification of the benefit-sharing mechanisms within the country; as well as the best means for databases to track biodiversity processes.

92. At the outset the government will determine the form of Prior Informed Consent that is achieved with local communities - before allowing any bio-prospecting and export of samples for study under the project. The development of administrative systems will incorporate means to track and monitor the partners involved and the status of biodiversity processes, and will include mechanisms for 'certificates of origin' to be prepared to accompany other export permitting required under extant laws and policies. Such arrangements will be codified and agreed upon by the national ABS committee and institutionalized for the project activities, and final systems will be endorsed by Cabinet.

93. The project will support the establishment of an electronic database on biodiversity and natural products, meshed with the cultural mapping system of the Ministry of I'Taukei, that will be able to be populated with information (and copies) on ABS agreements and projects, data handling systems and protocols, tracking among national/ regional/ global institutions; mechanisms for harmonized transfer of information on samples and scientific results; communications between agreeing parties; details of site locations; review decisions between communities, national and international institutions. The database/s will incorporate public access protocols for non-sensitive material that may be availed through a Clearing House Mechanism managed by the government.

Output 3.1: National law and implementation guidelines on ABS developed.

94. The draft Sustainable Development Bill, 1997 will be resurrected and evaluated to determine the benefits of its use to provide suitable ABS and Nagoya Protocol provisions. Whatever legislative framework is developed it will need to mesh with the Environmental Management Act, 2005 and much other legislation summarized in Annex II. The draft Guidance Framework (2010) and the draft ABS policy (1997) will be used as the basis for generating supporting policy and implementation guidelines to the legislative frameworks.

Output 3.2: Administrative systems / Procedures for ABS agreement negotiations between the government and relevant parties and institutions strengthened.

95. This output will assist Government develop and clarify relevant roles, procedures and administrative systems for ABS agreement negotiations between the government, communities and relevant institutions, including roles and responsibilities of the government institutions at the sub-national level. This will also include the development of: streamlining process for permits for access (incorporate PIC), determining mutually agreed terms; business standards for screening and approval processes (duration to be taken, steps to be followed etc.); the process of review of prior informed consent (from communities); the process and review of mutually agreed terms, and the clarification of the benefit-sharing mechanisms within the country.

96. Decision-maker and user manuals will be generated to include standard application forms; fees for service; requirements for the application, an explanation of how to complete the application, the establishment of a system for tracking the chain of custody for samples and derivatives (e.g. use of bar codes, micro-chips, DNA signals etc), examples of framework agreements for PIC and MAT with regard to benefit sharing, example agreements for the transfer

of materials and samples, protocols for the the delivery of reports and data at the end of the collection, research reports and other relevant reporting aspects etc.

Output 3.3: A monitoring and evaluation system generated to monitor application of the laws, policies, guidelines and agreements.

97. Tied to Output 3.2, an advanced relational database tied to GIS functionality and linked to the cultural mapping tool at MIT will be developed. It will secure and enhance the flow of information among multiple participants and communities. It will store and allow retrieval of information on: collections of biodiversity; permits and approvals; partners; the form and description of samples in bioassays and chemical analyses; the custodians of genetic resources and scientific results etc. Some 'layers' of data will be confidential so a series of security windows will need to be built into the database. Non-confidential collection, bioassay and chemical data will be available to the Department of Environment, the National Trust and MIT. Researchers, scientists and technicians will be trained in the design and use of the database, with users subject to specific security arrangements. The ABS Fiji Database shall be linked to the cultural mapping database of the Ministry of I Taukei Affairs and will not only provide a means to track the progress of ABS related activities, agreements, approvals, permits, information and materials transfer and results – but will also be used as the Monitoring and Evaluation tool for this project.

Output 3.4: Training programme developed and institutionalized on biodiscovery techniques in national laboratories

98. With the technology made available through Output 1.3 there will be a good base for training and education of support staff, technicians and research scientists. The USP [Institute of Applied Science (IAS)] [Centre for Drug Discovery and Conservation (CDDC)] will facilitate the education of resource science students with assistance provided through the GEF funds to educate 10 or more students from Fiji (GEF resources will be used for covering the travel costs of the students in order to undertake field-based research, as well as the procurement costs of research equipment. The actual education fees of these students will be covered by co-financing). Where possible these students may be people within relevant national institutions, who are interested in post-graduate studies. This form of education provision is preferred to ensure that there is a higher chance of retention of graduates within government and research institutions at the national level. Flexibility will be provided to enable Fijian undergraduates of a high standard to be assisted with post graduate education on genetic resource research to continue their studies and be qualified within the term of this project. Graduates and technicians will have the capacity to undertake scientific surveys; apply state of the art analytical chemical techniques; organize disease bioassays; organized data handling and manage collection, culture and long-term storage of samples.

Output 3.5: Awareness programme for national stakeholders on Nagoya Protocol obligations

99. The community education and awareness plan will be developed and the awareness campaign will include information on the uses and protection of the biodiversity of Fiji. It will convey the co-benefits that ABS arrangements may realize for communities and for conservation. Community awareness will be conducted principally through the written media (posters, pamphlets, briefs), radio and support to local community events. These materials will

be developed by the Department of Environment with input from the USP, FNU, National Heritage Trust and MIT.

100. The form and content of the awareness materials will be adjusted from time to time, as necessary, to facilitate outreach to the different communities involved. Corresponding activities will provide talks with students from local primary and secondary schools, tourism operators, local businesses and community representative groups. The subject matter will tie the benefits of bioprospecting, with the importance of biodiversity and the potential for local community benefit through the sustainable use and conservation of local biodiversity.

Key Indicators, Risks and Assumptions

Risk	Level	Mitigation
Uncertainty due to government and policy changes. An election is planned for 2014 and it is the hope of the current government of Fiji to have an ABS policy in place by that time. Under the current ad hoc system government personnel changes can also cause changes in policy approaches.	Medium	The project will strengthen the political commitment by raising awareness of the national ABS committee on the opportunities ABS projects offer to the country to generate resources, aid further conservation actions in-country, build international cooperation and coordination, as well as to contribute to global knowledge and well-being.
Community interest in conservation of local biodiversity and involvement in ABS related research and development is not maintained.	Medium	For initial field trials and research, marine areas where FLMMA has been successful will be involved. Following this successful approach should alleviate problems with community fatigue or non-interest. Community awareness and education campaign will maintain the interest among communities and should alleviate mis-information that may abound when dealing with terrestrial systems.
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 been collecting in Fiji waters for over 20 years and developed a reasonable knowledge of the ecology at common collection sites. In addition a number of training efforts have been held in invertebrate taxonomy. There are also facilities at USP to culture invertebrates. The project will build on the existing expertise and experience to mitigate this risk.
Assumption that ABS and bioprospecting will lead to conservation benefits. There are many threats to coral reef ecosystems which may run counter to the benefits of a successfully implemented ABS policy and system.	Low	DOE and the USP have conservation planning as one of their core commitments. Best practice environmental controls will be applied at all collection sites, and will be preceded by environmental impact assessments so that internal threats due to economic drivers are identified and management measures are applied. The climate change threat in the longer term may have serious consequences to coral reefs. . However, by supporting local communities to plan and

		implement conservation actions, the project is expected to mitigate this risk with the majority of the communities it will work with.
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Financial Modality

101. The project will be jointly funded by the Government of Fiji, academic institutions in Fiji (e.g. the USP and FNU), partnership collaborators such as the ICBG (and their respective research and academia members) and the private sector (potentially Douglas Pharmaceuticals). The GEF Trust Fund grant will complement these investments in order to ensure the transfer of technology and know-how, development of institutional capacities, an enabling framework of policies, agreements and administrative instruments and public awareness that will enable genetic resource-based businesses in Fiji to be financially fully self-sustaining in the longer term.

Cost-effectiveness

102. To ensure cost-effectiveness the project strategy focuses on capitalizing on existing private sector partnership agreements with government, academia and private industry, acting as prototypes for enhanced agreements that are harmonized with Nagoya Protocols – to maintain public/private investment interest. This will speed up the technology and knowhow transfer. The collaborative arrangements will be extended to be more inclusive of broader government and community members' participation and control. The GEF Funds will be used to stimulate quick and decisive action to take advantage of current initiatives involving the ICBG in the context of the discovery process for nature-based products.

103. The alternative strategy considered would be to base the project solely on public sector involvement. Government at the national and sub-national level does not have the technological standing, knowhow, ability to train in highly technical arenas or available cash to invest in high cost state of the art equipment. They do however have a key role in terms of oversight, regulation, dispute resolution, negotiations, institutional process, long term visioning, community engagement and natural resource management planning.

104. The combination of public/private investment and government oversight and adjudication – will combine well to ensure that the communities' and national interests are best served by the project Outcomes and outputs.

Sustainability

105. The project was designed in close consultation with key stakeholders. It has the full support of the Government of Fiji through the Department of Environment and the National ABS Committee.. It addresses urgent and priority priorities identified in the NBSAP. It focuses on community development and engagement in local conservation measures through capitalizing on financial and in-kind benefits of exploiting genetic resources in a manner which is consistent with customary processes and international best practice.

106. The project will adhere to the principles of sustainability through the following measures:

1. **Environmental sustainability** – EIA will be used for rapid assessment of all pilot and demonstration sites where bioprospecting activities will be undertaken. Measures will ensure techniques to be used for collecting will have negligible impacts on the biodiversity itself and will be carried out in strict accordance with

the requirements of all approvals and permit conditions issued by the Department of Environment. It is the rationale of the project that the benefits that will be generated from the collection and testing of biodiversity (in the short, medium and longer term) will stimulate motivations for increased private, community and governmental investment in biodiversity conservation;

2. **Financial sustainability;** the project will create technological capacities in Fiji for the exploitation of genetic resources and for national and sub-national stakeholders to be involved in a highly lucrative business sector;
3. **Institutional sustainability:** the project will fill voids in laws, policies and national institutions. It will assist with dialogue and collaborations with the private sector, communities and academia;
4. **Social sustainability:** the project will proceed with direct ties with the customary and cultural protocols administered by the Ministry of I' Taukei and is designed to involve community engagement, negotiation and collaboration from the outset. The biodiscovery activities and processes will be carried out consistent with interim Nagoya Protocol agreements addressing prior informed consent and mutually agreed terms – that will ensure the equitable distribution of the resulting benefits of genetic resource exploitation and will contribute to positive socioeconomic impacts for the communities. The project will instigate the development of capacities in the Government of Fiji for the formalization of ABS agreements as necessary, in order to ensure their continued suitability to communities and government stakeholders.

Replicability

107. This ABS project builds on models of current bioprospecting agreements and research activities but more importantly is closely linked to a very successful protected areas management approach - use of the locally managed marine areas (LMMA). The Fiji Locally Managed Marine Areas (FLMMA) network offers a successful model which has accommodated hundreds of communities over the last 10 years and offers a high potential for continued replication. The FLMMA approach or model is such that it could be refined and/or adapted to be applicable to numerous other biodiversity-rich terrestrial areas. It is the intent of this project to explore such adaptations and replication.

Strategic Results Framework and GEF Increment

Global and National Objectives

108. The project will deliver **global environmental benefits** through the enhanced community actions to protect the habitats of protected areas especially those that have been formulated under the Fiji Local Marine Managed Area network (FLMMA). This will be stimulated by the advancement of bioprospecting and biodiscovery technologies and their application at the local and national levels. This in turn will broaden and deepen an understanding of the link between genetic resource opportunities and biodiversity conservation. Early contributions from bioprospecting arrangements and longer term benefits by bio-discovery will result in payment for environmental services, so essential in maintaining conservation momentum and livelihood opportunities. The outcome will be the incentivization of biodiversity conservation.

109. There are currently 348 LMMA areas about Fiji. Together they accommodate about 30,222 hectares of locally managed ‘informal’ and more formalized marine protected areas. The technical, managerial, awareness and learning back stopping for FLMMA was originally facilitated by NGOs with in-kind support by the DOE and USP. Longer term financial resources to support the local actions under the FLMMA were a constant issue. There is now backstopping through the LMMA network, but this too is reliant on limited financial resources and the ability to provide in-kind support through associated larger conservation programmes and projects. Further incentivization and availing of financial and technical resources from the project will assist with establishing more substantial and sustainable resources for marine protected areas

Baseline Scenario

110. The Government of Fiji is spending approximately around 3 million dollars per year on conservation actions in Fiji. However, very little of this is directed toward marine based conservation or research on the market potential of genetic resources. The focus has been on the creation and management of natural forest reserves and protected areas to provide contribution to the long term conservation of biodiversity in collaboration with the custodial communities. The terrestrial conservation work brings about awareness and participation at the landscape level to ensure sustainability, maintain local ownership and equity sharing. However even for these terrestrial based actions the securing of the adequate long term resources to facilitate conservation is a great challenge, especially considering the need for user pay/compensation payment for the curbing of customary use of significant ecological areas. For the marine protected areas sensitive marine areas yet to be part of protected areas or FLMMA, there is the same pressure to identify sustainable sources of funding to facilitate community engagement, community action, localize livelihood opportunities

111. The collaborative partnership between the DOE and USP with the International Cooperative Biodiversity Groups (ICBG) has allowed formative study and investigations of potential active compounds for bioactive metabolites from Fiji’s marine biodiversity. Funds since 2004 have been used to set up the “University of the South Pacific (USP) Centre for Drug Discovery and Conservation (CDDC), some technical capacity at the regional level and funding support. The current baseline investment by this partnership includes US\$600,000 per year through to 2014. Some of these funds have been used to date to support the recurrent costs of the FLMMA network.

112. Under the “business as usual” scenario some support will be maintained to the FLMMA network under the ICBG partnership till the end of 2013. The role of the DOE will be limited to administrative oversight of ABS related actions on an ad-hoc basis. This baseline is insufficient to maintain the present momentum of FLMMA. It will not overcome the barriers identified previously.

GEF Alternative to Generate Global Benefits

113. The GEF **alternative scenario** will help to remove the barriers that prevent the sustainable development and use of genetic resources, which in turn provides the income generation opportunities to sustain sensitive marine areas and protection mechanisms established under the FLMMA.

114. The work should provide the fiscal incentive for the FLMMA network to expand, both in terms of new locally managed 'protected' areas and/or the spatial extension of existing FLMMA areas. Through the project, a system for garnishing short, medium-term and longer term finance for local communities and national entities will be put in place.

115. The creation and/or extension of FLMMA and other protected areas and the formulation of sustainable levels/sources of resources will contribute to the achievement of the targets set by the COP 10 (Decision X/2) and the new Programme of Work for Protected Areas (PoWPA) of the CBD.

116. The alternative GEF scenario will strengthen the base for technology transfer to assist with the discovery of active compounds for pharmaceutical uses from protected areas. Baseline funding is in the order of \$600,000 through the current ICBG partnership. However this does come to an end in early 2014. Incremental financing will be in the amount of **\$1,641,064 USD**; **\$660,000.00 USD** will be provided by the GEF and **\$1,581,064.00 USD** will be provided by co-financing sources. Co-financing for this project component will be provided by the USP (\$429,923), the GIT (\$1,059,138) and the University of California (\$92,003).

117. In addition, the GEF alternative will also **strengthen the institutional and human resource capacities for effective MPA management through the operationalization of ABS Agreements and Benefit Sharing**. This work will see enhanced human resources and provide clear mechanisms for ABS negotiations, decision-making, agreement, monitoring and evaluation. The incremental financing expected for this component is **\$539,000.00 USD**; **\$132,000.00 USD** will be provided by the GEF and **\$407,000.00 USD** will be provided by co-financing sources. Co-financing for this project component will be provided by the USP (\$300,000.00) and the University of California (\$107,000).

118. Finally, the GEF alternative will increase **national capacity to operationalize Nagoya Protocol obligations and further the understanding of ABS among stakeholders**. The incremental financing expected for this component is **\$561,000.00 USD**; **\$94,000.00 USD** will be provided by the GEF and **\$467,000.00 USD** will be provided by co-financing sources. Co-financing for this project component will be provided by the Government of Fiji (\$60,000.00), the USP (\$300,000.00) and the University of California (\$107,000).

119. Incremental costs summary: The incremental cost matrix presented below summarizes baseline costs and incremental activity costs for each project component. The total baseline amounts to **\$600,000.00 USD**. However this funding source expires in early 2014, but despite this it has been included in the incremental analysis. The costs of the incremental activities required to contribute to global benefits include **\$970,000.00 USD** to be funded by the GEF and **\$2,712,778 USD** to be provided by co-financers, for a total of **\$3,682,778.00 USD**. All project co-financers have stated their commitment to the project through written signed letters.

120. The table below presents the incremental cost analysis. The incremental impact will be **\$3,082,778.00 USD**, given a baseline of \$600,000.00 USD.

Incremental Cost Analysis

Project Outcome	Baseline	GEF	Co-finance		Increment
			Govt. Co-finance	Other co-finance	
<i>1 Technology Transfer to assist with the discovery of active compounds for pharmaceutical uses from protected areas</i>	\$600,000.00	\$660,000.00		\$1,581,064.00	\$1,641,064.00

<i>Sub-total</i>		\$660,000.00	\$0.00	\$1,581,064.00	\$1,641,064.00
<i>2. Operationalization of ABS Agreements and Benefit Sharing</i>	<i>\$0.00</i>	\$132,000.00		\$407,000.00	\$539,000.00
<i>Sub-total</i>		\$132,000.00	\$0.00	\$407,000.00	\$539,000.00
<i>3. Increased national capacity to operationalize Nagoya protocol obligations</i>	<i>\$0.00</i>	\$94,000.00	\$60,000.00	\$407,000.00	\$561,000.00
<i>Sub-total</i>		\$94,000.00	\$60,000.00	\$407,000.00	\$561,000.00
Project Management		\$84,000.00		\$257,714	\$341,714.00
TOTAL PROJECT	<i>\$600,000.00</i>	\$970,000.00	\$60,000.00	\$2,652,778.00	\$3,082,778.00

Project Results 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, through integrated implementation of sustainable environment management, climate change adaptation/mitigation and disaster risk reduction; and (ii) To elevate to the level of State policy the protection of the 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: <u>Objective 4:</u> Build Capacity on Access to Genetic Resources and Benefit Sharing					
Applicable GEF Expected Outcomes: <u>Outcome 4.1:</u> Legal and regulatory frameworks, and administrative procedures established that enable access to genetic resources and 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 developed)					
	INDICATOR	BASELINE	END OF PROJECT TARGETS	SOURCE OF INFORMATION	RISKS AND ASSUMPTIONS
Project Objective⁴ : 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 agrochemical uses discovered that assist with biodiversity conservation using capacity based in Fiji.	0	At least one lead compound	ABS Fiji database	Compounds discovered prove to show promise as lead compounds.
Outcome 1⁵: 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	That advances in bio-prospecting will lead to the identification of pharmaceutical compounds
	Level of capacities at the national level to undertake scientific surveys on bio-chemicals, apply chemical	Nil capacities at the national level for chemical analysis, bioassays, sample	10 staff in national institutions have the capacity to apply state of the art analytical chemical techniques; disease bioassays; data handling and collection,	Reports and manuals on approaches, methods, tools, applications, facilities and	Continued interest and partnership between pilot communities, provincial, local and national government departments, the private sector, the University of the South Pacific,

⁴ Objective (Atlas Output) monitored quarterly ERBM and annually in APR/PIR

⁵ All outcomes (Atlas Activity) monitored annually in the APR/PIR

	techniques, generate disease bioassays, and manage collections.	handling, collection & storage.	culture and long-term storage of samples.	procedures.	the Fiji National University and private sector research companies.
	Number of active compounds purified and their structures elucidated during the project period.	0	30 active compounds	ABS Fiji database	Samples and refined specimens contain active compounds.
	Outputs: 1.1 Scientific surveys undertaken on bio-chemicals from the coastal environs of Fiji. 1.2 Screening facility for selecting and storing active compounds is established at national level. 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. 1.4 In-country technology and competencies applied to identify 30 active compounds which are purified and their structure elucidated. 1.5 At least one lead compound is identified for commercial purposes.				
Outcome 2: Operationalization of ABS Agreements and Benefit Sharing	Number of baseline ABS agreements (prior informed consent, mutually agreed terms) for project development and the biodiscovery process.	No agreed formal or informal agreements incorporating PIC, MATs, engagement protocols for ABS.	At least 10 ABS agreements with communities following agreed guidelines, legal & customary protocols consistent with the Traditional Knowledge and Expressions of Culture Act	Document accepted by the Environmental Management Committee (Environment Management Act, 2005)	That agreement can be struck between local communities, local government, provincial and national government agencies.
	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 FLMA.	Community agreements on contributions to Trust Funds or other financial modality for conservation and development.	Interest and continued support of the local communities and private sector in conservation and ABS.
	Outputs: 2.1 ABS agreements, interim guidelines, negotiation procedures and legal/customary developed in accordance with the Nagoya Protocol and the Traditional Knowledge and Expressions of Culture Act. 2.2 Benefit sharing mechanism (e.g. Trust Fund) for ABS strengthened contributes to the conservation of biological diversity.				
Outcome 3: Increased national capacity to	Existence of ABS laws, policies, guidelines and processes for institutionalization of	No formal ABS legislation, policy or guidelines, with the Dept of Environment	Legislation and supporting policy for ABS is harmonized with the Environment Management Act, 2005 and the Traditional Knowledge and	Cabinet approval. Reports.	ABS is a prioritized by government and supported by various sectors.

operationalize Nagoya Protocol obligations.	Nagoya Protocol obligations under the leadership of relevant agencies.	acting in the role of competent national authority.	Expressions of Culture Act, 2013 – and includes the formation of the competent national authority (CNA).		
	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 Affairs.	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	
	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	That 10 local scientists will remain working in Fiji upon completion of training
	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).	Continued interest by communities, partner agencies and NGOs in instituting ABS systems.

	<p>Outputs:</p> <p>3.1 National law and implementation guidelines on ABS developed.</p> <p>3.2 ABS administrative systems, including permits for access, certificates of compliance, designated checkpoints and standards for screening and approval process in developed in accordance with the Nagoya Protocol provisions.</p> <p>3.3 A monitoring and evaluation system generated to monitor application of the laws, policies, guidelines and agreements.</p> <p>3.4 Training programme developed and institutionalized on biodiversity techniques in national laboratories.</p> <p>3.5 Awareness programme for national stakeholders on Nagoya Protocol obligations.</p>
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III. TOTAL BUDGET AND WORKPLAN

Award ID:	00076545
Project ID:	00087868
Award Title:	PIMS 5148 Fiji Access Benefit Sharing

Business Unit:	FJI10
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
Implementing Partner (Executing Agency)	Department of Environment

GEF Outcome/Atlas Activity	Responsible party	Fund ID	Source of funds	Atlas Budgetary Account Code	ERP/ATLAS Budget Description/ Input	Year 1	Year 2	Year 3	Total	Budget Notes
						US\$	US\$	US\$	US\$	
1. Discovering active compounds for pharmaceutical and agrochemical uses from marine protected areas	Department of Environment	62190	GEF	Commu & Audio Visu Equ	72400	8,000	8,000	8,000	24,000	1
				Cont. Services. - Individual	71400	33,000	33,000	33,000	99,000	2
				Cont. Services - Companies	72100	60,000	50,000	34,162	144,162	3
				Workshop	75700	10,000	15,000	10,838	35,838	4
				Supplies	72500	7,000	7,000	7,000	21,000	5
				Travel	71600	10,000	15,000	14,000	39,000	6
				Consultant	71200	20,000	20,000	27,000	67,000	7
				Information technology	72800	150,000	50,000	30,000	230,000	8
	Total Outcome Cost					298,000	198,000	164,000	660,000	
2. Operationalization of ABS Agreements and Benefit Sharing	Department of Environment	62190	GEF	Local Consultants	71300	15,000	15,000	15,000	45,000	9
				Travel	71600	6,000	6,000	6,000	18,000	10
				Comms & Audio Visu Equ	72400	2,500	2,500	2,500	7,500	11
				Audio visual	74200	2,500	3,000	3,000	8,500	12
				Cont. Services - Companies	72100	2,000	4,000	4,000	10,000	13
				International Consultant	71200	0	11,000	20,000	31,000	14
				Equipment and Furniture	72200	4,000	4,000	4,000	12,000	15
	Total Outcome Cost					32,000	45,500	54,500	132,000	
3. Increased national capacity to operationalize Nagoya protocol obligations	Department of Environment	62190	GEF	Cont. Services. - Individual	71400	5,000	5,000	5,000	15,000	16
				Travel	71600	2,500	2,500	5,000	10,000	17
				Cont. Services - Companies	72100	5,000	10,000	5,000	20,000	18
				Equipment and Furniture	72200	5,000	2,500	2,500	10,000	19
				Supplies	72500	5,000	5,000	5,000	15,000	20
				Workshops	75700	5,000	5,000	5,000	15,000	21
				Commu & Audio Visu Equ	72400	2,500	1,500	1,000	5,000	22
				Audio visual & Print Prod	74200	2,000	1,000	1,000	4,000	23

	Total Outcome Cost					32,000	32,500	29,500	94,000	
4. Project Management	Department of Environment	62190	GEF	International Consultants	71200	8,000	10,000	14,000	32,000	24
				Cont. Services. - Individual	71400	10,000	10,000	10,000	30,000	25
				Travel	71600	3,000	5,000	3,000	11,000	26
				Equipment and Furniture	72200	3,000	2,000	-	5000	27
				Prof. Services	74100	2000	2000	2,000	6,000	28
	Total					26,000	29,000	29,000	84,000	
Totals			GEF			388,000	305,000	277,000	970,000	

Summary of GEF budget by Atlas code

Atlas Budgetary Account Code	ERP/ATLAS Budget Description/ Input	Year 1	Year 2	Year 3	Total
International Consultants	71200	28,000	41,000	61,000	130,000
Local Consultants	71300	15,000	15,000	15,000	45,000
Contractual Services - Individual	71400	48,000	48,000	48,000	144,000
Travel	71600	21,500	28,500	28,000	78,000
Contractual Services-Companies	72100	67,000	64,000	43,162	174,162
Equipment and Furniture	72200	12,000	8,500	6,500	27,000
Communications	72400	13,000	12,000	11,500	36,500
Supplies	72500	12,000	12,000	12,000	36,000
Information Technology	72800	150,000	50,000	30,000	230,000
Professional Services	74100	2,000	2,000	2,000	6,000
Audio-Visual	74200	4,500	4,000	4,000	12,500
Workshop	75700	15,000	20,000	15,838	50,838
Totals		380,000	305,000	277,000	970,000

Budget notes

Component	Atlas category	Atlas code	Amount	Explanation	Budget Notes
1. Discovering active compounds for pharmaceutical and agrochemical uses from organisms in protected areas	Commu & Audio Visu Equ	72400	24,000	Communication plan generation, media production, liaison, consultation and mediation with communities	1
	Contract Services - Indiv	71400	30,000	50% Salary of project manager to for technical inputs including coordinating inputs from USP and ICBG partners: 40 months @ \$750/month;	2
			69,000	Salary of 2 University of Fiji technicians, 31 months each @ \$1,100	2
	Contractual Services - Company	72100	25,000	Salary support of USP/ICBG Partner individual for testing extracts in Fiji: 25 months @ \$1,000/month	3
		72100	42,000	Salary of ICBG partner technician, 12 months @ \$3500 for testing extracts & advising on purification in Fiji	3
			77,162	Salary of 2 USP technicians, 35 months each @ \$1,100 for making extracts in Fiji	3
	Workshop	75700	35,838	Workshops with targeted communities where collection will occur	4
	Supplies	72500	7,000	Supplies for USP & FNU for testing extracts in Fiji	5
			7,000	Supplies for ICBG for testing extracts in Fiji	5
			7,000	Supplies for ICBG /USP for purifying active compounds and elucidating structure	5

	Travel	71600	39,000	Travel of ICBG partners, USP and Govt officers, facilitation of community representative travel in-country	6
	Consultant - Int	71200	67,000	Advise on community consultations, survey guidance, and best practice: 6 months x \$11,200/m	7
	Information Tech	72800	230,000	Screening Facility and associated hardware and software	8
2. Operationalization of ABS Agreements and Benefit Sharing	Local consultants	71300	45,000	Specialist in ABS agreements to support review of ABS agreements, inclusive of consultations, negotiations & mediation with stakeholders: 75 days @ \$600/day	9
	Travel	71600	18,000	Travel of technicians, students and scientists for training	10
	Commu & Audio Visu Equ	72400	7,500	Engagement strategy & liaison across Govt re skills development	11
	Audio Visual	74200	8,500	Technology use for engagement of communities with external ICBG partners & technical comms for field work.	12
	Contractual Services - Companies	72100	10,000	Engagement services of ICBG partners in knowledge building with communities, facilitated by USP	13
	International consultants	71200	31,000	Negotiation of Agreements between communities, Govt agencies, ICBG partners and research institutions, forming agreed base Agreements covering PIC and MATs: 48 days by \$650/day	14
	Equipment and Furniture	72200	12,000	Materials and equipment to assist with field work and 'learn-by-doing' work with communities	15
3. Increased national capacity to operationalize Nagoya protocol obligations	Contract Services - Indiv	71400	15,000	International consultant to advise on capacity needs - institutional, legal, policy and procedures: 2months work over 3 years at \$7,500 per month	16
	Travel	71600	10,000	Travel of international institutional capacity adviser, including travel to communities.	17
	Contractual Services - Companies	72100	20,000	Institutional specialist to write draft laws, legislative provisions, policy guidelines and finalize base agreements: 3 months over 3 years at \$6,500 per month	18
	Equipment and Furniture	72200	10,000	Equipment and furniture in Dept of Env to assist with PMU and the formation of the eventual competent national authority (CNA).	19
	Supplies	72500	15,000	Standard agreements, accompanying guidelines, manuals, stationary for PMU and eventual CNA.	20
	Workshops	75700	15,000	Engagement workshops 1 per year to facilitate agreement to processes	21
	Commu & Audio Visu Equ	72400	5,000	Communication plan and application and engagement for final institutional processes	22
	Audio Visual	74200	4,000	Communication equipment and facilitation of final databases and enveloping into clearing house mechanisms/ portals	23
4. Project management	International consultants	71200	32,000	Institutional specialist to undertake high level negotiations, project management and reviews: 3 months at \$10,500 per month	24
	Contract Services - Indiv	71400	30,000	50% Salary of project manager for project management inputs: 40 months @ \$750/month	25
	Travel	71600	11,000	Travel by adviser and Govt representatives to communities for negotiations	26
	Equipment and Furniture	72200	5,000	Furniture and equipment to facilitate project management specialists, advisers and international consultants.	27
	Professional Services	74100	6,000	Final audits and confirmation of mid term and terminal accounts	28

IV.MANAGEMENT ARRANGEMENTS

Implementation Arrangements and Responsibilities

121. The project will be nationally executed as per UNDP National Implementation Modality (NIM) procedures. According to UNDP guidelines on National Implementation Modality (2011), the Government is responsible for the management and delivery of programme activities to achieve project outcomes/outputs. Government regulations, rules and procedures therefore apply to project implementation to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. The project will be governed in accordance with UNDP's Results Management Guideline (RMG). Key elements of the project implementation arrangements are described below:

Project Board:

122. The Project Board is the strategic decision-making body of the project. It will consist of the Department of Environment, Office, Ministry of *I Taukei* Affairs and UNDP. It is responsible for overall direction and management of project. The board is ultimately responsible for the project supported by the National Steering Committee. It is responsible for making management decisions for a project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual WorkPlan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans. The Project Board is expected to meet at least once annually and in its deliberations it will consider recommendations put forward by the Project Steering Committee. In the event that board members are not able to meet physically, other alternatives could be considered such as teleconferences, skype as well as email discussions.

123. In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for the best development results, best value for money, fairness, integrity, transparency and effective international competition.

124. In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP.

Project Steering Committee (National ABS Committee):

125. A *National Project Steering Committee* (PSC) will be convened by the Department of Environment, and will serve as the project's coordination and technical advisory body. The PSC will include representation of all the key project stakeholders. It will meet according to the necessity, but not less than once in 6 months, to review project progress and advice on technical matters concerning the project.

126. The PSC may meet more frequently to discuss issues of technical nature and make recommendations which would be forwarded to the Project Board for final decision making.

127. The Project Steering Committee may be an existing or previously formed NBSAP Steering Committee. This committee may comprise of smaller thematic working groups. The thematic area groups may meet quarterly or on an adhoc basis when need arises. The steering committee however meets at least twice per year to review and monitor the performance of the project. The PSC will include

NBSAP stakeholder group, thematic area working group and some key people involved in planning and implementing NBSAP activities. This may include other key government Ministries and departments.

128. Until the PSC has met and has deliberated, the following are the proposed TOR for the Committee (the TOR may be amended by the committee):

- Provide policy and strategic oversight and support to the implementation of the project, in particular to the process of forming ABS policies/frameworks and of completing and submitting national reports to the CBD with full government endorsement.
- Advise and ensure stakeholder involvement on matters of biodiversity sectoral and development mainstreaming, biodiversity valuation and on the nexus biodiversity-climate change.
- Review and provide advice on technical components of the Annual Work Plans
- Provide inputs to the projects' APR/PIR.
- Support project evaluations, if applicable
- Deliberate on the TOR and membership for other committees and working groups that are expected contribute to the implementation of project activities and the achievement of its outcomes.
- Discuss and make recommendations on any matter involving an alteration in the mandate, terms of reference, membership, or structure of the PSC
- Any other relevant task as applicable.

Implementing Partners:

129. The executing agency may enter into agreements with other organisations or entities to assist in successfully delivering project outputs. Possible implementing partners include government institutions, other eligible UN agencies and Inter-governmental organisations (IGOs), UNDP, and eligible NGOs. Eligible NGOs are those that are legally registered in the country where they will be operating. Proposed implementing partners must be identified based on an assessment of their legal, technical, financial, managerial and administrative capacities that will be needed for the project. In addition, their ability to manage cash must be assessed in accordance with the Harmonised Approach for Cash Transfers (HACT).

130. Implementing partners are responsible and accountable for achieving project Objective, Outcomes and Outputs as they may be assigned by agreement. They are also responsible to ensure the effective and efficient use of donor resources. The DOE is the lead Implementing Partner designated to take overall responsibility for the project. Other implementing partner organisations (such as the USP, the ICBG and NGOs) will work closely with the Project Manager (PM) and Project Management Unit (PMU) to implement activities and deliver outputs that are under their mandate in accordance with the Stakeholder Involvement Plan and relevant agreements. These arrangements will be finalized in the project's inception phase and aligned with the project's first annual workplan. Whenever possible, these agencies will lead the delivery of project Outputs which fall within their respective core areas of work, with the PMU facilitating their work and providing other required inputs to deliver planned project Outcomes

and Outputs. Implementing partners need to be actively engaged in providing advice and timely inputs to deliver the project outputs that are related to their mandate.

National Project Director (NPD):

131. The National Project Director (NPD) will be responsible for overseeing overall project implementation on a regular basis and ensuring that project Objective and Outcomes are achieved. This function is not funded through the project. The NPD, assisted by the Project Manager, will report to the Project Steering Committee on project progress. The NPD will be responsible for coordinating the flow of results and knowledge from the project to the Project Steering Committee.

132. The NPD, to whom the Project Manager will report, will be the Director of the Department of Environment. The NPD will be responsible for orienting and advising the Project Manager on Government policy and priorities, for maintaining regular communication with the lead institutions and NGOS in relation to biodiversity in Fiji, and ensuring that their interests are communicated effectively to the Project Manager.

133. Additionally the NPD will be responsible for providing project assurance services for project implementation including (i) recruitment of project staff and contracting of consultants and service providers; (ii) overseeing financial expenditures against project budgets approved by the PSC; and (iii) ensuring that all activities including procurement and financial services are carried out in strict compliance with Government and/or UNDP/GEF procedures. A DoE staff member will be assigned with the responsibility for the day-to-day management and control over project finance. A UNDP staff member will be also assigned with the responsibility of project assurance activities and will be the point of contact between the project management unit and the UNDP.

Project Management Unit (PMU):

134. Project implementation will be the responsibility in practice of the Project Management Unit (PMU), led by the National Project Director with the Project Manager and two assistants located within the project executing office at the Department of Environment. The project staff will be recruited using standard Government recruitment procedures. The Project Manager will manage the administrative implementation of all project activities and will ensure that all reporting is submitted according to pre-agreed deadlines. The Project Manager will also be technically supported by contracted service providers including national and international consultants, the University of the South Pacific and members of the ICBG partnership. The first two outcomes which include technical components of the projects will be implemented in close unison with the University of South Pacific (USP). This will be based on a Memorandum of Understanding entered between the University of the South Pacific and Department of Environment. The MoU will detail specific tasks carried out by USP, funding allocations, reporting requirements and details concerning ABS agreements and the use of data and research. The University of the South Pacific will report to the Department of Environment, liaising through the PMU.

Project Manager:

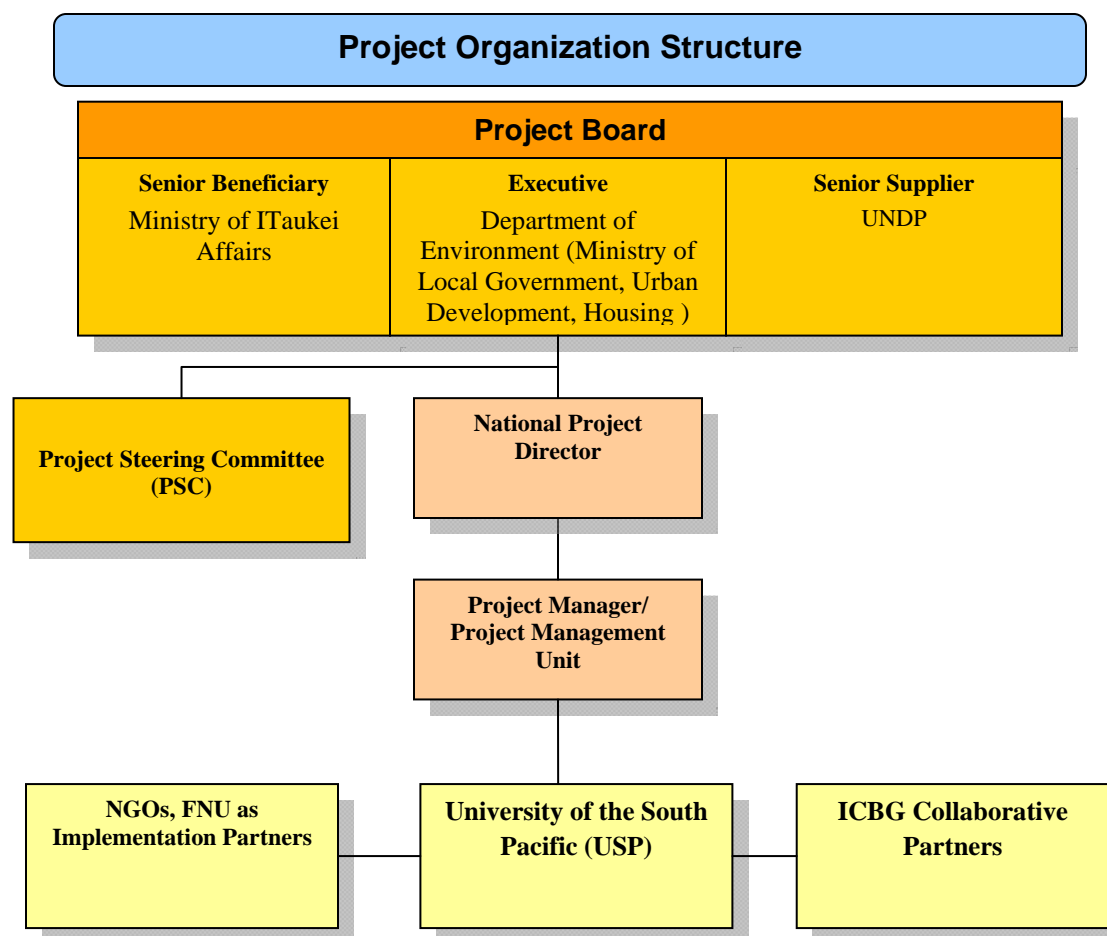
135. The Project Manager (PM) will be responsible for implementing the project in operational, administrative and financial terms, subject to oversight and monitoring by UNDP, the National Project Director and the PSC, and specifically the following:

- The implementation of project activities in accordance with Annual Budgets and Workplans and Quarterly Plans, approved by UNDP and the PSC as appropriate;
- The delivery of the project outputs foreseen in the Project Document;
- The achievement of project outcomes, in accordance with the indicator targets specified in the project Strategic Results Framework;
- The monitoring and evaluation of project impacts;
- The effective participation of project partners and other stakeholders in project implementation, in accordance with the project participation plan;
- The conformity of project activities with national laws, policies and priorities;
- The effective, efficient and transparent use of project funds.

136. In addition to the specific positions underlined above, a series of sub-contracts will be necessary in order to ensure and complement the technical capacity of the members of the PMU. These contracts will be entered into in accordance with the guidelines of UNDP and terms of reference defined by the NPD, during the first month of the implementation phase or annually, in accordance with the project's work plan. UNDP will provide GEF funds to the project partners for the purchase of goods and services.

UNDP:

137. UNDP will provide project assurance by ensuring the application of UNDP administrative and financial procedures for the use of GEF funds. UNDP will ensure project monitoring and evaluation according to an agreed schedule and in line with UNDP and GEF requirements. UNDP will assist in compiling lessons learned and sharing project experiences on a national, regional and international basis.



Summary of the inputs to be provided by partners

Partner	Inputs
Dept of Environment	Provision of strategic orientation and delivery of the project through the PSC
Project Steering Committee	Responsible for technical aspects of project implementation subject to coordination by NPC Provision of strategic orientation to project through participation in PSC
USP (CDDU)	Coordination and provision of technical aspects to project implementation and training subject to coordination and agreement with the PSC.
International Cooperative Biodiversity Group	This international consortium will be the lead international partner and will provide input through consortium partners (Georgia Tech University, Scripps Institute of Oceanography, University of California at Riverside & University of North Carolina).
Private sector	Realization of bioassays, marketing, provision of supplies and technical know-how to Fiji/

Partner	Inputs
UNDP	GEF Agency, Executing Agency and Senior Supplier

Audit Arrangements

138. The Government of Fiji will provide the UNDP MCO Fiji with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by a suitably qualified and certified accountant. UNDP will be responsible for making audit arrangements for the project in communication with the Project Manager and the Project Management Unit.

V. MONITORING FRAMEWORK AND EVALUATION

139. Project Monitoring and Evaluation (M&E) will be conducted in accordance with the established UNDP and GEF procedures and will be provided by the project team and the UNDP Multi Country Office (UNDP-MCO) with support from the UNDP/GEF Regional Coordination Unit (RCU) in Bangkok. The Project Results Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. The M&E plan includes an inception report, project implementation reviews, quarterly and annual review reports, and mid-term and final evaluations. The following sections outline the principle components of the M&E plan and indicative cost estimates related to M&E activities. The project's M&E plan will be presented and finalized in the Project Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff, partnership arrangements and M&E responsibilities.

Project Inception Phase:

140. A **Project Inception Workshop** (IW) will be held within the first three (3) months of project start-up with the full project team, relevant Government of Fiji partners, counterparts, co-financing partners, the UNDP-MCO and representation from the UNDP-GEF RCU, as well as UNDP-GEF headquarters (HQs) as appropriate. A fundamental objective of this IW will be to help the project team to understand and take ownership of the project's goal and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project results framework. This will include reviewing the results framework (indicators, means of verification, and assumptions), imparting additional detail as needed, and on the basis of this exercise, drafting the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

141. The Project Inception Workshop will also provide opportunity for a detailed presentation of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements to all project stakeholders. Particular emphasis will be on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as the Mid-Term Review. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephrasing.

142. The IW will provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff, partners and service providers and decision-making structures will be discussed as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

143. An **Inception Workshop report** is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Monitoring Responsibilities and Events

144. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and Budget (AWPB) and its indicators. The Project Manager will inform the UNDP-MCO of any delays or difficulties faced

during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The Project Manager will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the IW with support from UNDP-MCO and assisted by the UNDP-GEF RCU. Specific targets for the first-year implementation progress indicators together with their means of verification will be developed at this workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the AWPB. Targets and indicators for subsequent years will be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

145. **Periodic monitoring** of implementation progress will be undertaken by the UNDP MCO through quarterly meetings with the project implementation team, or more frequently as deemed necessary. This will allow parties to take stock of and to troubleshoot any problems pertaining to the project in a timely fashion to ensure the timely implementation of project activities. The UNDP MCO and UNDP-GEF RCU, as appropriate, will conduct yearly visits to the project's field sites, or more often based on an agreed upon schedule to be detailed in the project's Inception Report/AWPB to assess first-hand project progress. Any other member of the PSC can also take part in these trips, as decided by the Project Steering Committee. A Field Visit Report will be prepared by the UNDP MCO and circulated no less than one month after the visit to the project team, all Project Steering Committee members, and UNDP-GEF.

146. Annual Monitoring will occur through the **Tripartite Review (TPR)**. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments.

147. The **Terminal Review** is to be held in the last month of project operations. The Project Manager is responsible for preparing the Terminal Report and submitting it to UNDP-MCO and to UNDP-GEF RCU. It shall be prepared in draft at least two months in advance of the last PSC meeting in order to allow review, and will serve as the basis for discussions in the PSC meeting. The terminal review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learned can be captured to feed into other projects being implemented. The **Project Terminal Report** will summarize all activities, achievements, and outputs of the project; lessons learned; objectives met or not achieved; structures and systems implemented, etc.; and will be the definitive statement of the project's activities during its lifetime.

148. The project will be subjected to at least two independent external evaluations as follows:

149. The project will undergo an independent **Mid-Term Evaluation** at the mid-point of project implementation (tentatively mid 2015). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be

incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP MCO based on guidance from the UNDP/GEF Regional Coordination Unit. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

150. An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

Project Monitoring Reporting

151. The Project Manager, in conjunction with the UNDP-GEF project team, will be responsible for the preparation and submission of the following reports that form part of the monitoring process and that are mandatory. A **Project Inception Report (IR)**, which will be prepared immediately following the IW. It will include a detailed First Year/AWP divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The **Annual Project Report (APR)** is a UNDP requirement and part of UNDP MCO central oversight, monitoring, and project management. An APR will be prepared on an annual basis, to reflect progress achieved in meeting the project's AWP and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The **Project Implementation Review (PIR)** is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. The PIR can be prepared any time during the year and ideally prior to the annual review. **Quarterly Progress Reports** outlining main updates (narrative and financial) in project progress will be provided quarterly to the local UNDP MCO and the UNDP-GEF RCU by the project team. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform and the risk log should be regularly updated in ATLAS based on the initial risk analysis included in the Project Document.

Quarterly Progress Reports

152. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team..

Technical Reports (project specific- optional)

153. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical

Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate; the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

Project Publications (project specific- optional)

154. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

155. The indicative M&E work plan and budget is as follows

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> Project Manager UNDP CO 	5,000.-	Within first 2 months of project start up
Measurement of Means of Verification of project Outcomes	<ul style="list-style-type: none"> Project Manager will oversee the hiring of specific support as appropriate and delegate responsibilities to relevant team members. 	To be determined during the initial phase of implementation of the project and the IW.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> Oversight by Project Manager Project team 	To be determined as part of Annual Work Plan prep.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> Project manager and team UNDP MCO 	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> Project manager and team 	None	Quarterly

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Project Steering Committee	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP-MCO ▪ Govt representatives ▪ NGOs ▪ Partners 	None	Two times per year
Technical reports	Project Manager and Team	None	To be determined by Project Team and UNDP-MCO
Mid-term Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP MCO ▪ UNDP RCU ▪ External Consultants (team) 	15,000	At mid-point of implementation.
Terminal Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team, ▪ UNDP MCO ▪ UNDP RCU ▪ External Consultants (mixed local/int. team) 	25,000	At least two months before the end of project implementation
Terminal Report	Project Team UNDP-MCO	None	At least one month before the end of the project
Audit	<ul style="list-style-type: none"> ▪ UNDP MCO ▪ Project manager and team 	Indicative cost per year: 3,000, total 9,000	Yearly
Visits to field sites	<ul style="list-style-type: none"> ▪ UNDP MCO ▪ UNDP RCU (as appropriate) ▪ Government representatives 	No separate M&E cost: paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 54,000	

VI. LEGAL CONTEXT

156. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner. The implementing partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

157. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement

158. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

Communications and Visibility Requirements

159. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at <http://intra.undp.org/coa/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.html>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: [www.thegef.org/gef/GEF logo](http://www.thegef.org/gef/GEF%20logo). The UNDP logo can be accessed at <http://intra.undp.org/coa/branding.shtml>.

160. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: [www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08%20Branding%20the%20GEF%20final%200.pdf). Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

161. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

VII. ANNEXES:

Annex 1: Terms of Reference:

1) National Project Manager

- Coordination of Project activities in accordance with Annual Work Plans and Budgets (AWPBs).
- Supervision of the activities of the technical personnel of the project, thereby guaranteeing their relevance, effectiveness and efficiency
- Preparation of terms of reference for external consultants contracted by the project, the supervision and coordination of their work and the review and approval of their products.
- Ensure that the project is executed with the full participation of local actors and that mechanisms exist to ensure that their interests are taken into account, communicated and reflected in the implementation of the project.
- Promote the coordinated participation of Government institutions and key partners, at national and local levels, in the implementation of the project.
- Continuous and periodic monitoring of the impacts of the project, in relation to the advances foreseen in the AWPBs and the impacts foreseen in the project results framework.
- In communication with the NPD, ensure that the Project is executed in accordance with the policies and plans of the Dept of Environment
- In communication with the Programme Office of UNDP, ensure that the project is executed in accordance with the United Nations Development Assistance Framework (UNDAF) in Fiji.
- Identification and promotion of opportunities for actions of other agencies of the United Nations system.
- Ensure the incorporation of a cross-cutting gender focus in the actions of the project.
- Together with UNDP, prepare Project Implementation Reviews (PIRs) detailing the progress of the project, to be presented to GEF.
- Together with UNDP and the project team, and in discussion with local stakeholders, prepare AWPBs for approval by the NSC and the GEF.
- With the support of the administrative team of the project, ensure the efficient and transparent execution of financial and physical resources, in conformity with the norms of the Government, GEF and UNDP.
- Design and implementation of plans of professional development for the members of the Project Implementation Unit.
- Identification of the risks that could affect the achievement of the impacts foreseen by the project, and the definition and application of corresponding mitigation strategies.
- Support to the functioning of the PSC, through the provision of advice and logistics.
- Preparation and supervision of the application of operations manuals for the implementation of the Project.
- Organization and support of external evaluations of the project.
- Preparation of quarterly reports (QORs) in English, of no more than 150 words, on the progress of the project
- Any other tasks that may be assigned to him/her and are compatible with the nature or his/her post.

2) Administrative Assistant

- Manage the economic and financial resources assigned to the project, under the direction of the Project Manager, in close coordination with the NPD and UNDP-MCO
- Assist the Project Manager in the different activities involved in the implementation of the project.
- Support the monitoring and evaluation of the implementation of the project.
- Provide logistic support for the execution of activities.
- Facilitate coordination with UN agencies and participating national institutions
- Provide administrative support to the contracting of personnel for the Project, as required
- Assist in the process of procurement of goods and services within the framework of the project
- Assist in the presentation of financial, administrative, audit and other reports, as necessary
- Generate a database of contacts, providers, personnel and documentation.

Annex 2: Summary of Legislative and Policy Frameworks of Relevance to ABS.

Current legislation / Policy	Description	How does it address ABS related issues	Administering Agency / Ministry
2010 <i>Draft of the Indigenous Fijian Traditional Knowledge and expressions of Culture Policy</i>	The policy reflects the commitments of the Government, to safeguard, protect and promote their traditional knowledge and expressions of culture. As an enabling mechanism the policy ensures first and foremost that present and future generations of I Taukei will socially, economically and culturally benefit from the range of interventions.	<u>Part 1-number 2.5 (30) – with regard to traditional knowledge & expressions of interest:-</u> <ul style="list-style-type: none"> • The principle of compensation • The principle of prior informed consent • The principle of benefit sharing • The principle of access 	MIT
Preservation of objects of Archaeological and Paleontological interests Act - 1940	This act basically establishes the need for licenses and permits that are required before any site is being accessed which has traditional, cultural or historical importance to Fiji.	<u>POAPI Act (Cap.264)</u> <ul style="list-style-type: none"> • Survey permit and excavation permit • Permit to export archaeological material • In house research permit • Oral history Collection Permit 	Fiji Museum
Biosecurity Promulgation 2008	BAF is mandated to issue import permits for plants and animals and their products. Import permits come with requirements that importers follow to meet Fiji's appropriate levels of protection, depending on the risk (pets and diseases) with consignment.	<u>Part 5 and Part 6</u> Imports and exports , biosecurity access arrangements etc.	Quarantine
The Sustainable Development Bill of 1997	Contains sections on bio-prospecting can become an essential part of the ABS policy in Fiji. The draft bill does not cover issues such as formation of a national competent authority and national focal point. It also does not talk about how to establish prior informed consent; much of	Biodiversity Prospecting (1) The Conservation and National Parks Authority shall establish and maintain an effective system to regulate biodiversity prospecting in Fiji to ensure that:	NA

	these may however be part of the actual legislative framework on ABS.	<ul style="list-style-type: none"> a) Ecological, social or economic harm is not caused by biological research or exploitation; b) The taking of biological samples does not cause any undesirable impact upon Fiji's biodiversity; c) A fair return is provided for any commercial exploitation of Fiji's biological resources <p>(2) Biodiversity prospecting in any marine or terrestrial area is prohibited without prior approval by means of a special permit.</p> <p>(3) Any person who contravenes, or attempts to contravene, the provisions of paragraph (2) shall be guilty of an offence and liable on conviction to the penalties provided under Part XXI of this Act.</p>	
Endangered and Protected Species Act 2002	An act that deliberates on the establishment of Fiji Islands CITES management authority and scientific council. This acts regulates on the importation and exportation of items listed under CITES.	The legislation regulates and controls the international trade, domestic trade, possession and transportation of species protected under the convention on international trade in endangered species of wild fauna and flora	Dept of Environment

		(CITES). There are a number of administrative processes that may be relevant for ABS activities: <i>S9. Export permits</i> <i>S15. Keeping of records</i> <i>S18. Transit and transshipment of specimens</i> <u>S21. Registration of persons to trade in specimens</u>	
Plant quarantine Act 1985	The revised Plant quarantine Act ⁶ of 1985 requires written authorization for movement into or through Fiji of plants, plant material, plant pests regulated materials or conveyances. The act also restricts importation of prohibited plants species from outside Fiji for research unless approved by Minister responsible in Fiji. In the close study of the clauses of this act it clearly identifies to focus on the importation and exportation of plant species with declaration to the quarantine. The act is specifically targeting the concerns of quarantine, noxious weeds, import and export of plant species which by far is not the overall goal of an ABS concern.	No relevant provisions. Relevant for plant quarantine matters only.	DoFF & DoA
Animals Importation Act – 1985	Similar to Plant Quarantine Act, Animals Importation Act ⁷ of 1985 also addresses the importation of animals, fish and eggs for research in Fiji.	No relevant provisions. Related importation only	DoA, DoFF

⁶ Plant quarantine Act- Cap 156 revised in 1985

⁷ Animals Importation Act Cap 159 revised in 1985 subsidiary legislation.

Animals (Controls of experiments) Act	The Animals (Controls of experiments) Act ⁸ has some legal covering on research in academic institutions within Fiji. Licenses are required for experiments to be undertaken in attaining manual skills, however bio-prospecting, biotechnology and gene research is clearly not mentioned. The act requires researchers to obtain licence to carry out experiments in Fiji, or permits in cases where the Minister feels it appropriate to do so. The experiments in academic institutions in Fiji mean activities for the purpose of acquiring physiological knowledge or any knowledge which will be used for saving or prolonging life, or alleviating suffering, or for combating any disease whether of human beings, animals or plants.	Section 6 enables approval for experiments For: 1. the purpose of the advancement by new discovery of physiological knowledge, or 2. of any knowledge which will be useful for saving or prolonging life, or alleviating suffering, or for combating any disease whether of human beings, animals or plants; (b) for the purpose of testing any former discovery alleged to have been made for the advancement of the types of knowledge referred to in paragraph (a);	
Birds and Game protection Act	The Birds and Game protection Act ⁹ of 1985 in a very brief clause has conditions of access to birds, nests and eggs for scientific research in Fiji.	Sect 6. Enables the issuing of a license to 'kill'.	DoFF
Patents Act 1978	The Patents act of 1978 and the Copyrights acts of 1999 are the two legal frameworks available in Fiji principally safeguarding Fijian intellectual property rights. Fiji needs to improve the system of protection, development and use of genetic resources in order to prevent loss and disorderly use of genetic resources. To this end, the relationship between conservers, developers and users of genetic resources need to be enhanced.	Sect 4. Provides the right and privilege granted to inventors to be conferred by letters patent under the seal of Fiji, whereby the inventor shall be entitled to the sole and exclusive privilege of using, selling or making his said invention in Fiji and of authorising others so to do for the term of fourteen years from the	Attorney Generals

⁸ Animals (Control of Experiments Act) Cap.161 Ed. 1978.

⁹ Birds and games protection rev.1985 Cap 170

	<p>Laws need to protect the rights of providers during access of genetic resources, establishment of rational mechanism for access to genetic resources, and benefits sharing from their use. Also there is a need to establish a system to protect traditional knowledge which can be effectively undertaken through documentation, inheritance and further development of traditional knowledge. With such laws in place the management and protection of intellectual property rights over traditional medicine and herbal use of biological resources will be improved.</p>	<p>date of the letters patent. (<i>Amended by 26 of 1967 s.2.</i>)</p>	
<p>National Trust for Fiji Act [Cap 265]</p>	<p>Empowers National Trust to enter into binding conservation covenants with landowners, purchase land for conservation purposes, adopt by-laws for trust properties and maintain a register of nationally significant areas</p>	<p>Provides protection to national trust lands (and resources) including requirements for access via the Act's purpose:</p> <p>“(a) to promote the permanent preservation for the benefit of the nation of lands (including reefs),natural interest or beauty;</p> <p>(b) the protection and augmentation of the amenities of any such landto preserve their natural aspect and features;</p> <p>(c) to protect animal and plant life; and</p> <p>(d) to provide for the access to ...such lands..”.</p>	<p>National Trust.</p>

Annex 3: Minutes of Stakeholders Meeting



*Empowered lives.
Resilient nations.*

MINUTE OF THE STEERING COMMITTEE & STAKEHOLDERS MEETING ON ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING (ABS)

25 July 2013

1st August, 2013

PREPARED BY THE SECRETARIAT:

**Iva Josivini (NBSAP Project Assistant)
Department of Environment
Magan House, 19 McGregor Road, Suva**



*Empowered lives.
Resilient nations.*

**STEERING COMMITTEE & STAKEHOLDERS MEETING
ON ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING (ABS)**

| 25th July, 2013 | Holiday Inn

Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) was acceded by Fiji in late 2012. The Protocol addresses international commitment by National Focal points at sharing the benefits arising from the utilization of genetic resources in a fair and equitable and appropriate transfer of relevant technologies, taking into account rights over those resources and to technologies with appropriate funding.

Fiji has been approved with a grant from the Global Environment Facility (GEF) to prepare its ABS proposal on Capacity Development, Training, and Bioprospecting with the help from UNDP in its processes towards implementation of this Protocol. A consultant has been recruited to facilitate the compilation of a full sized proposal. Discussions during this meeting will allow for stakeholder contributions towards the development of the ABS proposal.

Tentative Agenda

9.00 am	Welcome and Opening remarks (Department of Environment)
9.10 am	Introduction of Participants
9.20 am	Purpose of the meeting (UNDP and DOE)
9.30 am	Presentation 1
	Background/update on ABS
	Presentation 2
	Project Formulation (Update) by UNDP

Presentation 3

Update from consultant and group work & plenary discussions
(Review of draft log frame)

11:50 -12:00pm

Summary of outcomes and way forward

1.0 OPENING AND WELCOMING

- 1.1 A total of 16 organizations attended the workshop (**attachment 1**) that comprises key government ministries or departments, non government agencies and USP academic institutions in Fiji. Invitations were addressed to heads of respective organizations and followed via electronic mails and telephone conversations.
- 1.2 The meeting was formally opened with an opening statement by the Manager of Project Management Unit of the Ministry; Mr. Sele Tagivuni followed by comment from Mrs. Winifereti Nainoca representative from UNDP and then, introduction of participants stating their name, organization being represented and provide a brief explanation on what is ABS and what they were looking forward to at this meeting.
- 1.3 The meeting was kept casual, friendly and informal with frequent discussions and ideas shared in usual person to person exchanges allowing a wide range of views to be shared across the table. The discussions were moderated by representative from UNDP Winifereti Nainoca, Floyd and Sele from Department of Environment

2.0 Presentation 1: Background Update on ABS

- 2.1 Mr. Floyd Robinson from UNDP briefly spoke briefly about Access to Genetic Resources and Benefit Sharing in Fiji. Nagoya Protocol on Access to Genetic Resources and Benefit Sharing (ABS) was exceeded by Fiji in 2012. The Protocol addresses international commitment by National Focal points at sharing the benefits arising from the utilization of genetic resources in a fair and equitable manner and appropriate transfer of relevant technologies, taking into account rights over those resources and to technologies.
- 2.2 Fiji has been approved with a grant from the Global Environment Facility (GEF) to prepare its ABS proposal on Capacity Development, Training and Bioprospecting with UNDP in its process towards implementation of the Nagoya Protocol. An ABS Consultant, Mr. Matt McIntyre has been recruited to facilitate the compilation of Fiji ABS Project proposal.
- 2.3 This first Roundtable Log Frame Discussion will collate all the necessary preliminary information that the Department of Environment will need to assist the consultant in finalizing a draft project Document (PDD) for final submission to GEF.

3.0 Presentation 2: Project Formulation (Update) by UNDP

- 3.1 Based on the Project Identification Form (PIF), the project Title is “**discovering nature- based product and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing Fiji**”. The Nagoya Protocol Implementation Fund (NPIF) is a multi- donor trust fund established in 2011.
- 3.2 The Protocol was established to facilitate the early entry into force and its implementation fulfilling its national level obligation. The NPIF assist eligible developing countries like Fiji with economies in transitions that are in the process of ratification of the Nagoya Protocol.

- 3.3 There are activities that support to accommodate the NPIF is particularly seeking to support concrete and innovative opportunities leading to ABS agreement with involvement of the private sector.

4.0 Presentation 3: Update from ABS Consultant

- 4.1 Mr. Matt McIntyre provided a presentation on “discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Fiji”. Basically to provide a clear idea of the project design documents on Access Benefit Sharing in Fiji as presented by the GEF agency, UNDP. The Project design document may cover the background information, progress and gap analysis, emerging issues and challenges and priorities.
- 4.2 As mentioned in the presentation that there are a few challenges considered from the consultation meetings with the NGO’s partners and government ministries during the two days of stakeholders consultation meeting in which Department of Environment will need to provide an update for the ABS progress in Fiji.

5.0 Notable Comments and Suggestions

- 5.1 The project framework clearly stated the expected outcome and as an issue raised by a member and that is component 3 of 1.3 is the awareness programme for national stakeholders on Nagoya protocol. It’s preferable to become the first outcome rather being last outcome on the least. This issue will be reconsidering once the Project Framework is drafted and circulated for comments.
- 5.2 Another issue raised was to reconsider the project title by focusing to one particular area for either terrestrial or marine area. It is then highly recommended that the project title covers marine nature based product on the application of Nagoya Protocol which will assist to provide understanding for the communities and stakeholders in partners the focus area of the Project.
- 5.3 Ministry of iTaukei had carried out cultural mapping and in relation to this, it is highly recommended to take action on verification process to confirm the information already reported of this Project. Thus the Ministry will take the lead role of discussion to the iTaukei, land owners and local communities in regards to this project in the future.
- 5.4 Nature Fiji- Mareqeti Viti recommended that the Terrestrial sub- committee (Protected Area Committee) to consider the discussed issue of the Meeting.

6.0 Group Discussion to Review the Log Frame

- 6.1 Members were grouped according to the three project component to discuss and give comments on the expected outcomes and outputs or other possibilities which can be include in the Project Framework (**Attachment 2**)
- 6.2 Comments from group discussions will be summarized and circulated to group members for final comment and will be included in the draft Project Framework.

End of Meeting: 1pm

Attachment 1

Registration

**Steering Committee Meeting on Access to Genetic Resources and Benefit Sharing (ABS)-
1st Roundtable Log Frame Discussion
25th July, 2013, Holiday Inn (9-12pm)**

	Name	Organization	Email Address
1	Saras Sharma	Department of Fisheries	saras.sharma@fisheries.gov.fj
2	Tevita Vodivodi	Department of Fisheries	texvodivodi@yahoo.com
3	Matt McIntyre	P4SD	mattmcintyre@planning4sd.com
4	Kasaqa Tora	National Trust Fiji	ktora@nationaltrust.org.fj
5	Meretui Ratunabuabua	Pacific Heritage Hub	meretui.ratunabuabua@usp.ac.fj
6	Vilisoni Timote	Biosecurity	vtimote@biosecurityfiji.com
7	Margret Fox	Wildlife Conservation Society	mfox@wcs.org
8	Kelera Vuibau	Solicitor General's Office	kelera.vuibau@ag.gov.fj
9	Mereia Lomavatu	Ministry of Agriculture	mlomavatu@agriculture.gov.fj
10	Savenaca Cuquma	Ministry of Agriculture	scuquma@gmail.com
11	Jone Driu	I Taukei Affairs Board	jone.drugunalevu@govnet.gov.fj
12	Binesh Dayal	Department of Forestry	bineshdayal@yahoo.com
13	Sauliga Mataki	Department of Agriculture (Land use Section)	smataki@govnet.gov.fj
14	Aradhana Singh	Ministry of Foreign Affairs	aradhana.singh@govnet.gov.fj
15	Ro Iva Meo	Department of Fisheries	ivameo87@gmail.com
16	Patricial Parkinson	IUCN	patricia.parkinson@iucn.org
17	Cenon Padolina	SPC	cenonp@spc.int
18	Valerie Tuia	SPC	valeriet@spc.int
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Attachment 2:

Groups Summary Discussion and Recommendation

Group 1

Discussions were base on the expected output in the Project Frame work and the group has added on some more output that are relevant.

Output 1.1

- Reviewing the relevant legislation/policies and procedures; to clarify synergies and gaps to identify the way forward. Identify competent authorities; standardise documentation; establish a position within Department of Environment and under the NBSAP to identify where does the Nagoya Protocol fit in.
- Provide an ethical guideline (base on ethical existing guideline e.g. MoH) for researcher to base their information. The Department of Environment to be the Focal point to develop the ABS template and review existing data base in place. More capacity Building and aware to be done to identify the monitoring mechanism.

Output 1.2

- Review the existing legislation and identify the focal point for database sharing for the respective inline Ministry.

Output 1.3

- Awareness and consultation programme for national stakeholders on Nagoya Protocol obligations(several levels of in-house capacity building)

- **Inclusion of and output 1.4:** Monitoring of the administrative system and procedure put in place (self check mechanism).
- **Inclusion of and output 1.5:** Sustainability of the objective of the project (ensuring the long survival of the project).

Group 2

Some of the recommended discussion points include;

1. Some of the outcomes listed in the log frame are too ambitious. Suggestions to have a PPP so that partner is there to provide the state of the art technology through demonstrations projects and protocols by working with communities and sharing lessons learnt from this protocols.

Component 1:

2. For the Expected Outputs for Component 1, the group had made suggestions to change the first sentence to include *Demonstration of Scientific surveys undertaken on bio-chemicals from marine areas of Fiji with communities*. There was a suggestion to establish proper guidelines and due protocol for the scientific research or surveys.
3. For the Screening facility expected output, there was a suggestion by the group to have a facility that is already established on the ground to screen these active compounds. Including using these compounds to screen for other diseases too and not only for dengue fever.
4. Recommendation to have legal and approved Guidelines for ABS Fiji, inclusive of the processes and policies in place.

Component 2:

5. The expected outcome 1 paragraph there was suggestions to have the description of the outcomes include Prior Informed Consent.
6. For expected outcome 2a on the FLMMA trust fund some comments and question that was raised include. Benefit sharing mechanisms to be discussed with communities first including immediate benefits, potential royalties, user pay system and sale of bio-prospecting products. The FLMMA trust fund will be established by end of this year December 2013. What if some of these bio-prospecting products were not found within the areas that FLMMA are in? What does this mean and how is FLMMA going to address this given that they're trying to derive at least a 25% net income from the sale of these products.

Component 3:

7. For expected outcome 1 on Nagoya Protocol obligations for the first bullet point a recommendation that was made include harmonizing legislative systems first before

filtering down to administrative systems. In particular in relation to PIC and MAT develop Guidelines for ABS in Fiji.

8. General Recommendations:

9. Some of the expected outcomes listed in component 2 should have been more an expected output rather than outcomes.
10. Most of the synopsis listed in each of the components does not clearly reflect the extended component description in the pages that follow.
11. Outcomes and outputs do not follow easily or there is no clear structure to relate some of the expected outputs to the outcomes.

Group 3

The group had mentioned a key point, while the first two components looked at scientific research and operational of ABS agreements, there is a need to ensure that sufficient awareness raising (e.g. communities/ amongst key government departments/senior government reps) is conducted as well as developing an ABS framework/guidelines. The group was also of the opinion that the budget under expected outputs for outcome 3 is insufficient (i.e. need to increase budget from \$100,000 to a higher level)

Outcome 1

- Prior to conducting bio prospecting there is a need for good ground work including the establishment of bio –prospecting guidelines. Currently, researchers seek permits from a range of government departments (e.g. immigration, forestry, medical authorities, national trust, Ministry of *I Taukei*). It appears that there is a lack of coordination/communication amongst these stakeholders which could allow for granting of permits without thorough scrutinization of applications. There are guidelines (per sector) but uncertainty about the extent of enforcement.
- Request for clarification of the capacity of national government laboratories to store bio-prospecting samples obtained from field
- Importance of monitoring conditions of permits

Outcome 2

- 25% of net income from sale of bio prospecting products is unrealistic. Requesting clarification on criteria for selection of this amount. Group suggesting that a realistic figure is determined e.g. International Treaty for Food and Agriculture (Plant and Genetic Resources).
- Request for clarification that funds from bio – prospecting will benefit communities which samples are extracted from (there is concern that directing funds to FLMMA trust fund may lead to other communities benefitting from research & request for clarification that funds will be used for community conservation)

- Project to work on establishing a dispute resolution mechanism
- **Outcome 3:**
 - Increase budget for awareness raising from US\$100,000 by at least another US\$50,000. Whilst the project has a strong focus on scientific research, there is need for awareness raising on ABS amongst government departments, resource owning communities and public. In addition, it is essential that a framework for ABS in Fiji and research guidelines/procedures are established before bio-prospecting is implemented as per outcomes 1 & 2.
 - Project implementation to lead to finalization of policy and/or legislation which will strengthen ABS implementation in Fiji
 - Request for clarification on co-financing provided by the Institute of Applied Sciences (USP) .i.e. this is not clear in the PIF
 - Networking to include stakeholders such as the media, Pacific Heritage Hub, Tertiary Institutions (e.g. USP & FNU), Secretariat of the Pacific Community (fishery section based in Noumea)
 - Translation of awareness raising material into local languages
 - Project awareness raising to collaborate/work closely with existing awareness initiatives/programs of various government departments (e.g. Fishery/Forestry/*Ministry of I Taukei*) and regional organizations such as the Secretariat of the Pacific Community (SPC) & IUCN.
 - In house awareness training/awareness on ABS project for relevant government departments (including senior management and project officers i.e. horizontally and vertically within departments to ensure all staff have good understanding of ABS)
 - Development of a communication strategy
 - **Inclusion of an outcome 4:** Establishment of a Project Management Unit (PMU) which will monitor and evaluate project implementation

Other comments

- Bio- prospecting happening in Fiji but not reported to relevant authorities
- Need to engage Ministry of *I Taukei* at all stages of bio-prospecting (recognizing channels of communication when working with resource owning communities).

Annex 4: Environmental and Social Screening Summary

Name of Proposed Project: Discovering nature-based products and building capacities for the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Fiji

A. Environmental and Social Screening Outcome

☐ Category 1. No further action is needed

☐ Category 2. Further review and management is needed. There are possible environmental and social benefits, impacts, and/or risks associated with the project (or specific project component), but these are predominantly indirect or very long-term and so extremely difficult or impossible to directly identify and assess.

☒ Category 3. Further review and management is needed, and it is possible to identify these with a reasonable degree of certainty. If Category 3, select one or more of the following sub-categories:

☒ Category 3a: Impacts and risks are limited in scale and can be identified with a reasonable degree of certainty and can often be handled through application of standard best practice, but require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for a full environmental and social assessment (in which case the project would move to Category 3b). See Section 3 of the Review and Management Guidance.

☐ Category 3b: Impacts and risks may well be significant, and so full environmental and social assessment is required. In these cases, a scoping exercise will need to be conducted to identify the level and approach of assessment that is most appropriate. See Section 3 of Review and Management Guidance.

B. Environmental and Social Issues (for projects requiring further environmental and social review and management)

Question 1.2: Are any development activities proposed within a legally protected area (e.g. natural reserve, national park) for the protection or conservation of biodiversity?

Yes – the bioprospecting surveys and collection will be done within the coastal environs of Fiji. Protected areas have been established in these areas and the focus will be on exploring the Fiji Locally Managed Marine Areas (FLMMA) for potential genetic resources that contain active compounds for pharmaceutical or agro-chemical use that will be commercialized. The surveys will be led by the University of South Pacific and ICBG partners and the collectors will be accompanied by members of local communities and representatives of Governmental national agencies, so collection will be ensured to be limited to no damage to the environment. The project will also result in the increase of finances to biodiversity conservation through at least 15 communities benefiting from ABS agreements and directing some of the finances/benefits towards the management of the FLMMAs. There will be no negative impacts on biodiversity.

Question 4.4: Will the proposed project have variable impacts on women and men, different ethnic groups, social classes?

Yes. The project aims to ensure the sharing of benefits to indigenous and local communities in various situations through the identification of natural products for pharmaceutical and agro-chemical commercialization, aiming to demonstrate best practice Prior Informed Consent processes and Mutually Agreed Terms in ABS agreements. The ABS agreements developed on this project will general benefit the concerned communities, most of whom have low socio-economic status. Women will be proactively considered for involvement in project-related activities.

Question 4.6: Will the project have specific human rights implications for vulnerable groups?

Yes – but these implications are positive. The project aims to put in place a rational framework for Access and Benefit Sharing (ABS) in Fiji that embodies CBD requirements for Prior Informed Consent and Mutually Agreed Terms in ABS agreements, including the fair and equitable sharing of benefits. The project will also support the documentation, protection and application of traditional knowledge of indigenous and local communities, contributing both towards cultural survival and long term potential for commercial benefits.

Question 8.1: Is the proposed project likely to have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets?

Yes. ABS agreements will include conditions on access to natural resources, although such conditions are normally imposed to control access to the resource user (bio-prospector), such as the quantity and frequency of collection by the resource user; and not control the resource provider. Prior Informed Consent processes undertaken during the project will ensure that such agreements are fair and equitable on Mutually Agreed Terms.

Question 9.2: Would the proposed project result in secondary or consequential development which could lead to environmental and social effects, or would it have potential to generate cumulative impacts with other known existing or planned activities in the area?

Possibly. The successful development of commercial products through the project's initiatives could lead to future increased demand for the species providing the genetic resources that has shown to provide economic benefits. However, one of the principles for bio-prospecting permitting is to ensure that exploitation of the biological resources is conducted in a sustainable manner, and this is expected to be included in any related agreements. The risk of overharvesting could also in the future be mitigated by encouraging the local communities to plant or cultivate the resources needed, if possible.

C. Next Steps (for projects requiring further environmental and social review and management):

Environmental Impacts:

The development goal of this project is to contribute towards the conservation and sustainable use of globally significant biodiversity in Fiji. This will be achieved through enhanced national contribution towards the achievement of the three objectives of the CBD (especially Objective 3 on Access and Benefit Sharing). As such, the project is designed to have an overall positive impact of Fiji's natural environment and biological resources, adding value to the sustainable management of its rich forest, wetland and marine ecosystems.

The most likely environmental concerns relates to the potential for development of commercial products through the project that could lead to future increased demand for harvesting of the species due to the commercial value, which could lead to overharvesting and loss of numbers of the demanded species. However, one of the principles of for bio-prospecting permitting is to ensure that exploitation of the biological resources is conducted in a sustainable manner, and this is expected to be included in any related agreements.

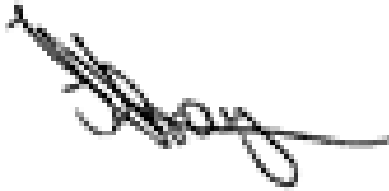
Social Impacts:

Similarly, the Access and Benefit Sharing regime that the project aims to put in place will meet the CBD requirements, ensuring the protection of traditional knowledge belonging to Fiji's indigenous population and the fair and equitable sharing of benefits from the development of nature-based products among all concerned parties. This will be a significant improvement on the current situation, where no such protection exists.

The ABS Agreements resulting from the project will be developed through Prior Informed Consent processes which will ensure proper consultation and recognition of indigenous people's concerns. These will include Mutually Agreed Terms relating to the access and use of the concerned resources.

Women will be proactively considered for involvement in project activities. Access and Benefit Sharing agreements are expected to include the fair and equitable distribution of benefits within concerned indigenous and local communities.

D. Sign Off

A handwritten signature in black ink, appearing to read 'Floyd Robinson', written over a horizontal line.

Project Manager: Floyd Robinson

Signed Date: 2013-09-30