



Part I: Project Information

GEF ID

10677

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of The Gambia

Countries

Gambia

Agency(ies)

UNEP

Other Executing Partner(s)

Department of Parks and Wildlife Management (DPWM)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Sector

Taxonomy

Focal Areas, Biomes, Rivers, Tropical Rain Forests, Biodiversity, Grasslands, Mangroves, Tropical Dry Forests, Wetlands, Species, Plant Genetic Resources, Livestock Wild Relatives, Crop Wild Relatives, Animal Genetic Resources, Mainstreaming, Certification - International Standards, Certification -National Standards, Protected Areas and Landscapes, Community Based Natural Resource Mngt, Productive Landscapes, Land Degradation, Sustainable Land Management, Community-Based Natural Resource Management, Sustainable Livelihoods, Forest, Forest and Landscape Restoration, Drylands, Influencing models, Demonstrate innovative approach, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Stakeholders, Communications, Civil Society, Local Communities, Indigenous Peoples, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Beneficiaries, Sex-disaggregated indicators, Women groups, Gender results areas, Knowledge Generation and Exchange, Participation and leadership, Access and control over natural resources, Access to benefits and services, Awareness Raising, Capacity Development, Supplementary Protocol to the CBD, Access to Genetic Resources Benefit Sharing, Behavior change, Education, Public Campaigns, Private Sector, SMEs, Individuals/Entrepreneurs, Capital providers, Financial intermediaries and market facilitators, Capacity, Knowledge and Research, Learning, Targeted Research, Enabling Activities, Knowledge Generation

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

Significant Objective 1

Land Degradation

No Contribution 0

Submission Date

6/9/2022

Expected Implementation Start

1/31/2023

Expected Completion Date

12/31/2026

Duration

48In Months

Agency Fee(\$)

292,114.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-3-9	Further development of biodiversity policy, legal and institutional frameworks through the Implementation of the Nagoya Protocol on Access and benefit sharing	GET	3,074,886.00	12,898,357.00
Total Project Cost(\$)			3,074,886.00	12,898,357.00

B. Project description summary

Project Objective

i) Provide technical support for developing ABS policy, legal, institutional and regulatory frameworks for The Gambia; (ii) Undertake to pilot of administrative or policy measures to implement community protocols, bioprospecting, and/or biotechnology research; and (iii) Promote ABS-compliant management of protected areas that support improvements in the conditions of biological and genetic resources for the Nyambai Forest Complex.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Enhancing The Gambian national policy, legal, institutional and regulatory frameworks and knowledge base needed to implement the Nagoya Protocol	Technical Assistance	<p>1.1 The Government of Gambia adopts a National ABS policy and supportive regulatory frameworks</p> <p>Indicator 5:</p> <p>National ABS regulatory framework in place and operational</p> <p>Targets</p> <p>? At least three (3) regulatory frameworks (ABS, CFM and Revenue Sharing) guidelines and regulations in place</p> <p>? ABS Administrative Measures in place and posted on the ABS-CHM</p> <p>? Online permit management system in place and operational</p> <p>? Electronic system for monitoring compliance to the Nagoya protocol in place and operational</p> <p><u>Indicator 6:</u> A financial</p>	<p>1.1.1. Programming and institutional alignment established of selected line government agencies on policy</p> <p>application of ABS</p> <p>1.1.2. Policy, legal, institutional and regulatory frameworks governing ABS drafted and approved by the legislature, including the appointment of ABS Competent National Authority</p> <p>1.1.3 National guidelines on ABS, reflecting intellectual property rights, traditional knowledge, gender, and benefit-sharing contracts, developed and adopted to complement the ABS framework</p>	GET	750,000.00	3,903,521.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Supporting research for valorization, value addition and commercialisation of selected genetic resources in Nyambai Forest Park	Technical Assistance	<p>2.1 Valorisation of biodiversity improves conservation and sustainable use of selected genetic resources in Nyambai Forest Park</p> <p>Indicator 10: 12,360 ha of Terrestrial protected areas under improved management</p> <p>Target</p> <p>At least two biodiversity conservation initiatives being undertaken by local communities or biodiversity focused common initiative groups (such as TRAHASS) are supported to achieve enhanced management.</p> <p>Indicator 11: Biodiversity management plan for in-situ conservation and management of biological resources integrated into pilot agreement</p>	<p>2.1.1 Valorisation of biodiversity of native genetic resources and associated traditional knowledge in Nyambai Forest Park, supported by the project to comply with The Gambian ABS national legislation and Nagoya Protocol throughout the value chain.</p> <p>2.1.2 Benefits derived from the use of genetic resources and traditional knowledge in the Nyambai Forest Park, are identified, classified, and assessed to strengthen the expertise and capacity of national authorities, including setting the basis for future negotiations.</p> <p>2.1.3 Commercial and non-commercial utilization of</p>	GET	1,468,463.00	4,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Enhancing partnerships among relevant actors to improve equitable access and use of genetic resources and traditional knowledge	Technical Assistance	<p>3.1 Partnerships for commercial and non-commercial bioprospecting opportunities strengthened by stakeholders and actions taken to establish ABS contracts at the community-level (FPIC, MAT)</p> <p>Indicator 12: Number of ABS pilot agreements negotiated and implemented enabling equitable sharing of benefits between users and providers.</p> <p>Target</p> <p>At least three ABS agreements developed and operationalized for initial commercialization of at least 3 trial products incorporating PIC, MAT and fair and equitable benefit sharing provisions</p> <p>Indicator 13: Number of potential ABS</p>	<p>3.1.1. Partnership management mechanisms established and piloted in Nyambai Forest Park to support and regulate commercial and non-commercial bioprospecting opportunities through a national partnership platform</p> <p>3.1.2. National inventory and pre-feasibility for bioprospecting projects established, leading to a new collaboration and ABS contracts (PIC, MAT) in Nyambai Forest Park</p> <p>3.1.3. Developed a provider-user model agreement mechanism in high biodiversity Nyambai Forest Park to test proposed national ABS co-management regulations of</p>	GET	500,000.00	3,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Monitoring and Evaluation	Technical Assistance			GET	210,000.00	650,000.00
Sub Total (\$)					2,928,463.00	11,553,521.00
Project Management Cost (PMC)						
	GET		146,423.00		1,344,836.00	
Sub Total(\$)			146,423.00		1,344,836.00	
Total Project Cost(\$)			3,074,886.00		12,898,357.00	

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environment, Climate Change and Natural Resources (MECCNAR)	In-kind	Recurrent expenditures	6,000,000.00
Recipient Country Government	Ministry of Environment, Climate Change and Natural Resources (MECCNAR)	Grant	Investment mobilized	1,000,000.00
Recipient Country Government	Department of Parks and Wildlife Management (DPWM)	In-kind	Recurrent expenditures	1,500,000.00
Recipient Country Government	Department of Parks and Wildlife Management (DPWM)	Grant	Investment mobilized	500,000.00
Private Sector	Medical Research Council Unit The Gambia to the London School of Hygiene & Tropical Medicine (MRC at LSHTM)	In-kind	Recurrent expenditures	398,357.00
Recipient Country Government	Department of Forestry	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	National Environment Agency	In-kind	Recurrent expenditures	500,000.00
Recipient Country Government	National Environment Agency	Grant	Investment mobilized	2,000,000.00
Total Co-Financing(\$)				12,898,357.00

Describe how any "Investment Mobilized" was identified

THE INVESTMENT MOBILIZED HAS BEEN IDENTIFIED BY CONSIDERING THE BUDGETARY ALLOCATION. THE REFERRED INSTITUTIONS WILL BE MOBILIZED FROM THE NATIONAL BUDGET OR FROM OTHER SOURCES OF INCOME INCLUDING TAXES ESTABLISHED BY LAW MOBILIZED BY THOSE INSTITUTIONS AND PART OF THESE WILL BE INVESTED TO SUPPORT THE PROJECT EXECUTION.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Gambia	Biodiversity	BD STAR Allocation	3,074,886	292,114	3,367,000.00
Total Grant Resources(\$)					3,074,886.00	292,114.00	3,367,000.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

136,986

PPG Agency Fee (\$)

13,014

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Gambia	Biodiversity	BD STAR Allocation	136,986	13,014	150,000.00
Total Project Costs(\$)					136,986.00	13,014.00	150,000.00

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	12,360.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	12,360.00	0.00	0.00

Name of the Protected Area	WDA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Bambana Forest Park		National Park		389.00					

Name of the Protected Area	WDA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Kabafita Forest Park		National Park		243.00					
Kiang West National Park		National Park		11,526.00					
Nyambai Forest Park		National Park		202.00					

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
92549.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
92,549.00			

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
Indicator 4.4 Area of High Conservation Value or other forest loss avoided				
Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	60,000	150,000		
Male	50,000	150,000		
Total	110000	300000	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

A: Threats

The main threats faced by The Gambia in relation to biodiversity with specific reference to genetic resources are: forest habitat fragmentation and transformation, illegal wildlife trade, fuelwood extraction, bush burning, the challenge of invasive species and climate change.

Deforestation: Deforestation and forest cover decline in The Gambia is the result of two main factors ? the type of agricultural production system, and the heavy reliance on forests for domestic fuelwood supply[1]: (i) Agricultural production systems for crop farming in The Gambia consist of intensive land use characterized by low levels of input. Shifting cultivation is still widely practiced in the country, although fallow periods have been considerably reduced as land becomes scarce in most farming communities. The compounding effect of high population pressure and the scarcity of land have forced farmers to intensively cultivate small areas of land year after year, which exhausts the soil nutrients and ultimately leads to declines in crop yields, and the need to expand into new lands. (ii) The high demand for domestic energy has resulted in indiscriminate tree felling without regard to their slow replacement. Tree species like *Combretum sp.* and *Terminalia sp.* are particularly threatened by cutting, burning, poisoning or lopping for branch wood in order to ensure a regular fuelwood supply to households and urban markets. Deforestation is rampant throughout the country, resulting primarily from the domestic demand for fuel and timber (for housing and fencing).

The current rate of deforestation for the country as a whole is estimated at about 5-7% per year. Deforestation is contributing to the destruction of indigenous woody tree species such as *Khaya senegalensis*, *Pterocarpus erinaceus*, *Cordia africana*, *Prosopis africana*, *Terminalia macroptera*, and *Diosphyrus mespiliformis*. Between 1946 and 1998, woodland cover in the country decreased from 81% to 42%; during this period, closed woodland disappeared almost entirely, and tree density in open woodlands decreased, while the area of tree and shrub savannah increased as a result of the extensive conversion and degradation of the other forest classes. According to the 2010 National Forest Assessment (NFA)[2], forest cover decreased from 505,300 ha (44% of the country's surface area) in 1981/82 to 423,000 ha (37%) by 2009/2010. During this period, mangrove forests alone declined from 67,000 ha to 35,700 ha. In the business-as-usual scenario, rates of deforestation (estimated at 5-7%)[3], more than half of the remaining forest/woodland cover in The Gambia will be lost in the next ten years.

Demand for timber and non-timber products from protected areas is high, and many areas within and adjacent to protected areas are being degraded. This destruction is in turn having a severe impact on large mammal species which are also subjected to heavy hunting pressure. It has been observed in several case studies in Sub-Saharan Africa that collaborative forest management/arrangements that transfer of responsibilities to local communities can create incentives for community participation and contribute to tangible benefits resulting from a reduction in deforestation. Such collaborative

management approaches will be sought by the current project with communities bordering the Nyambai Forest Park complex.

Most of the deforestation in The Gambia is illegal. The illegal and unsustainable exploitation of plants and the export of raw materials have undermined the true value of biodiversity and weakened economic returns to communities and the State. The diversity of plants and animals of The Gambia provides potential and opportunity for the economic development of the country if properly managed and controlled also for increased investments in biodiversity conservation. Recurring political instability has, however, adversely affected investor confidence in The Gambia (particularly during the last presidential regime). Besides, the inadequate funding allocated from national budgets to develop the necessary legal framework for ABS, and to implement it through the various government departments, has resulted in the ineffective application of the Nagoya Protocol in The Gambia. Without a robust national framework, companies and bio-prospectors will continue relying on case-by-case contractual agreements to utilize The Gambia's natural resources.

Ecosystem degradation and conversion: Natural habitat conversion is one of the major factors of biodiversity loss in The Gambia. Rising demand for food and other agricultural products, among others, has resulted in the clearing of natural habitats to make space for agricultural land; and economic, demographic, and social pressures are likely to put further pressure on natural habitats. Wetland ecosystems are increasingly being used for rice cultivation and dry season vegetable gardening as well as grazing for livestock. Road construction and other infrastructure development have caused major disruptions in the processes and functions of key ecosystems such as wetlands. Harvesting of mangroves for fuelwood and other domestic uses has greatly reduced the area of mangrove forests. Demand for timber and non-timber products from protected areas is high, and many areas within and adjacent to protected areas are being degraded. Between 1946 and 1998, woodland cover in the country decreased from 81% to 42%; during this period, closed woodland disappeared almost entirely, and tree density in open woodlands decreased, while the area of tree and shrub savannah increased as a result of the extensive conversion and degradation of the other forest classes. According to the 2010 National Forest Assessment (NFA)[1]¹, forest cover decreased from 505,300 ha (44% of the country's surface area) in 1981/82 to 423,000 ha (37%) by 2009/2010. During this period, mangrove forests alone declined from 67,000 ha to 35,700 ha. Under business-as-usual rates of deforestation (estimated at 5-7%)[2]², more than half of the remaining forest/woodland cover in The Gambia will be lost in the next ten years.

Ecosystem conversion (particularly the conversion of forest ecosystems into crop fields and forest degradation) can result into climatic impacts. There is massive land transformation, huge impacts from climate change, and a high risk for species extinction due to deforestation and forest degradation that affect terrestrial ecosystems with dire consequences in wetlands, coastal and marine zones. Such unsustainable practices, coupled with climate change which is predicted to exacerbate drought conditions in the country, exact additional stress on already vulnerable ecosystems and potentially have a marked effect on different ecosystems and species. Indeed, The Gambia is among the most vulnerable countries, especially due to its insularity and geographical position.

The project will contribute to reducing the potential for ecosystem degradation by supporting economic initiatives that contribute to enhanced livelihood options for populations in the project area. In this regard, the project will be creating a transparent permit system, which will encourage private investment in bioprospecting and benefit other communities and ecosystems. Moreover, when products are successfully produced and sold at the pilot scale, the value chain and benefit distribution will be maintained. The increased income from activities such as collecting, cultivating, harvesting, and transporting the targeted species for commercialization products will benefit not only the target pilot sites but also the broader communities living in genetic resource diversity areas.

Unsustainable agricultural practices: The Gambia is confronted with problems frequently associated with unsustainable agriculture, livestock, and forestry production, including soil salinization and erosion, decreasing fertility of the arable land, and finally migration and out-migration. Agricultural production systems for crop farming in The Gambia consist of intensive land use characterized by low levels of input. Shifting cultivation is still widely practiced in the country, although fallow periods have been considerably reduced as land becomes scarce in most farming communities. The compounding effect of high population pressure and the scarcity of land has forced farmers to intensively cultivate small areas of land year after year, which exhausts the soil nutrients and ultimately leads to declines in crop yields. Furthermore, land placed under continuous cultivation has high levels of erosion that produce sedimentation of downstream rice fields and aquatic and marine habitats. Soil erosion and siltation from agriculture (and livestock grazing) are important processes in habitat loss and fragmentation in The Gambia. Annual soil erosion is estimated at 12.5 tonnes per hectare per year for frequently cultivated soils having a slope of 2% or more[4]. These processes have diminished soil productivity, and the eroded materials are deposited in the lowlands of the river basin, causing sedimentation in the rice-growing areas and adverse impacts on aquatic life.

Agriculture is a vital sector in the Gambia. According to the Gambia Bureau of Statistics, it accounts for about 17.8 percent of gross domestic product (GDP), ranking behind the services sector, which recorded 68.8 percent of GDP. Employment in agriculture appears to be mainly driven by women, who are more likely to engage than men.

It has been observed that diversity, the foundation of our food security, is also decreasing within cultivated crops. Protected areas' role in preserving biodiversity is becoming increasingly important at a time when biodiversity loss is a growing concern. Protected areas play a critical role in preserving plant genetic diversity, and far more support for managing protected areas for the agricultural benefits they provide is needed. Farmers and agricultural scientists will be added to the list of supporters of protected areas as a result of this. An approach to conservation that genetic resources to agricultural lands, protected areas, natural forests, managed forests, and grazing lands can offer a comprehensive approach that meets many human needs while addressing the ethical imperative to conserve biodiversity and the genetic resources they harbour.

The types of bush fires common in the Gambia are characteristic of portions of the greater sub-region where poor land use practices and dwindling farmland is a feature. The vast majority of fires in the West African tropics are set intentionally for land clearing and conversion, swidden agriculture and arson and as such are land use fires, not forest fires. In the past two decades, extended and frequent droughts coupled with increased pressures on land and unsustainable forest use, especially in the tropics have led to an increase in catastrophic fire events.

One of the most important ecological effects of burning is the increased probability of further burning in subsequent years, as dead trees topple to the ground, opening the forest to drying by sunlight, and building up the fuel load with an increase in fire-prone species, such as pyrophytic grasses. Bushfires tend to have devastating effects on biological diversity and associated genetic resources in tropical grassland ecosystems. For example, a study carried out in Kenya to assess the effects of fires on plants and wildlife species diversity and soil physical and chemical properties, found that the fire had triggered the regeneration of the herbaceous plants. The burned areas, on the other hand, had a significantly higher percentage cover. The fire had an immediate negative impact on the animal population, as evidenced by the destroyed site. When data was collected seven days after the fire, no animal species were found on the site. The animal diversity was proportional to the density of vegetation caused by fire-induced vegetation regeneration. There were fewer birds at all of the burned sites than at the unburned sites. For all of the soil properties studied, the effects of fires were most noticeable in the upper layer of the soil. The pH, potassium, organic carbon, and cation exchange capacity all increased as a result of the burning. Fires have an immediate negative impact on vegetation, wildlife, and soil chemical properties, according to the study. With time, the incidence and effects of bushfires are forecast to increase with a changing climate. For example, tropical rain forests, which were once thought to be resistant to fires, are now experiencing large-scale fires due to unsustainable management practices.

The challenge of invasive species:

A number of alien invasive species have been recorded in The Gambia (see *Table 7*). These invasive alien species have a range of impacts on native biodiversity including competition with the native taxa of flora and fauna, hybridisation with genetically close species, alteration of the physical and chemical characteristics of soil, modification of natural and semi-natural habitats and propagation of pests and diseases. Currently, fruit trees are under huge threats posed by fruit flies and mealy bugs. Yields and qualities of mangoes, guavas, sour and sweet sops and citrus have gone down as a result of the outbreak of these pests. The vegetables, on the other hand, are equally affected by several invasive and alien pests which are causing huge negative impact to vegetable production. Many vegetable crops such as the solanaceous crops (tomato, bitter tomato and eggplant), cabbage and other vegetables have significantly suffered from the red spider mites. These species cause huge problems to indigenous and local communities, with particularly significant negative effects on their local and national economies. Species that are invasive in certain parts of the country have caused severe negative impacts on such areas.

Table 7. Invasive species of The Gambia. Extracted from Noba et al. (2017).

Families	Scientific name	Ecology or status
Amaranthaceae L.	Amaranthus spinosus L.	weed
	Acanthospermum hispidum DC.	weed
	Ageratum conyzoides L.	weed
	Chromolaena odorata (L.) R. King & H. Robinson	pasture
Asteraceae Martinov.	Eupatorium odorata L.	weed

	<i>Tridax procumbens</i> L.	weed
Commelinaceae Mirbel.	<i>Commelina benghalensis</i> L.	weed
Convolvulaceae Juss.	<i>Ipomoea aquatica</i> Forssk.	weed
	<i>Cyperus difformis</i> L.	weed
	<i>Cyperus distans</i> L.	weed
	<i>Cyperus rotundus</i> L.	weed
Cyperaceae Juss.	<i>Cyperus tuberosus</i> Rottb.	weed
	<i>Mariscus alternifolius</i> Vahl	weed
	<i>Acalypha ciliata</i> Forsk	weed
Euphorbiaceae Juss.	<i>Euphorbia heterophylla</i> L.	weed
Meliaceae Juss.	<i>Azadirachta indica</i> A. Juss.	forest
Mimosaceae R.Br.	<i>Mimosa pigra</i> L.	forest
Moraceae Link.	<i>Broussonetia papyrifera</i> (L.) Vent.	terrestrial
	<i>Brachiaria deflexa</i> (Schmach.)	weed
	<i>Brachiaria lata</i> (Schmach.) Hubb.	weed
	<i>Digitaria horizontalis</i> Willd.	weed
	<i>Echinochloa colona</i> (L) link	weed
	<i>Eleusine indica</i> (L.) Gaertn.	weed
	<i>Imperata cylindrica</i> (L.) Raeu.	weed
	<i>Oryza barthii</i> A. Chev.	weed
	<i>Oryza longistaminata</i> A. Chev. & Roehr.	weed
Poaceae (R.Br.) Barnh.	<i>Paspalum orbiculare</i> G. Forst.	weed
	<i>Panicum maximum</i> Jacq.	weed
	<i>Sporobolus pyramidalis</i> P. Beauv.	weed
Pontedariaceae Kunth.	<i>Eichhornia crassipes</i> (Mart.) Solm-Laub.	aquatic
Portulacaceae Juss.	<i>Portulaca oleracea</i> L.	weed
Scrophulariaceae Juss.	<i>Striga hermonthica</i> (Del.) Benth.	weed
	<i>Lantana camara</i> L.	terrestrial

The entry into The Gambia of invasive and alien species is attributed to natural and or trans-boundary movement of the species; farming (with introduction of new plant species) by people; landscaping (with introduction of some undesirable plant species like water hyacinth as ornamental, or use of non-native genotypes) by people; discarding of infested materials (rubbish, or accidentally spreading seeds and plant fragments); movement of infested commodities/goods, or their containers, or conveyors; movement of people (by air, road, rail and sea transport); and direct intentional or unintentional

introduction of crops and livestock infested with pests and diseases by agriculture and forestry; infrastructure development, pump and tidal irrigations through canals, runoffs of rain water. The mentioned entry points need a functioning Biosafety Law with implementation guidelines to control and reduce the entry and spread of invasive and alien species.

Biological invasions are generally associated with negative effects on biodiversity and hence genetic resources, but they also have serious implications for human well-being. Biological invasions, along with other drivers of ecosystem degradation such as habitat change and exploitation, pollution, climate change, and associated effects such as the loss of keystone species, pollinator loss, and altered ecosystem functioning, contribute to the decline of biodiversity[1].

Biological invasions have a wide range of dramatic effects, as well as numerous subtle socio-economic consequences. Biological invasions have been shown to have negative socioeconomic, cultural, and human health consequences when ecosystem services are disrupted[2]. Invasive alien species, for example, are responsible for a variety of human health issues such as allergies and skin damage. Human disease outbreaks caused by novel pathogens, such as the human immunodeficiency virus (HIV), monkey pox, and severe acute respiratory syndrome (SARS), are similar to biological invasions. These pathogens breach the barriers that separate their natural reservoirs from human populations, igniting the spread of novel infectious diseases and causing massive economic losses.

B: Root causes

The root causes below are mapped to the identified threats as follows: (i) Deforestation has as major root cause the high population growth and pressure on natural resources (including demand for fuelwood); (ii) Ecosystem degradation and conversion has as major root cause poor landscape and natural resources planning; (iii) The unsustainable agricultural practices (including the excessive use of bush burning) is mainly the result of a weak local economy and excessive reliance on rain fed agriculture; and (iv) the challenge of invasive species has as major root cause the impact of climate change.

High population growth and pressure on natural resources (including high demand for fuelwood):

The Gambia has just 10,689 square kilometers of land, which ranks 164th in the world. Its 2019 population is estimated at 2.23 million with a population density of 176 people per square kilometer (74th in the world). Despite having a very little land area, The Gambia's population continues to grow due to a high fertility rate. This growth in population coupled with increasing urbanization and the demand for more farmlands and other land uses exerting great pressure on the environment in developing countries, particularly regarding energy consumption such as firewood, charcoal, furniture, food, water, shelter, and roofing. The effects of this pressure on natural resources are evident in The Gambia. Demand for resources coupled with the impacts of climate change has led to floods, droughts, crop failure, and rising temperatures, particularly in the northern parts of the country where there is limited forest cover due to logging. This is disproportionately impacting the rural poor who are often highly dependent on the goods and services provided by biological diversity. Unfortunately, such environmental assets are frequently taken for granted, underpriced, and overexploited.

The high demand for domestic energy has resulted in indiscriminate tree felling without regard to their slow replacement. Species like *Combretum* and *Terminalia* are particularly threatened by cutting, burning, poisoning or lopping for branch wood in order to ensure a regular fuelwood supply to

households and urban markets. Deforestation is rampant throughout the country, resulting primarily from the domestic demand for fuel and timber (for housing and fencing). Forests in The Gambia provide 85% of domestic energy needs in the form of fuelwood with over 90% of the population dependent on biomass as fuel. Each Gambian uses 0.6 kg of firewood per day, and in urban areas, the per capita consumption of charcoal is 0.09 kg per day. The national fuelwood demand is estimated at around 242,370 tonnes[1] annually, and certain species like *Pterocarpus sp.* (Rosewood) and *Prosopis sp.* (ironwood) are preferred for fuelwood and charcoal because of their high calorific value[2]. The volume of fuelwood available in the country according to a study by the Energy Division[3]³ in 2004 was about 88,000 m³, and 60% of the demand has to be met through importation.

As is the case with ecosystem degradation and the conversion of natural landscapes, by enhancing economic opportunities for local populations, the project will be reducing the impact of fuelwood demand on local natural landscapes.

Poor landscape and natural resources planning: The expansion of crop and livestock farming across natural areas, the development of the mining (particularly sand mining), and the expansion of urban areas are contributing to habitat fragmentation and loss. Over the past decades, biological resources have been the subject of misuse and over-exploitation by people. Recent population trends have accelerated and deepened the process of over-exploitation and consequently the degradation of natural resources in The Gambia. The spread of agricultural activity and in particular the devastating cumulative effect of forest fires has resulted in the degradation of the natural vegetation and a reduction in both food and habitats for wildlife. Habitat conversion is one of the major factors of biodiversity loss in The Gambia. Rising demand for food and other agricultural products, among others, has resulted in the clearing of natural habitats to make space for agricultural land; and economic, demographic and social pressures are likely to put further pressure on habitats. Wetland ecosystems are increasingly being used for rice cultivation and dry season vegetable gardening as well as grazing for livestock. There is a lack of national and sub-national guidelines that require farmers to adjust livestock densities to field capacity, which would reduce the risk of vegetation degradation and competition with wild biological diversity. Road construction and other infrastructure development have caused major disruptions in the processes and functions of key ecosystems such as wetlands. Harvesting of mangroves for fuel wood and other domestic uses has greatly reduced the area of mangrove forests. Demand for timber and non-timber products from protected areas is high, and many areas within and adjacent to protected areas are being degraded. The management of grazing land can be used to exemplify the poor planning that goes into the management of land resources in The Gambia. Excessive populations of free-ranging livestock (cattle, sheep, and especially goats) are leading to significant overgrazing. These pressures are exacerbated by the prevailing poverty and food insecurity and the rapid growth (2.3%) of the country's human population, which is amplifying demand for land and natural resources and shortening fallow periods in shifting cultivation regimes. The loss of natural ecosystems is particularly severe on the northern side of the River Gambia (North Bank Region) where many areas are already devoid of vital natural resources such as livestock forage and firewood. Of great concern is the projected worsening situation on the south side of the river.

Natural resources management in The Gambia remains poorly developed, with the use of techniques and technologies that do not sufficiently support sustainable outcomes. Some of the natural resource management techniques that increase land vulnerability to the degradation of land and seascape resources include (i) Deforestation, land clearing and slash and burn agriculture. (ii) Tree cutting that results in land erosion and even depletion of water resources. (iii) Unsustainable exploitation of mangroves with the attendant coastal erosion and agricultural land salinization. (iv) Lack of access to information, knowledge, and material for the use of climate resilient technologies. (v) Limited use of innovative water harvesting technologies that increase available soil moisture for plant use long after the rains have stopped or when interspersed with drought periods.

A weak local economy and excessive reliance on rain fed agriculture: A weak local economy that is heavily reliant on climate-sensitive natural resources such as forests or fishery stocks as a source of livelihoods, and widespread poverty means a low adaptive capacity, reducing their ability to respond and withstand climate-induced threats. Multiple national assessments, including the Government's own National Adaptation Programme for Action (NAPA), have suggested that climate change impacts of particular relevance to The Gambia will include the increased frequency and severity of climatic events, such as flooding, leading to increased mortality and loss of assets and livelihoods; the undermining of macro-economic growth; reductions in food security; and increasing migration pressures. In recent years, flash flooding has been occurring earlier than ever previously recorded threatening both the lives and livelihoods of the rice growing regions.

The agricultural sector in The Gambia is characterized by low productivity mainly because of erosion (due to topographical conditions as well as unsustainable land use), unsustainable or inadequate agricultural practices (e.g., traditional slash and burn land preparation), water pollution and lack of technical means leading to land expansion rather than intensification. Rice is the main crop grown, but there are also rainfed millet, maize, and sorghum - all grown for subsistence. Peanuts are also grown for cash, and there is some vegetable production. Agricultural practice includes high-input deep tillage that leaves top-soils exposed in the dry season; shifting cultivation (slash-and-burn) regimes that require the conversion and use of large areas; and, the widespread use of fire for preparing the ground in the planting season. At least 80% of the standing biomass is consumed by fires in any given year, and up to 91% of the forest area is exposed to fire at least once every two years. This kills off any regeneration, retards the growth of most tree species and transforms the tree composition from mixed species to fire-tolerant species[1].

Moreover, the introduction (in pursuit of food self-sufficiency) of newly developed dryland NERICA rice has compounded the pressure on natural ecosystems by creating a new incentive for slash-and-burn land conversion. The production systems are also inefficient because they are based almost exclusively on rainfall patterns that are unpredictable, and whose volume, spatial and temporal distribution are predicted to become even more variable in the near future

The impact of climate change: The risk of climate change-induced damage to human and economic development in coastal areas of The Gambia is therefore mounting. The combined effects of sea level rise and changes in upstream river discharge, erosion of coastal embankments and changes to natural sediment dynamics pose a serious threat to the natural resource base and livelihood opportunities of coastal communities. In addition to recurrent and rapid onset of extreme events (i.e., flash flooding), The Gambia's coastal zone is being confronted with a range of "creeping" climate risks, such as

increasing salinity level trends in coastal freshwater resources, growing drainage congestions, dynamic changes in coastal sediment dynamics and morphology and a decline in the functioning of protective ecosystems (e.g.: mangroves).

Some of the natural resource management techniques that increase land vulnerability to climate change events are: deforestation and slash and burn agriculture; tree cutting that results in land erosion and even depletion of water resources; and the unsustainable exploitation of mangroves that contributes to coastal erosion and agricultural land salinization. Others include reduced fallow periods, combined with inadequate replenishment of soil nutrients through a judicious combination of organic and mineral fertilizers; and the lack of access to information, knowledge and material on the use of SLM, INRM, and climate resilient technologies such as drought resistant and early maturing seed varieties that complete the sensitive phase of their growth cycle during the increasingly shorter rainfall period. There is also the limited use of innovative water harvesting technologies that increase available soil moisture for plant use long after the rains have stopped or when interspersed with drought periods.

C: Barriers

This project proposes to address the challenges noted above by increasing understanding of the value of biodiversity and strengthening capacities for its management among the government and the people of the Gambia. Addressing Access and Benefit Sharing issues under the Nagoya Protocol offers one important way forward and is consistent with the country's NBSAP. In order to enable the country to adopt relevant legislation and establish institutional structures so as to effectively implement the provisions of the Nagoya Protocol at the national level, the following barriers need to be addressed.

Barrier 1: Weak national policy and regulatory ABS-relevant frameworks

The Gambia has been a Party to the CBD since 8 September 1994. It also acceded to the Nagoya Protocol on ABS in July 2014, which entered into force for The Gambia in October 2014. However, the implementation of ABS in the country has been hampered by the weak legal framework to ensure its transposition into the Gambian legal order and facilitate its implementation. Investment by international biotechnology companies would be less likely in the absence of a clear legal framework and national institutional capacity for effective governance of the sector. In addition, ILCs in particular may not gain from bio-prospecting activities, although their land, genetic resources and associated traditional knowledge may be utilized. The Government of The Gambia therefore aims to ensure that all stakeholders, including the national and local governments and ILCs stand to benefit through the fair and equitable distribution of benefits from bio- prospecting. Efforts to date have been inadequate to remove the existing barriers to the introduction of an effective national ABS regime that will contribute towards biodiversity conservation and encourage sustainable use of biological resources, therefore the threat of ecosystem degradation remains, which may reduce future bio-discovery prospects. Overall, the constituency and financial resources for biodiversity conservation will not advance beyond baseline levels. Existing agreements for bio-prospecting partnership have been weakly regulated, not necessarily taking account of the PIC, rights and needs of indigenous and local communities (ILCs) and other stakeholders, or include requirements for the equitable sharing of benefits. There is therefore a strong need for models of the consultative processes involved in development of ABS agreements, including PIC and MAT. Further, it is important that all players are able to understand the provisions and implications of such agreements, the sometimes complex issues involved, and ability to negotiate

future benefit sharing in the event that commercial products are derived from the process. This does not mean that the existing policy environmental framework in The Gambia is completely silent on ABS. The Gambian Biodiversity and Environment Act 2003 provides for the improvement of the peoples' quality of life and promotes the fair and equitable sharing of the benefits arising out of the utilization of genetic resources; strengthening the institutional capacity of the State and developing control mechanisms for an integrated and efficient management of genetic resources; the education and training of human resources for the management of the conservation of biodiversity and wildlife, in particular for biotechnology and the management of genetic resources; and the development of technologies aimed at increasing the productivity of genetic resources. Although The Gambia has made notable progress in developing policy, legal and institutional frameworks for the management of ABS, a number of barriers remain. A preliminary assessment has identified numerous gaps which need to be addressed in the current national legislation on ABS, including inter alia: i) Mechanisms for negotiating PIC and MAT; ii) Monitoring utilization of genetic resources & designation of checkpoints tools to support compliance; iii) Access of genetic resources for the development of commercial products in-country; iv) Regulation of access of genetic resources for multiple uses, for example, food, medicine, spices; v) Intellectual Property considerations for ABS and inter-relation with the patent laws; vi) Effectiveness of the environmental impact assessment (EIA) process for ABS lack of agreements and mechanisms for ensuring the fair distribution of monetary and non-monetary benefits stemming from medicinal products derived from genetic resources. At the institutional level, weak institutional capacity, and a lack of clarity on the roles and responsibilities of different institutions in terms of the overlaps over the implementation of the respective institutional mandates (as well as other stakeholders including indigenous and local communities), are significant hurdles to ABS regulation/Nagoya Protocol implementation in the Gambia prevented effective implementation of national legislation on ABS. For example, the Gambia needs to designate one or more National Competent Authority(ies) as required by the Nagoya Protocol

It is therefore the case that, the country does not have any tailored policy, regulatory and institutional framework to effectively implement at the national level the ABS mechanisms as provided for in the Nagoya Protocol. Furthermore, intellectual property administration in The Gambia is under the purview of two institutions namely; the Industrial Property Office, Attorney General's Chambers, and Ministry of Justice which administers Industrial Property Rights while Copyright and related rights are administered by the National Centre for Arts and Culture. It is noted here that The Gambia is a member of the World Trade Organizations since 23 October 1996. However, the country is not a party to any of the WTO multilateral agreements and has not been involved in any WTO dispute settlement procedures (as of July 2017). The Gambia deposited its instrument of acceptance of the Trade Facilitation Agreement on 11 July 2017. As of the end of September 2017, The Gambia has not yet submitted its Category A notification. Additionally, The Gambia has not yet deposited its instrument of acceptance of the Protocol amending the TRIPS Agreement.

Barrier 2: Lack of science-based valorization of biodiversity components in National Parks

Economic valuation of natural capital such as biodiversity components (flora and fauna) is an important step towards improving conservation. It aims at unfolding the manifold benefit dimensions of biological diversity as well as its monetary values and then integrating them in social and policy decision-making processes. In The Gambia, despite the identification and recognition of the richness of key floral and faunal biodiversity in National Parks, there is lack of science-based valorization of

biodiversity. Consequently, there is lack of comprehensive understanding of the monetary and non-monetary value of biodiversity at species or genetic level to inform tailored policy approaches to improve biodiversity conservation in the National Parks. By the same token, the government of The Gambia has limited institutional and regulatory frameworks and capacity to legislate policy instruments for capturing the value of biodiversity. Overcoming this barrier will be complementary to addressing the two afore-mentioned barriers linked to lack of awareness and inadequate legal and institutional frameworks in the country. This is because ensuring science-based valorization of biodiversity components requires capacity development, and once science-evidence is generated, it forms the basis for awareness-raising among stakeholders. Finally, the establishment of either incentive-based or market-based instruments to improve biodiversity conservation will draw on existing institutional capacities and frameworks and access to appropriate information that reflects the value of biodiversity components.

Barrier 3: Limited institutional and technical capacity to coordinate implementation of biodiversity resources management initiatives, including limited capacity to establish and develop partnerships for ABS

Partnerships are an important component of ABS and Traditional Knowledge (TK) associated with genetic resources. They allow users of genetic resources and associated traditional knowledge to access biodiversity, in exchange for sharing technology, conducting training, and other benefit-sharing. ABS partnerships or arrangements have emerged as an important way in which these commitments are realized. For example, most companies prefer to pass the responsibility of resolving these difficult benefit-sharing issues onto the gene banks, governments, or intermediary institutions with whom they work, acknowledging that companies have neither the competence nor legitimacy to negotiate with holders of traditional knowledge. The nature of ABS arrangements, and the extent of collaboration and partnership, varies significantly. The institutional capacity and the organizational framework for developing and organizing these partnerships within the context of ABS are not present in The Gambia, as the country has no experience with ABS.

Lack of capacity has been identified as a key constraint for the introduction of a national ABS regime across a wide range of stakeholders and at all levels ? national, local / community, and sectoral. Resources will not be adequate to support the level of capacity building needed to bring the CAN, checkpoint authorities, and other stakeholders to implementation readiness in the short term, and local experience and information-sharing on the development of PIC, MAT, and benefit-sharing will remain inadequate. Bio-prospecting and the use of traditional knowledge resources will continue to be weakly regulated, therefore Indigenous and Local Communities (ILCs) across the country would remain at risk of losing out on the benefits associated with bio-prospecting and there will be little incentive for improving the conservation of biological resources at the local level.

Although the Ministry of the Environment Climate and Natural Resources is the designated institution responsible for the implementation of laws and policies related to biodiversity, the Government of The Gambia lacks adequate technical staff with relevant experience, and training and limited coherent inter-institutional coordination between government entities, private stakeholders, and local communities to effectively implement laws, strategies and regulations on ABS[9]. An inadequate decentralization and delegation of biodiversity management to the lowest levels of government within the framework of the decentralized biodiversity governance system has also been identified as a barrier to the ABS regime across a wide range of stakeholders. Strengthening institutional capacity is therefore needed, to ensure sustainable use of genetic resources and benefit-sharing in The Gambia. In addition, the Government of the Gambia lacks adequate funding to review, and strengthen the existing sectorial biodiversity laws, policies, and institutional framework to effectively develop and implement the national ABS framework. The national customs and other border agencies lack the capacity to facilitate and coordinate their interventions relating the international trade, foreign investment, and economic development. of genetic resources across national borders. With regards to technical capacities, TheGambia lacks expertise in undertaking critical biodiscovery research relevant for the advancement of ABS in the country. For example, technical expertise is critically lacking in carrying out

bioprospection and undertaking bioassays. The limited levels of technical capacities in Gambian institutions mean that it is currently not possible to scale these activities up to a level that would constitute a 'critical mass' enabling the country fully to own and control exploration and bio-testing processes[10].

Barrier 4: Limited awareness on ABS, NP and related benefits

One of the major impediments to the sustainable management and use of biodiversity in The Gambia is the scarcity of information on the country's biodiversity and genetic resources. This barrier is exacerbated by a limited awareness of the economic value of genetic resources and a limited understanding of the ABS principles among decision-makers and national authorities, which, in turn, limits political and technical support for The Gambia's accession to and implementation of the Nagoya Protocol. Levels of awareness among decision makers, sectoral agencies, the commercial sector and ILCs amongst others concerning the potential benefits of an effective ABS regime will continue to remain low. At the national level, there is little understanding of ABS issues among sectors other than those directly involved in the conservation and development of biological resources, and even then there is a need to ensure consistency in the vision and rationale behind ABS, given the emergence of relevant initiatives related to intellectual property and the World Intellectual Property Organization (WIPO) and agricultural / plant genetic resources linked to other global instruments (ITPGRFA). The limited awareness among indigenous peoples and local communities about the importance of genetic resources and associated traditional knowledge, as well as the benefits arising from their use, limits the sustainable use of biological resources in The Gambia at the local and community levels. Indigenous peoples and local communities (IPLCs) have a limited understanding of ABS principles and the protection of genetic resources associated with traditional knowledge. IPLCs have a limited understanding of their rights and benefits in the development of ABS-related products such as pharmaceuticals, cosmetics, and foods that incorporate traditional knowledge. Furthermore, the absence of educational, communication, and promotional materials in local languages on biological and genetic resources, as well as associated traditional knowledge, exacerbates the limited knowledge about the ABS strategy. The effective implementation of the ABS regime in the country will be aided by the use of translated ABS-related promotional materials and their dissemination during awareness-raising campaigns. Decision-makers and policymakers lack solid and detailed information on which to base their decisions about accession and the implementation of the ABS measures in the country, such as the opportunities and obligations of becoming a Party to the Nagoya Protocol.

Lack of ABS policy frameworks can hamper biodiversity conservation through, for example, delays in policy implementation and harmonization of legal and institutional frameworks. These frameworks could be directly affecting key threats and root causes of environmental degradation in The Gambia. Deforestation, for example, mainly caused by the conversion of forest ecosystems into crop fields and forest degradation through illegal and inappropriate exploitation of natural resources can result into climatic impacts. In addition to illegal and inappropriate exploitation of natural resources, the high value of medicinal plants to pharmaceutical and cosmetic companies drives unsustainable and uncontrolled harvests and inequitable benefit-sharing regimes.

The illegal and unsustainable exploitation of plants and the export of raw materials have undermined the true value of biodiversity and weakened economic returns to communities and the State. Such weak

economic returns further exacerbates the weak local economies and heavy reliance on rainfed agriculture (one of the root causes of environmental degradation).

The inadequate funding allocated from national budgets to develop the necessary legal framework for ABS, and to implement it through the various government departments, has resulted in the delayed application of the Nagoya Protocol in The Gambia. Without a robust national framework, companies and bio-prospectors will continue relying on case-by-case contractual agreements to utilize The Gambia's natural resources. To related this to the identified root causes, one would observed that root causes such as poor landscape planning could benefit from the application of the Nagoya Protocol in The Gambia.

On the socioeconomic front, social perceptions, ignorance, poverty, and gender inequality can perpetuate a present threat to biodiversity conservation. The practice of shifting cultivation, for example, which is sometimes employed in the conversion of forests to cropland (one of the threats to environmental welfare in The Gambia), often deploys wide-scale use of fire and has sometimes resulted into wildfires that usually devastate large areas of land (another threat). Such practices also contribute to environmental impacts on biodiversity. There is massive land transformation, huge impacts from climate change, and a high risk for species extinction due to deforestation and forest degradation that affect terrestrial ecosystems with dire consequences in wetlands, and marine zones. Such unsustainable practices, coupled with climate change (one of the root causes associated with invasive species) which is predicted to exacerbate drought conditions in the country, exact additional stress on already vulnerable ecosystems and potentially have a marked effect on different ecosystems and species.

The Gambia's long-term solution to effectively address the threats, root causes and barriers identified above requires a conducive environment to incentivize the safeguarding of biological diversity. Consequently, The Gambia's ABS framework needs to be fully developed and implemented to generate tangible local and national benefits from the wealth of genetic resources that can be reinvested towards biodiversity conservation. The project is designed to address these shortcomings and provide a more stable and user-friendly procedural mechanism of access and benefit-sharing, especially the principles of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT).

Table 8. Proposed solution to the barriers to the implementation of the Nagoya Protocol in The Gambia

Barriers	Proposed solutions
Barrier 1: Inadequate national policy and regulatory ABS-relevant frameworks	<p>Revise existing laws in governing access and benefit- sharing relating to genetic resources and traditional knowledge, including any relevant 'check points' established in this jurisdiction where research, development, or other activities are performed or where genetic resources are acquired.</p> <p>Development of good practices on benefit-sharing among communities, based on utilization of biological resources for commercial as well as research purposes</p> <p>Development of an IT-enabled ABS monitoring system for the National Biodiversity Authority to effectively monitor the use of biological resources in ABS processes.</p>

Barrier 2: Inadequate science-based valorization of biodiversity components in National Parks	Support bioprospecting in the fields of pharmaceuticals, cosmetics, and agriculture ? working together with the lone National University, the National Agricultural Research Institute, the Medical Research Council of The Gambia at the London School of Hygiene and Tropical Medicine, the Traditional Healers? Association of The Gambia, and local communities in the vicinity of the Nyambai Forest Park complex.
Barrier 3: Limited experience with establishing and developing partnerships for ABS	Ensure that material transfer agreements or other contracts take into account the national access and benefit-sharing regulatory requirements in effect, including those requirements implementing the Protocol?s requirements. Monitor developments at the international level, including at the CBD, the World Intellectual Property Organization and the World Trade Organization in respect of new international rules under consideration regarding the exchange and use of genetic and/or biological resources.
Barrier 4: Limited awareness on ABS, NP and related benefits	Create awareness on intellectual property rights and traditional knowledge associated with genetic resources. Furthermore, this component will also support consulting and awareness raising targeting key stakeholders including parliamentarians, political decision makers, and government officials to enhance understanding on the importance economic value of genetic resources and new businesses opportunities for the national economy as well as the provisions of the Nagoya Protocol. This component will build capacity of relevant stakeholders including staff of government agencies, academics institutions) for implementing the Nagoya Protocol and the national ABS measures.

2) The baseline scenario and any associated baseline projects

While the implementation of ABS in The Gambia is a novelty, the current project build on a number of policies, plans and initiatives that have undertaken activities that can support the project baseline.

National policies and plans relevant to the project

The National Environmental Management Act (NEMA): NEMA was enacted in 1994 and provides the legal framework for the control and management of the environment. NEMA makes provisions for the overall management of the coastal zone and all other wetlands. The priorities identified for a sound environmental management can be summarized as: (i) improvement and strengthening the institutional framework for environmental management; (ii) mainstreaming environment issues in policy and planning processes; (iii) strengthening environmental regulatory framework and enforcing the regulatory codes, and environmental regulations fully; (iv) Ensuring the functioning of institutional and legal frameworks for sustainable management and protection of the coastal zone and its resources; (v) strengthening environmental advocacy and sensitization for sustainable development; (vi) ensuring the participation of the private sector, CSO, Non-Governmental Organization, and youth and women?s groups in sustainable natural resource consumption; (vii) supporting decentralization and Local Government Reform for community based natural resource management and sustainable development planning; and (viii) improving environmental quality monitoring and enforcement and solid waste

management. The current project is in line with the objectives of NEMA as it contributes to the sustainable management and use of genetic and biological resources. At the heart of ABS, is the engagement and benefit of local populations from the GRs and aTK in their environment ? in line with the fifth priority of the NEMA

Sustainable Development Goals (SDGs): The project is relevant to, and will contribute to at least seven of SDGs. Firstly, it will contribute to the eradication of poverty (Goal 1) by establishing ABS deals that bring monetary and non-monetary benefits to local communities that provide genetic resources and research institutions and companies that use those resources for research, product development, and commercialization. Secondly, the project will contribute to Gender Equality and Women's Empowerment (Goal 5) through gender equality and inclusion of women's interests and experiences into policy development, training, in-situ and ex-situ conservation of selected resources, sustainable harvesting, research, product development, and equal participation in the benefits derived from ABS agreements. Thirdly, it will contribute to the creation of Decent Work and Economic Growth (Goal 8) by supporting small/medium-scale community-based enterprises with propagation/re-introduction, business and value-addition skills to harvest, process, package, and market natural products from selected genetic resources, and sustainable harvesting and trade. Fourth, it will contribute to the development of Industry, Innovation, and Infrastructure (Goal 9) through pharmaceutical R&D on selected genetic resources of medicinal value in collaboration with traditional medical associations and R&D and natural product development for pharmaceutical and food and beverage use. Fifth, the project seeks to contribute to sensitization for Responsible Consumption and Production (Goal 12) through sustainable harvesting of plant genetic resources. Sixth, the project will contribute to Climate Action (Goal 13) through R&D activities and conservation that will promote the resilience of genetic resources, and the ecosystems and landscapes where they are found. Finally, the project will contribute to improving Life on Land (Goal 15), through promoting both in-situ and ex-situ conservation of selected resources under communal management, conservation of selected resources under household botanical gardens and nurseries, and in-situ conservation of selected resources within protected areas of the project.

United Nations Development Assistance Framework (UNDAF) 2017-2021: The project is also in line with the UNDAF) 2017-2021 for The Gambia . This strategic policy document clearly notes that ?UNDAF 2017-2021 is underpinned by the central objective of poverty reduction and inclusive growth, ensuring that no one is left behind. In line with these core programming principles of ?leaving no one behind? and on ?sustainable development & resilience? One strategic result is of particular interest to the current project. This is Strategic Result 3. Sustainable Agriculture, Natural Resources, Environment and Climate Change Management. Here, the priority area of interest is that of Integrated agricultural production and productivity as well as commercialization for inclusive growth and food security. Outcome 3.2: Natural Resources & Environment Management Sustainable, inclusive, and integrated natural resource and environment management enhanced for food security, income generation and safe environment. At the center of this integrated production, is the sustainable use, management, and conservation of the country's genetic resources. The implementation of the Nagoya Protocol therefore supports the achievement of this sustainability goal.

National baseline projects

The following are projects that are under implementation at the national level, and onto which the current project can build.

(i) GEF/UNEP project GEF ID 9772 - Land/Seascape planning and restoration to improve ecosystem services, and livelihoods, expand and effectively manage protected areas. Total Budget: \$5.6M; Project timeline: 2019 ? 2024.

The project aims to create an enabling environment for The Gambia in building national capacity to lead the reform of land use and marine spatial planning policies and to implement land/seascape level management that conserves ecosystem services in productive and protected land/seascapes. The ultimate goal of the project is to arrive at an enhanced capacity for the planning and implementation of policies and programs that benefit sustainable land and seascapes management. To achieve this goal, this project will undertake activities and actions that build national capacity to lead the reform of land use and marine spatial planning policies. It will also build the capacity for relevant stakeholders to implement land and seascape level management that conserves ecosystem integrity, conservation, as well as services in productive and protected land and seascapes. The achievement of these goals will enable the Gambia to enhance the resiliency of land and seascapes ecosystems, improve as well as sustainably manage the ecosystem services derived from these environments, reduce greenhouse gas emissions, and sustain the productivity of key environments that benefit the social and economic sectors of the country.

The proposed ABS project will build on the enhanced capacity for the implementation of policies and programs, focusing on improved planning and enforcement system to identify and address the causes of land degradation and biodiversity loss. Lessons from this project will inform the development of capacities to improve the legal and institutional frameworks to create an enabling environment for the development and implementation of an effective ABS regulatory framework and system.

(ii) GCF/UNEP funded Large-scale Ecosystem-based Adaptation (EbA) in The Gambia: developing a climate-resilient, natural resource-based economy project. Total Budget: \$20.5 M; Project timeline: 2017-2023

The EbA project aims to build the climate-resilience of rural Gambian communities and facilitate the development of a sustainable natural resource-based (green) economy by implementing large-scale EbA within and adjacent to agricultural areas, community-managed forest reserves and wildlife conservation areas. The project focuses on (a) restoring degraded forests and agricultural landscapes with climate-resilient plant species that provide goods for consumption or sale; and (b) facilitating the establishment of commercially viable natural resource-based businesses to be managed by community-based organizations.

Focusing on the natural resource-based business concept of the EbA project, the ABS project will build on the achievements accomplished by the EbA project in enhancing the value chain of indigenous forest trees/products being developed. The increased access and benefits sharing outcomes will increase the economic well-being of traditional communities through fair trading options and availability of markets; and at the same time increase their participation in sustainable natural resource management.

(iii) The GEF/FAO GEF ID 5406 Community Based Sustainable Drylands Forest Management. Total Budget: \$3M; Project timeline: 2016 - 2022

The project aimed at improving community-based management of dry land forests in Gambia to reduce forest degradation and improve local livelihoods. This project supported Community Forestry, Forest Management Plans and transformation of the status of some forest estates toward communities or Communities Joint Forest managed states.

The well-established Communities Joint Forest Management system requires that communities are able to sustainably manage forests in their respective areas. The Forest Management Plans being implemented by forest communities will be relevant for the proposed ABS project in terms of communities' involvement and enabling them to participate in equitable access, use but also management of biodiversity and genetic resources for their livelihoods and generation of global environmental benefits.

(iv) The IFAD-funded Resilience of Organizations for Transformative Smallholder (ROOTS) Agriculture Development Programme. Total Budget: US\$80.6 M; Project timeline: 2019 - 2022

The goal of the project is to improve food security, nutrition, and resilience of smallholder farmers to climate change in The Gambia. The project's development objective is to increase agricultural productivity and access to markets for enhanced food security and nutrition and for the resilience of family farms and Farming Organizations. ROOTS will be implemented in five regions: (i) Central River Region; (ii) North Bank Region; (iii) Lower River Region; (iv) West Coast Region; and (v) Upper River Region. Within these regions, 39 districts have been selected based on indicators related to poverty, vulnerability, remoteness, quality and scale of infrastructure, and harmonization with other donor-supported programmes. The direct beneficiaries of the project are approximately 40,000 households (over 10 per cent of the population), of which 80 per cent are women and 25 per cent youth and persons with disabilities. The project will also target micro entrepreneurs, government staff in the relevant ministries, agencies and commissions, and the private sector.

With the development objective of increasing agricultural productivity and access to markets, the proposed ABS project will support in the development a system that promotes value addition, equitable access and benefits to genetic resources, particularly for indigenous communities and women, to ensure adequate enterprise development and valorization for certain natural resource-based products.

Regional Policy Baseline: The 2015 African Union Strategic and Practical Guidelines for a coordinated Implementation of the Nagoya Protocol in Africa.

With financial and technical support from the ABS Capacity Development Initiative, the African Union Commission spearheaded a multi-stakeholder participatory approach through the period of 2012 to 2015 with the aim of developing policy instruments to guide to African countries in their efforts towards the implementation of the Nagoya Protocol. As a member of the African Union, The Gambia is entitled to use the results of this process as regional baselines and references in the process of developing an effective Nagoya Protocol compliant ABS regulatory framework at the national level. The principal instruments that resulted from that process and were endorsed by the African Union heads of States in 2015 are:

(1) The African Union Strategic Guidelines for the Coordinated Implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits arising from their Utilization and,

(2) The African Union Practical Guidelines for the Coordinated Implementation of the Nagoya Protocol in Africa.

These two instruments encapsulate not only the main three clusters of the key obligations (i- Obligations in respect of Access; ii- Obligations in respect of benefit sharing and ; iii- obligations in respect of compliance) of NP that parties are expected to fulfill, but also the institutional apparatus required for the administration of the implementation of the protocol through domestic ABS measures and the support mechanisms that should be set up to ensure both effective and efficient governance and regulation of the domestic ABS operations. Taken together, the rationale of the strategic and practical guidelines is to assist African countries in a step-by-step approach to domesticate the Nagoya Protocol through the development of relevant administrative, legislative and policy measures as required by the protocol, in a way that enables them regulate access to and the utilisation of GRs and the a TK and earn to benefit from these access and utilisation processes. Through national fulfillment of the NP obligations, countries can equally apply ABS principles in other value chains as appropriate such as in commodity trade or BioTrade trade. Eventually, the application of NP compliant ABS measures will enable African countries such as The Gambia to diversify their income generating opportunities, including through the planned co-management arrangements of Nyambai Forest Park in ways that allow more monetary and non- monetary benefits to accrue to the park and the adjacent communities, as well as contributing to poverty alleviation, biodiversity conservation and broader Sustainable Development Goals (SDGs) outcomes .

The Strategic Guidelines outline the principal issues African countries must pay attention to when formulating their domestic ABS policy and regulatory frameworks. For example, when formulating the objectives of national ABS measures, countries must pay attention to the use of the terms that are defined in article 2 of the NP and article 2 of the Convention on Biological Diversity (CBD) and capture them in the relevant provisions of national ABS regulations in a manner that delivers clarity and legal certainty. Other key issues outlined in the Strategic Guidelines are awareness raising and information sharing; benefit sharing approaches including issues to consider during negotiations of MAT; monitoring and compliance of the implementation of the ABS measures; the protection and promotion of traditional knowledge associated with genetic resources, community and farmers' rights and economic development; capacity building, capacity development and technology transfer . On its part, the Practical Guidelines provide the step-by-step approach to the implementation of the NP at the domestic level - that is, a step-by-step approach to addressing in their domestic ABS measures, the issues outlined by the Strategic Guidelines. As intended by the African Union Commission, the objective of developing these instruments is to establish a coordinated and cooperative regional approach to preventing misappropriation of African GRs and / or traditional knowledge associated with GRs, as well as sanctioning such misappropriations when they occur.

These continental voluntary ABS policy instruments are important baselines policy references for the domestic efforts towards the implementation of the Nagoya Protocol in The Gambia. They can help the country to contextualize its Access and Benefit Sharing policy ambitions to address domestic interests. These could be primarily relating to conservation and sustainable use of GRs, valorization of GRs,

development of value chains and economic or social development, as well as the broader realization of the SDGs or the enhancement of research and development capacities the country sets itself to achieve through the implementation of the Nagoya Protocol at the national level.

International policy baseline: Focus on the three clusters of the core obligations of the Nagoya Protocol, the institutional framework and other support mechanisms

There are three main clusters of Nagoya Protocol core obligations that parties to this multilateral environmental treaty must fulfill. These are: (1) Obligations in respect of Access; (2) Obligations in respect of fair and equitable sharing of benefits and, (3) Obligations in respect of compliance. The effective implementation of the Nagoya Protocol in The Gambia should therefore result in the country capturing these three clusters of obligations in the relevant provisions of national ABS measures, be they administrative, legislative or policy, designed to operationalize the Protocol.

? Access Obligations: Regarding the obligations in respect of access, the Nagoya Protocol requires Parties like The Gambia to set out in their domestic ABS administrative, legislative or policy measures, and unless they decide otherwise, that access to genetic resources for their utilisation shall become subject to the Prior Informed Consent (PIC) (Article 6.1). Parties can also subject access to GRs over which indigenous and local communities have established rights (under domestic law) to the PIC of these communities (Article 6.2). The position adopted by the Africa Union Commission in the two ABS guidelines mentioned above is that they advise African countries to de facto include the PIC requirement in their ABS measures as a condition to access to their GR. As a result of making the choice to require PIC for access to the country's GRs in domestic ABS measures, the Nagoya Protocol obliges parties to ensure that such ABS measures deliver legal certainty, clarity and transparency (Article 6.3.a). Furthermore, domestic ABS measures shall provide for fair and non-arbitrary procedures (Article 6.3.b); must establish clear rules and procedures in matters of PIC and MAT (Articles 6.3.c; 6.3.f and Article 7; 6.3.g); provide for the issuance of a permit or its equivalent when access is granted (Article 6.3.e), and such permit when published to the ABS clearing house, becomes an internationally recognised certificate of compliance (article 17.2). This internationally recognised certificate of compliance shall serve as evidence that the GRs which it covers were accessed in accordance with the PIC of the provider country (Article 17.3). Furthermore, the ABS measures that subject access to GRS, subject to PIC, are encouraged to create conditions conducive to promoting and encouraging research which contributes to the conservation and sustainable use of biological diversity (Article 8.a); take due account of current or imminent emergencies that threaten human, animal or plant health (Article 8.b) and take into account the importance of genetic resources related to food and agriculture for food security (article 8.c). In relation to Traditional Knowledge (TK) associated with GRs, parties are expected, in accordance with their domestic laws, to take into account the customary law of indigenous and local communities as well as their community protocols and procedures (Article 12), in the design and subsequent implementation of domestic ABS measures, with the effective participation of these communities . Importantly, considering that these communities are likely to lack capacities for their effective participation in national ABS processes, the Nagoya Protocol encourages parties like The Gambia to support them, including the women in these communities in the development of community protocols in relation to access to traditional knowledge associated with genetic resources (article 12.3.a).

? Benefit-Sharing Obligations: Alongside the obligations in respect of access and consistent with Article 15.3 and 15.7 of the CBD, the NP obliges parties to take measures at the national level to ensure that the benefits arising from the utilisation of GRs, as well as subsequent applications and commercialisation, are shared in a fair and equitable manner with the provider of such resources, based on mutually agreed terms (MAT) (article 5.1). The national ABS measures which can be administrative, legislative or policy measures (article 5.3) should also aim at ensuring that, where indigenous and local communities have established rights over GRs pursuant to domestic law, fair and equitable benefits are shared with such communities, equally based on MAT (article 5.2). National measures must consider that the benefits to be shared may be monetary or non-monetary (Article 5.4) and can refer to the suggested list of monetary and non-monetary benefits which is annexed to the Protocol. The protocol indicates that benefits to be shared can be drawn from subsequent applications and commercialisation of GRs. This is significant and should draw the attention of legislators and policy makers in The Gambia when delineating the scope of the country's domestic ABS measures that implement the Nagoya Protocol. In doing so, The Gambia must take into account the definitions of the terms 'utilisation?', 'biotechnology?' and 'derivative?'... provided for in Article 2 of the Nagoya Protocol. The Gambia must also factor the implications of these definitions in the delineation of the scope of the measures, and in the negotiations of the MAT / benefit sharing agreement under the rules and procedures for requiring and establishing MAT consistency with article 6.3.g of the Nagoya Protocol. Furthermore, the support that parties are encouraged to provide to indigenous and local communities in the establishment of minimum requirements for MAT and model contractual clauses to secure the fair and equitable sharing of benefits arising from the utilization of traditional knowledge associated with GRs (article 12.3.b&c) should capture the possibility of further applications and commercialisation of such knowledge. Two important provisions that can potentially impact on the domestic ABS measures specifically in respect of the benefit sharing dimension of such measures for a country like The Gambia are article 10 on the Global Multilateral benefit sharing mechanism and article 11 on transboundary cooperation. While the process is underway within the CBD/NP circles in the context of which parties are considering the need for and modalities of a global benefit sharing mechanism, parties like The Gambia are strongly advised to get involved in these processes and be ready to capture the outcomes of these deliberations and update their domestic instruments when necessary. However, from the perspective of a sub-regional cooperation, it is important that The Gambia legislates in its domestic ABS measures on how the country intends to address cases of GRs and traditional knowledge associated with GRs that straddle across borders, or for which, The Gambia may recognise GRs as originating from its territory, but which were accessed with no PIC or MAT.

? Compliance Obligations: The obligations of the parties to comply with national laws and regulatory requirements represent a major progression brought about by the Nagoya Protocol in comparison with the CBD. Indeed, in accordance with the provisions of the Nagoya Protocol, Parties must include in their domestic ABS measures the following: Provisions to ensure that GRs and TK used by partners in their jurisdiction have been accessed in compliance with domestic ABS rules of the provider country, meaning that access was based on PIC, and MAT were established (Articles 15 and 16). In addition, Parties should take measures to monitor the use of genetic resources at all stages of the value chain. The principal institutional tool of this monitoring scheme is the designation of checkpoints that must be effective and should perform the functions that are relevant to the utilisation of GRs or to the collection of relevant information at any stage of research, development, innovation, pre-commercialisation or

commercialisation (Article 17). As indicated above, one of the tools to ascertain that the user complied with the access measures of the provider country is the internationally recognised certificate of compliance, which is simply the access permit that was issued by the provider country and published in the ABS-CHM. In the event of violation of the established access regulations of a provider country, the NP encourages Parties to take measures that enable them to cooperate in search of a solution to the problem (Articles 15.3 and 16.3). In addition, the parties must provide the possibility of recourse in their legal system in the event of a dispute arising from the implementation of MAT (Article 18.2); and take measures regarding access to justice (Article 18.3). Lastly, at the first Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol, Parties adopted decision NP1/14, which includes the Cooperative Procedures and Institutional Mechanisms to Promote Compliance with the provisions of the Nagoya Protocol, and to address cases of non-compliance pursuant to article 30 of the NP. The cooperative procedures establish a compliance committee and outline a set of procedures that a party like The Gambia can refer to, in case it is faced with pertinent cases of violations of its ABS measures .

The Gambia is expected to fulfil the three clusters' core obligations of the Nagoya Protocol described above through relevant provisions in its domestic ABS measures. Their effectiveness and efficiency during the implementation phase e.g., in relation to the application of the ABS principles in the planned co management of the Nyambai Forest Park, will highly depend on how the country considers the integration of other supporting mechanisms in the broader national ABS regulatory infrastructure. One of these support mechanisms is the institutional framework that should be designed to administer the implementation of the ABS measures. In this respect, the NP proposes that parties should designate a Competent National Authority (CNA) (or competent national authorities) (Article 13) and should undertake to share relevant information through the ABS Clearing House Mechanism (ABS-CHM). This implies the designation at the national level in The Gambia of an agency, and the appointment of a dedicated focal point/publishing agency for the ABS CHM. As indicated above: Under the compliance cluster of the NP obligations, parties will have to set up institutional checkpoints. In addition to the institutions, the NP provides for several supporting tools that can aid the effective implementation of domestic ABS measures. These include the development of model contractual clauses (article 19), codes of conduct, guidelines, and the best practices and /or standards (article 20), as well as undertaking awareness raising (article 21) and capacity building (article 22).

Lessons learned

With the GEF investment mobilised through this project, the government of The Gambia can indeed use the pilot cases, e.g., the valuable resources identified in the NFP, for example, their food, medicinal or cosmetic uses, to develop commercially profitable value chains, by bringing in the private sector based on win-win partnerships. It should be stressed that the innovative financing that can be envisaged by the Government of The Gambia including the PPP and blended financing (among others) will only be effective if stakeholders have a good knowledge of the opportunities to which the financing is aimed. This means that good market research, for example of the commercial potentials associated with the utilisation of the selected pilot cases of NFP GRs under the new national ABS governance framework. It also means an investment in domestic valorization and transformation capabilities, as will be conceived in the valorisation strategy.

Table 9 A summary of lessons learned from the implementation of ABS and how these lessons are used to support project design.

Project scope	Lessons learned	Implementation in the project
National Project Coordination and Management	The involvement of a legal expert in the legal aspects of the project is important.	An ABS Legal Officer has been added as one of the project staff at the PMU of the project. His/Her role will be to support the legal aspects of ABS implementation for the project
Project Implementation	<p>The two national workshops organized based on the work plan provided important information, knowledge, and experiences on ABS at national and global levels. These contributed to raising awareness of representatives from different ministries, research institutes, and universities.</p> <p>Seeking approval in advance from the government will lessen the delays in implementation of the work plan.</p>	<p>These two workshops have been held during the project preparation phase. More have been included as some of the early awareness-raising activities of the project during implementation.</p> <p>Engagement with key governmental stakeholders (such as those included in the PSC) has been done to achieve this goal.</p>
Stakeholder Engagement	<p>Involving private sectors or GR users in the ABS discussions should be considered to balance the views on the establishment of ABS regulations.</p> <p>Active involvement of participants in achieving the objectives of consultation meetings is crucial in the project's success.</p> <p>Involvement of stakeholders from the academe is important in constructing the ABS framework.</p> <p>Involvement of CSOs/NGOs, other line ministries, research institutions, private sector, and other key and concerned stakeholders during the consultation-workshop is beneficial.</p>	<p>Important private stakeholders on GR in The Gambia have been brought on board the project. TRAHASS and MRCG at LSHTM are examples.</p> <p>Several meetings with key stakeholders were held at project preparation to ensure active inputs into the project design.</p> <p>Collaboration has been established with the UTG, who will be contributing to research and biodiscovery activities during project implementation.</p> <p>See stakeholder roles and participation in the project Section 2.5 and Section 5.</p>

<p>Capacity Building and Policy Support</p>	<p>Building on existing regulations and procedures at the national or institutional level is an opportunity to increase stakeholder understanding and participation for which they are familiar with.</p> <p>Capacity building on ABS and related matters should be provided to enhance understanding of the NP and ABS processes.</p> <p>Case studies based on monitoring and sharing experiences can help in drafting pilot projects on the ABS implementation about GR management</p>	<p>The Gambia National Biodiversity Strategy and Action Plan 2015-2020, has several elements that address sustainable use of its components and fair and equitable sharing of benefits arising from the utilization of genetic resources. These will serve as a springboard for discussions and engagements in relation to GR and NP in the current project.</p> <p>Stakeholders of the project will benefit from a range of training and awareness raising activities (see Component 2)</p> <p>The project makes use of 6 case studies in the implementation of ABS (including biodiscovery, bioprospecting, research and value addition initiatives. These will serve as experiences in drafting pilot projects on the ABS implementation about GR management</p>
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3) The proposed alternative scenario with a description of outcomes and components of the project

The specific objectives of this project are to: (i) Provide technical support for developing ABS regulatory and institutional frameworks for The Gambia; (ii) Undertake piloting of administrative or policy measures to implement community protocols, bioprospecting, and/or biotechnology research; and (iii) Promote ABS-compliant management of protected areas that support improvements in the conditions of biological and genetic resources for the Nyambai Forest Park Complex. These will in turn create further incentives for biodiversity conservation that will result from the enhanced understanding of the opportunities that can be leveraged with the effective implementation of the Protocol. The overall goal is to promote participation and awareness and to train local stakeholder groups and decision makers at a national, provincial, and local levels from the production, scientific, and government sectors, to help develop models for biodiversity sustainable use that are in line with the Nagoya Protocol based on CBD.

Baseline scenario: The Government of The Gambia has identified the development of a National ABS framework consistent with the Nagoya Protocol's provisions as a priority and is investing in efforts to develop its national biotechnology industry beyond existing traditional medicine production for domestic use, as well as the systematic documentation and protection of traditional knowledge. Currently however, there are no ongoing investments in bio-prospecting from potential key institutions and partners that could contribute to ABS in The Gambia, including investments from local and international stakeholders.

This project aims to invest in a coordinated suite of activities to address the current biodiversity decline across the country, with a focus on genetic resources harvested and used for the medicinal and cosmetic industries, in addition to creating frameworks and supporting institutions to be equipped to implement ABS. Interventions will concentrate on the mechanisms and underlying conditions that can enable long-term use and equitable distribution of benefits for improved livelihoods and biodiversity

conservation. Over-harvesting and unsustainable exploitation of genetic resources will be reduced because of the project, allowing species conservation. Through effective community engagement in conservation for sustainable development, The Gambia's capacity to manage access and benefit-sharing will be strengthened.

Component 1: Enhancing The Gambian national policy, legal, institutional and regulatory frameworks and knowledge base needed to implement the Nagoya Protocol. This component will consolidate actions to conserve and sustainably use genetic resources and related traditional knowledge in The Gambia through the development and implementation of a national policy, legal and institutional framework on ABS in accordance with the CBD and the Nagoya Protocol, using GEF Trust Fund and co-financing mechanisms. As a result, the incremental activities under this component include 1) revising, validating, and operationalizing ABS policy, legislation, and institutional coordination, thereby regulating appropriate access to genetic resources, and ensuring fair and equitable sharing of benefits along the value chain, and 2) establishing cross-sectoral and inter-institutional collaboration, thereby ensuring ABS is incorporated into various sectors and thus enabling ABS to be implemented. 3) This component will also test and implement a system for long-term monitoring of progress in the use of genetic resources and traditional knowledge, as well as compliance with PIC/MAT processes, through the establishment of the ABS Monitoring Unit. The establishment of community genetic resource registers, as site-based databases that will aid in monitoring access to genetic resources and provide baselines for replication of the process in other potential sites in The Gambia, is another incremental achievement from this component. These efforts to develop an ABS-compliant regulatory framework will complement The Gambia's current efforts to promote sustainable development based on the sustainable use of the country's natural resources.

The Outcomes for Component 1, as well as the activities for related outputs are found in the table below:

Outputs/Outcomes	Activities for Outputs of Component 1
Outcome 1.1. The Government of Gambia adopts a National ABS policy and supportive regulatory frameworks.	
Output: 1.1.1. Programming and institutional alignment established of selected line government agencies on policy application of ABS.	Activity 1: Carry out a gap analysis of the existing legislative and institutional framework for ABS and the Nagoya Protocol for The Gambia and identify strengths, weaknesses and gaps ? Propose updates and provide guidelines for institutional alignment established of selected line government agencies
	Activity 2: Draft required instructions and regulations on ABS for The Gambia
	Activity 3: Prepare a government brief on the proposed regulatory and institutional framework and the economic potential and value of genetic resources and traditional knowledge
	Activity 4: Prepare National Operational Guidelines
	Activity 5: Draft model Community Protocols
	Activity 6: Develop model ABS agreements (PIC, MAT)

<p>Output: 1.1.2. Policy, legal, institutional and regulatory frameworks governing ABS drafted and approved by the legislature, including the appointment ABS Competent National Authority.</p>	<p><i>Activity 7:</i> Facilitate the approval of ABS policy, regulations and guidelines by the Ministry of Environment, Climate Change and Natural Resources; and facilitate the recognition and approval of ABS policy, regulations and guidelines by the relevant legal and institutional bodies of The Gambia required for full implementation</p>
	<p><i>Activity 8:</i> Establish financial mechanism for benefit sharing from ABS agreement</p>
	<p><i>Activity 9:</i> Support the drafting and enactment of Gambia's ABS Law</p>
	<p><i>Activity 10:</i> Confirm the appointment of a National Focal Point (NFP); and establish the ABS Competent National Authority (CNA), and Competent Sector Authorities (CSAs)</p>
<p>Output: 1.1.3 National guidelines on ABS, reflecting intellectual property rights, traditional knowledge, gender, and benefit-sharing contracts, developed and adopted to complement the ABS framework and facilitate implementation by all relevant actors.</p>	<p><i>Activity 11:</i> Designate check points to enforce compliance to the national ABS regulatory framework</p>
	<p><i>Activity 12:</i> Establish a system to document and protect Traditional Knowledge</p>
	<p><i>Activity 13:</i> Establish a system of certification of compliance and origin.</p>
	<p><i>Activity 14:</i> Develop an online ABS permit system</p>
<p>Outcome 1.2. Key stakeholders, including public and private sector, academia, scientific community, technical, civil society, and indigenous people take measures to strengthen implementation and enforcement of the National ABC policy and regulatory framework.</p>	
<p>Output: 1.2.1. Awareness-raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, civil society, communicators, and the general public.</p>	<p><i>Activity 15:</i> Conducting stakeholder consultations to capture and document views, perceptions and recommendations for an ABS awareness and communications strategy.</p>
	<p><i>Activity 16:</i> Undertaking desk review of key documents and processes governing key aspects pertaining to ABS's communication in The Gambia and incorporate them into the Awareness and Communications Strategy.</p>
	<p><i>Activity 17:</i> Submit validated awareness and Communications Strategy to the Minister of Environment for approval and signing.</p>
	<p><i>Activity 18:</i> Implement awareness raising campaigns</p>
<p>Output: 1.2.2. Interactive training modules, including negotiation skills designed and directed for specific target groups to facilitate access to</p>	<p><i>Activity 19:</i> Conduct a Training Needs Assessment (TNA) among government agencies at national and sub-national level to identify training needs required for effective implementation and enforcement of Nagoya Protocol on ABS.</p>
	<p><i>Activity 20:</i> Develop or update the curriculum content to include ABS competencies, and support approval of the draft curriculum by the University of The Gambia administration.</p>
	<p><i>Activity 21:</i> Develop toolkit for ABS regime management in The Gambia</p>

genetic resources, based on the national law and the Nagoya Protocol. Special attention will be put on strengthening of indigenous research and development capabilities.	<i>Activity 22:</i> Train representatives of selected government agencies at national level (including parliamentarians) on the full cycle of ABS regime management.
	<i>Activity 23:</i> Train designated checkpoints on global certification of compliance and origin, monitoring and compliance to PIC and MAT
	<i>Activity 24:</i> Train representatives of selected government agencies at sub-national level on the full cycle of ABS regime management.
Output: 1.2.3 Online information system on ABS developed (including information on species) and operational in collaboration with all relevant stakeholders	<i>Activity 25:</i> Establish a consolidated National Database on biodiversity, genetic resources, and traditional knowledge of The Gambia, and populate the database with primary and secondary GR data on these resources of The Gambia
	<i>Activity 26:</i> Establish a national ABS Clearing House Mechanism and associated rules and procedures for accessing and using this CHM

Component 2: Supporting research for valorization, value addition and commercialisation of selected genetic resources in Nyambai Forest Park.

This component will lead to the implementation, documentation, and sharing of best practices, lessons learned, and experiences gained during project implementation in order to strengthen stakeholders' abilities and skills beyond the project period. The project increment in this Component includes a range of commercial and non-commercial initiatives with diverse actors in the biological and genetic resources space. For example, collaboration with the Medical Research Council, the Gambia of the London School of Hygiene and Tropical Medicine will lead to national capacity development in (i) undertaking bioprospecting (from organizing the collection of samples and specimens, through laboratory work, to patenting of products); (ii) carrying out extraction techniques like solvent extraction, aqueous extraction and also essential oil extraction; and (iii) on undertaking bio-activity tests. These are all indispensable skills for the effective implementation of ABS in any national context. In the same light, project collaboration with University of The Gambia will lead to TK documentation, ethnobotany studies, biogeography of genetic resources, prototype product development, sustainable production technology and use of raw materials, technology transfers, and market and value chain analysis. Increments will also be achieved in the project work with the Traditional Healers? Association of the Gambia (TRAHASS). This collaboration will lead to (i) The development of an inventory of knowledge on the traditional utilisation and properties of biological resources in the two pilot communities (surrounding the Nyambai Forest Park); (ii) Agreed processes on traditional knowledge, including documentation, testing the depth and veracity of traditional knowledge, and assessment of proprietary rights, including customary rights; and (iii) Protocols for sharing of knowledge and other matters related to potential benefit sharing mechanisms consistent with local customs. Still within this Component, local initiatives such as Yaxare Herbal Infusions, Jameel, and Jain's Cosmetics will collaborate with researchers and institutions such as the University of The Gambia, the National Agricultural Research Institute, the Ministry of Gender and others to achieve enhancements in genetic resources products value chains, the inclusion of women in benefits to ABS, etc.

The engagement with commercial and not commercial stakeholders referred to above will contribute to the valorisation of biodiversity of native genetic resources and associated traditional knowledge, as well as the commercial and non-commercial utilization of native genetic resources. Best practices, lessons learnt, and experiences gained during these interactions will be documented and shared in order to strengthen the abilities and skills of stakeholders beyond the project period. In addition, this component will introduce a gender perspective to ABS decision making and implementation processes. Based on a careful evaluation of the cultural attitudes in The Gambia, this will be a critical incremental element in ABS processes as it will mainstream gender considerations into discussions regarding access to and marketing of genetic resources, as well as in negotiations with buyers, researchers and other stakeholders.

The Outcomes for Component 2, as well as the activities for related Outputs are found in the table below:

Outputs/Outcomes	Activities for Outputs of Component 2
Outcome 2.1 Valorisation of biodiversity improves conservation and sustainable use of selected genetic resources in Nyambai Forest Park.	<p>Output: 2.1.1 Valorisation of biodiversity of native genetic resources and associated traditional knowledge in Nyambai Forest Park, supported by the project to comply with The Gambian ABS national legislation and Nagoya Protocol throughout the value chain.</p> <p><i>Activity 27:</i> Consult with at least 7 indigenous and local communities to participate in the development of cultural community protocols to facilitate ABS.</p> <p><i>Activity 28:</i> Generate Information Exchange mechanisms that guarantee the right to Consultation and Prior Informed Consent of indigenous and local peoples.</p> <p><i>Activity 29:</i> Develop adopt and disseminate cultural community protocols for the protection of traditional knowledge associated with genetic resources.</p> <p><i>Activity 30:</i> Implement sensitization and awareness programs on the importance of conservation and sustainable use of genetic resources and associated traditional knowledge</p> <p><i>Activity 31:</i> Undertake consultation on mechanisms to protect traditional knowledge, cultural expressions, natural, biological and genetic resources of indigenous peoples</p>
Output: 2.1.2 Benefits derived from the use of genetic resources and traditional knowledge in the Nyambai Forest Park, are identified, classified, and assessed to strengthen the expertise and capacity of national authorities, including setting the basis for future negotiations.	<p><i>Activity 32:</i> Train on methodologies for specimen preservation and cataloguing</p> <p><i>Activity 33:</i> Train on the process chain of undertaking bioprospecting (from organizing the collection of samples and specimens, through laboratory work, to patenting of products)</p> <p><i>Activity 34:</i> Train on Carrying out extraction techniques like solvent extraction, aqueous extraction and also essential oil extraction.</p> <p><i>Activity 35:</i> Train on bio-activity tests</p> <p><i>Activity 36:</i> Train on drafting and executing ABS agreements</p> <p><i>Activity 37:</i> Set up facilities for specimen collection and preservation at the DPWM</p>

Output: 2.1.3 Commercial and non-commercial utilization of native genetic resources and benefit-sharing of selected genetic resources are researched, legislated, and included in the test for The Gambian national ABS monitoring system.	<i>Activity 38:</i> Undertake activities to: (i) strengthen permitting and administrative measures; (ii) establish ABS monitoring and tracking system
	<i>Activity 39:</i> Organize national workshop to reach agreement on the ABS administrative, permitting system, as well as monitoring and tracking system
	<i>Activity 40:</i> Develop tool-kits, manuals circulars, guidelines and other instruments for facilitating the establishment of the ABS permitting system

Component 3: Enhancing partnerships among relevant actors to improve equitable access and use of genetic resources and traditional knowledge.

The project's incremental activities under component 3 focus on supporting the establishment of partnerships among key stakeholders at all levels of ABS implementation, from government to communities and researchers to private sector businesses. It will also involve support for the practical implementation of ABS on pilot locations. The incremental activities under this component include the development of public private partnerships and streamlining collaboration between relevant stakeholders in the ABS space, bioprospecting, and value chains development for a range of genetic resources derived products in the cosmetics, sanitary, and food sectors; developing a model ABS agreement(s) to provide a basis for negotiating fair and equitable benefit-sharing; and a catalogue of Traditional Knowledge associated with GR. The Project also seeks to create national capacities that will empower GR Suppliers to be users as well of such resources and the TK to obtain benefits that are shared within their own communities.

The Outcomes for Component 3, as well as the activities for related Outputs are found in the table below:

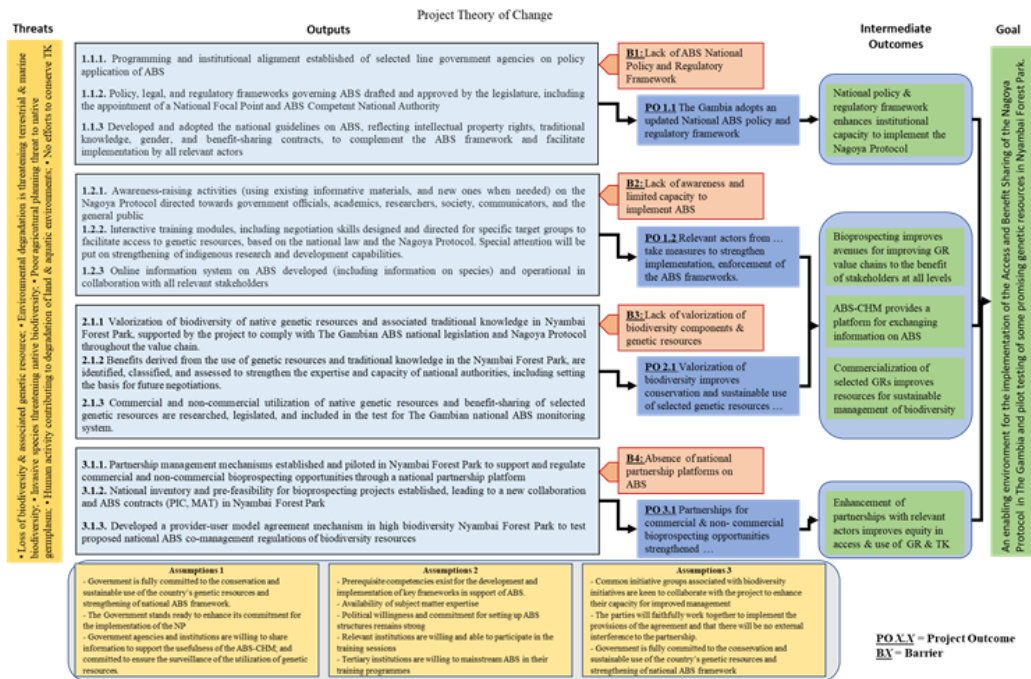
Outputs/Outcomes	Activities
Outcome 3.1 Partnerships for commercial and non-commercial bioprospecting opportunities strengthened by stakeholders and actions taken to establish ABS contracts at the community-level (FPIC, MAT).	
Output: 3.1.1. Partnership management mechanisms established and piloted in Nyambai Forest Park to support and regulate commercial and non-commercial bioprospecting opportunities through a national partnership platform	<i>Activity 41:</i> Identify and engage potential partnerships for piloting commercial and non-commercial bioprospecting opportunities
	<i>Activity 42:</i> Develop simple protocols and establish clear responsibilities
	<i>Activity 43:</i> Hold meetings and sign Memorandum of Agreement with relevant stakeholders
	<i>Activity 44:</i> Collect existing information on biodiversity, genetic resources and traditional knowledge
	<i>Activity 45:</i> Support the implementation multiple-year collaborative research and bioprospecting with identified partnerships
	<i>Activity 46:</i> Produce and disseminate report on bio-prospecting opportunities in the Nyambai Forest Park

<p>Output: 3.1.2. National inventory and pre-feasibility for bioprospecting projects established, leading to a new collaboration and ABS contracts (PIC, MAT) in Nyambai Forest Park</p>	<p><i>Activity 47: Implement <u>Pilot 1 MRC</u>: Genetic interactions between human populations and malaria parasites in different environmental settings across Africa.</i></p>
	<p><i>Activity 48: Implement <u>Pilot 2 MRC</u>: Influence of environmental variations (Plasmodium spp and Anopheline spp, climate and human populations) on the diversity and interactions between red blood cell glycoprotein receptors, the malaria parasite and disease phenotypes across Sub-Saharan Africa.</i></p>
	<p><i>Activity 49: Implement <u>Pilot 3 UTG</u>: Bioprospecting for potential antimicrobial agents extracted from Gambian traditional medicinal plants</i></p>
	<p><i>Activity 50: Implement <u>Pilot 4 UTG and TRAHASS</u>: Collaboration with TRAHASS in the biodiscovery and certification of at least 25 plant-based bioactive compounds in The Gambian traditional medicine landscape; and partnerships to support value chain development within ABS frameworks.</i></p>
	<p><i>Activity 51: Implement <u>Pilot 5 National Agricultural Research Institute (NARI)</u>: Evaluating botanicals of indigenous plant Neem (<i>Azardichtica indica</i>) (Neem extracts) for the control of Fall Army Worms FAW (<i>Spodoptera frugiperda</i>) on pearl millet in The Gambia</i></p>
<p>Output: 3.1.3. Developed a provider-user model agreement mechanism in high biodiversity Nyambai Forest Park to test proposed national ABS co-management regulations of biodiversity resources.</p>	<p><i>Activity 52: Undertake community sensitization and awareness ABS; ABS-compliant collaborative forest management (CFM); and the roles and responsibilities of the communities in ABS-compliant CFM; as well as Identify of interested groups and institutions, their roles and responsibilities and priority genetic resources for CFM by each group/institution (ensuring the full participation of women in the process).</i></p>
	<p><i>Activity 53: Undertake a situation analysis of the different genetic resources for CFM by selected CFM groups/institutions for the development of CFM plans.</i></p>
	<p><i>Activity 54: Support the negotiations by the selected groups with the DPWM for implementation of CFM; and Sign ABS-compliant collaborative forest management agreements between the DPWM and local communities/groups/stakeholders</i></p>
	<p><i>Activity 55: Implement <u>Pilot 6 DPWM</u>: Development of ABS-compliant collaborative forest management agreements for communities around the Nyambai Forest Park Complex</i></p>

Theory of change

The three key lessons outlined above correspond directly to the barriers highlighted in this project and the three project components identified seek to overcome these barriers through: (i) Strengthening the national legal and regulatory framework for implementing ABS; (ii) Awareness raising and capacity building for implementation of the national ABS framework; and (iii) Demonstrating benefit-sharing agreements facilitated.

FIGURE 7 PROJECT THEORY OF CHANGE



The three inter-related components of the project incorporate the entire value chain from identification through to commercialization and consumption (see Figure above). In general, the principal parties in ABS are the owners of the biological resource (the State, Indigenous Peoples and Local Communities (IPLCs), be they private or collective) and those intending to access the resource for technological development (researchers, research centers, and private companies). The basic issue to be addressed is that each transaction among them must be known and fully understood by all parties and must involve a full recognition of the contribution of each. The knowledge, understanding, and trust that is needed to reach this level of communication between parties is not easy to achieve in a polarized political environment, and the transaction costs can be very high.

Components 1 and 2 will work in tandem to create a more transparent, equitable system at each stage of the value chain thereby reducing the transaction costs and better protecting the biological resource. Lessons from experience in South Africa, Kenya and other countries demonstrate that as simple as it may seem, capacity building and awareness raising on the issue of genetic resource conservation, access, and prospecting must be taken seriously so that a policy that deals with these problems with legitimacy can be built. Strong efforts in capacity building and awareness are needed to breach the gap. Component 2 seeks to address this barrier by providing training and raising awareness across a wide range of stakeholders from national and local governments to academics and research to local communities and the private sector. This GEF project provides a unique opportunity to tackle these multiple barriers and provide the demonstration of a new paradigm agreement through Component 3.

As can be seen in the ToC diagram (see Figure above), the assumption is that that once communities are actively engaging with the research community and applying their customary laws and community protocols to bioprospecting opportunities, these types of research will become routine and efficiently administered. The ToC also assumes that having the following (i) an institutional framework in place to facilitate implementation of ABS; (ii) a broad-based understanding of the ABS regime and traditional knowledge exists; (iii) an improved roadmap for research and commercialization is in place; and (iv) selected ABS value streams are socially acceptable and economically viable then the project will achieve its objective to increase economic opportunity and biodiversity conservation for local communities and indigenous peoples in The Gambia stemming from fair and equitable sharing of biodiversity benefits thereby contributing to the following impacts: (1) Increased wealth creation through safeguarding The Gambia's biological resources and its genetic diversity from unfair use and exploitation. (2) Recognition, respect, protection, and indigenous knowledge and practices system on access to genetic resources. (3) Improved management and sustainable use of genetic resources and biodiversity.

The project components will contribute to the achieving the overall project objective and address the key barriers as follows: *Component 1: Strengthening the national framework for implementing ABS in accordance with the Nagoya Protocol:* This component aims to update the current national ABS framework in accordance with the Nagoya Protocol and harmonize current policies on bioprospecting and scientific research on genetic resources and TK associated with genetic resources. The project will enhance multi-sectoral and inter-agency collaboration regarding on-going research up until its potential for commercialization. The institutional mechanism should be able to cross-check or inform other agencies of any research undertakings and link these with the private sector for possible uptake. *Component 2: Supporting research for valorization, value addition and commercialisation of selected genetic resources in Nyambai Forest Park* A nation-wide communication, education and public awareness campaign on ABS and its related policies and procedures will be undertaken under this component. The capacity building will include: strengthening the research sector by developing an integrated and comprehensive ABS road map on genetic research and development (R&D); strengthening national systems on intellectual property rights by the researchers and IPLCs; improving the capacities of national government and IPLCs to engage with private sector with regard to ABS; strengthening capacities in the assessment of research proposals including the monitoring and tracking of bioprospecting and related activities involving utilisation of The Gambia's genetic resources and TKs; strengthening capacities of IPLCs to manage their GRs and associated TKs as well the benefits that come with it; establishment of a model research and development facility. *Component 3: Demonstrating benefit-sharing agreements:* Under this component, a key outcome is to facilitate the negotiation of at least one ABS agreement. The project will support the design and review of ABS agreements so that they are in line with the national ABS framework and the provisions of the Nagoya Protocol. This component will also support community protocols of securing PIC/FPIC and MAT and ensuring the fair and equitable sharing of both monetary and non-monetary benefits for the use of the genetic material, products, and knowledge. Further under this component, conservation strategies of specific resource covered by the ABS agreement will be planned.

4) Alignment with GEF focal area and/or impact program strategies

The project aligns with BD 3-9 of the Biodiversity Focal area strategy: Implementing the Nagoya Protocol on Access and Benefit Sharing. The project activities will support the national implementation of the Nagoya Protocol. The project specifically supports (i) the Development and implementation of a strategy and action plan for the implementation of ABS measures. (e.g. monitoring of the use of genetic resources, compliance with legislation and cooperation on transboundary issues); and (ii) Building capacity among stakeholders (including indigenous and local communities, especially women) to negotiate agreements between providers and users of genetic resources. The project will also build institutional capacity to carry out research and development to add value to The Gambia's genetic resources and associated traditional knowledge. The project is also aligned with the development (or revision) of national measures to implement and enforce the Protocol (e.g., the legislative, administrative or policy measures on access and benefit-sharing) (component 1 of the project).

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

In the baseline situation, while the approval of the national ABS policy and development of the national ABS legislation would take considerably longer, the lack of technical expertise input towards the development of implementing administrative and permitting procedures and supporting information-sharing mechanisms and guidance materials may not be available. Inter-agency coordination for biotechnology development will remain weak, resulting in potential conflicts and confusion, which may adversely affect investor confidence. Further, in a business-as-usual scenario, resources will not be adequate to support the level of capacity building needed to bring the DPWM, checkpoint authorities and other stakeholders to implementation readiness in the short term, and local experience and information-sharing on the development of PIC, MAT and benefit-sharing will remain inadequate. Bio-prospecting and use of traditional knowledge resources will continue to be weakly regulated, therefore indigenous local communities across the country would remain at risk of losing out on the benefits associated with bio-prospecting and there will be little incentive for improving the security of biological resources at local level.

Similarly, the levels of awareness among decision makers, sectoral agencies, the commercial sector and local communities concerning the potential benefits of an effective ABS regime will continue to remain low. At the national level, there will be inadequate understanding of ABS issues among sectors other than those directly involved in the conservation and development of biological resources, and even then there is a need to ensure consistency in the vision and rationale behind ABS. Without the support of the project, local communities may not be able to understand the importance of their genetic resources and aTK and hence be unable to realize the full economic potential of their resources. Lack of appropriate benefit sharing arrangements would lead to financial, social and environmental losses. Private sector and the government investment in accessing this genetic resource and sharing of the benefits will continue to be limited.

Without GEF investment in the proposed project, the approval of the national ABS policy and development of the national ABS framework would take considerably longer, and it would be more difficult to achieve the international standards for best practice in ABS required by the CBD and

Nagoya Protocol. It would be more difficult to convince upstream decision-makers that the ABS policy and regulations are required, and to put in place appropriate institutional mechanisms. The lack of technical expert input towards the development of implementing regulations will affect their completion and quality, and supporting information sharing mechanisms and guidance materials may not be available. Inter-agency coordination for biotechnology development will remain weak, resulting in potential conflicts and confusion which may adversely affect investor confidence.

Scenario with GEF intervention: With GEF investment, the project aims to develop and implement the national ABS framework, build national capacities and facilitate the discovery of nature-based products. The project will support the finalization and approval of the National ABS Policy by the Gross National Happiness Commission and the National Cabinet, and the development, operationalization and promulgation of the Biodiversity Rules and Regulations encompassing ABS implementation. It will build the necessary capacity within the DPWM and other related stakeholders for the implementation of the ABS framework. The national ABS institutional framework will be operationalized, including the designation of Competent Authorities at national (and sub-national) level which will be responsible for administration of the online permitting system and the granting of the ABS access permit, the designation of checkpoints to support compliance with the ABS legislation, and establishment of the ABS CHM. DPWM's technical capacity for bio-prospecting laboratory analysis will be increased through the installation of analytical equipment and upgrading staff knowledge and skills in specific bio-prospecting laboratory techniques.

Besides supporting The Gambia in setting up institutions and frameworks for the implementation of the Nagoya Protocol, additional objective of this GEF funds will be the funding of concrete actions leading to the actual implementation of the protocol and environmental benefits. For example, at least 100 new extracts will be identified and preserved for bio-activity tests and 25 active compounds fractionated for development of potential trial products using DPWM's upgraded analytical facilities. Staff of both DPWM and partner agencies will be trained in the full cycle of ABS regime management. Three local women-led initiatives that use and add value to local genetic resources in the production of herbal infusions/teas, cosmetics, and sanitary products will be supported to achieve more sustainable sourcing of their raw materials, more competitive value addition, and the processes of acquiring patents for their products. Through the pilot projects, the inclusion of appropriate PIC, MAT and ABS agreements in bio-prospecting and product development processes will be demonstrated and these ABS tools will be streamlined in the co-management of the forest parks. Knowledge resources which will be generated from key aspects of ABS implementation, including best practices and lessons, will be developed from the experience in The Gambia and disseminated through publications and a national seminar.

Intensive awareness raising and capacity building efforts will ensure that all concerned stakeholders understand the principles behind the ABS regime, the requirements for its implementation, and the potential benefits that can be realized to different parties. The project will also facilitate the reinvestment of benefits from ABS agreements back into biodiversity conservation and supporting ILCs through official mechanisms.

This project aims to invest in a coordinated suite of activities to address the current biodiversity decline across the country, with a focus on genetic resources harvested and used for the medicinal and cosmetic

industries, in addition to creating frameworks and supporting institutions to be equipped to implement ABS. Interventions will concentrate on the mechanisms and underlying conditions that can enable long-term use and equitable distribution of benefits for improved livelihoods and biodiversity conservation. Over-harvesting and unsustainable exploitation of genetic resources will be reduced because of the project, allowing species conservation. Through effective community engagement in conservation for sustainable development, The Gambia's capacity to manage access and benefit-sharing will be strengthened.

Component 1: This project will consolidate actions to conserve and sustainably use genetic resources and related traditional knowledge in The Gambia through the development and implementation of a national policy, legal and institutional framework on ABS in accordance with the CBD and the Nagoya Protocol, using GEF Trust Fund and co-financing mechanisms. As a result, the incremental activities under this component include 1) revising, validating, and operationalizing ABS policy, legislation, and institutional coordination, thereby regulating appropriate access to genetic resources, and ensuring fair and equitable sharing of benefits along the value chain, and 2) establishing cross-sectoral and inter-institutional collaboration, thereby ensuring ABS is incorporated into various sectors and thus enabling ABS to be implemented. 3) This component will also test and implement a system for long-term monitoring of progress in the use of genetic resources and traditional knowledge, as well as compliance with PIC/MAT processes, through the establishment of the ABS Monitoring Unit. The establishment of community genetic resource registers, as site-based databases that will aid in monitoring access to genetic resources and provide baselines for replication of the process in other potential sites in The Gambia, is another incremental achievement from this component. These efforts to develop an ABS-compliant regulatory framework will complement The Gambia's current efforts to promote sustainable development based on the sustainable use of the country's natural resources.

Component 2: This component will document and share best practices, lessons learned, and experiences gained during project implementation in order to strengthen stakeholders' abilities and skills beyond the project period. This component will also bring a gender perspective to the ABS decision-making and implementation processes. This will be a critical incremental element in ABS processes, as it will mainstream gender considerations into discussions about access to and marketing of genetic resources, as well as in negotiations with buyers, researchers, and other stakeholders, based on a careful evaluation of cultural attitudes in The Gambia. Here, local initiatives such as Yaxare Herbal Infusions, Jameel, and Jain's Cosmetics will collaborate with researchers and institutions such as the University of The Gambia, the National Agricultural Research Institute, the Ministry of Gender and others to achieve enhancements in genetic resources products value chains, the inclusion of women in benefits to ABS, etc. One of the activities of the project will be to implement sensitization and awareness programs on the importance of conservation and sustainable use of genetic resources and associated traditional knowledge (Output 2.1.1.; Activity 30). As part of implementing sensitization and awareness programs on the importance of conservation and sustainable use of genetic resources, the project will support restoration activities (translating theory to practice) in which project beneficiary communities will undertake indigenous tree planting, restocking of depleted local species of medicinal plants, ecosystem restoration, in a bid to benefit environmental health and genetic resources.

Component 3: The project's incremental activities under component 3 focus on supporting the establishment of partnerships among key stakeholders at all levels of ABS implementation, from

government to communities and researchers to private sector businesses. It will also involve support for the practical implementation of ABS on pilot locations. The incremental activities under this component include the development of public private partnerships and streamlining collaboration between relevant stakeholders in the ABS space, bioprospecting, and value chains development for a range of genetic resources derived products in the cosmetics, sanitary, and food sectors; developing a model ABS agreement(s) to provide a basis for negotiating fair and equitable benefit-sharing; and a catalogue of Traditional Knowledge associated with GR. The Project also seeks to create national capacities that will empower GR Suppliers to be users as well of such resources and the TK to obtain benefits that are shared within their own communities.

Cost/Benefit	Baseline (b)	Alternative (A)	Increment (A-B)
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<p>Global benefits</p>	<p>Weaknesses exist in the existing legal framework that does not require PIC, MAT involving equitable sharing of benefits. There is inadequate awareness and institutional capacity to implement a national ABS regime.</p> <p>Overall, the constituency and financial resources for biodiversity conservation will not advance beyond current baseline levels.</p> <p>Lack of tangible economic value attached to biodiversity rich ecosystems on government owned land inside and outside the PA system is a root cause for its conversion for other land uses. This forgoes future use options for genetic resource conservation.</p>	<p>The project aims to establish a national policy and implementing regulations on ABS and the institutional framework and supporting measures for their implementation. This national ABS framework will enable the Gambia to fully implement the Nagoya Protocol.</p> <p>Strategic awareness raising and capacity building will be conducted for target groups and a secure operational environment for investment in bioprospecting and product development established in order to facilitate development of the biotechnology industry and to generate revenue from ABS agreements for re-investment in biodiversity conservation.</p> <p>Demonstrated development of pilot ABS agreements exemplify practical implementation, with attention to the core ABS principles of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) including the fair and equitable sharing of benefits with ILCs and other stakeholders, combined with capacity building and awareness raising to enhance understanding of the value of biological resources and measures for their improved security</p>	<p>The introduction of an effective national ABS regime will contribute towards biodiversity conservation and encourage sustainable use of globally significant genetic resources.</p> <p>Increased awareness of the existence, use and option values of biological resources among key audiences.</p> <p>Contributions towards the maintenance of globally significant biodiversity and ecosystem services</p>
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National and local benefits

Bio-prospecting and use of traditional knowledge resources will continue to be weakly regulated and Indigenous and Local Communities (ILCs) across the country at risk of losing out on national benefits associated with bio-prospecting.

Inadequately regulated bioprospecting may not take account of the PIC, rights and needs of ILCs and other stakeholders, or include any requirement for the equitable sharing of benefits or the capacity to subsequently monitor compliance with any such benefit sharing agreement. Loss of TK, and absence of incentives for sustainable land use will result in continued loss and degradation of biological resources.

The project will strengthen regulation of bioprospecting activities through the establishment of the national ABS framework, provision of training to the DPWM, NCAs and checkpoint agencies on issues such as permitting processes, and develop supporting information management systems. An approximate of 300,000 person are expected to directly benefit from the ABS regime and the capacity building related to the NP implementation.

To enhance prospects for genetic resources and bioprospecting, a healthy environment that support the survival of these genetic resources is a prerequisite.

The project area (particularly Kiang West National Park (11,526 ha), Nyambai Forest Park (202 ha), Bamba Forest Park (389 ha), Kabatifa Forest Park (243 ha)) are quite degraded (from the harvesting of wood in the parks), and polluted (from the dumping of municipal solid waste on them). By restoring these areas, and the reduction or elimination of pollution, a total of 12,360 hectares of land that contributes ecosystem services directly to several a large population of the project area will witness improved ecosystem services delivery.

Demonstration of PIC processes leading to ABS agreements and the fair and equitable sharing of benefits will ensure full involvement of ILCs.

Greater economic benefits to the government and other stakeholders from genetic resources enabled through the biotechnology industry, thereby providing incentives for biodiversity conservation;

Communities that are custodians of genetic resources and associated traditional knowledge are provided with livelihood options that result in economic benefits, thereby reducing pressures for unsustainable use of genetic resources and conversion of ecosystems; TK is protected;

Protected areas that benefit from project funding will enhance the ecosystem services delivered to local communities.

National development strategies and economic growth are supported, reducing poverty and

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

Globally biodiversity is in decline and many factors are contributing to the decline. The Millennium Ecosystem Assessment report of 2005 identifies human activities as the main cause of changes in biodiversity and these include over-exploitation, pollution, and the impacts of invasive alien species, among others. The Nagoya Protocol on ABS has the potential to reduce loss of biodiversity through access and benefit sharing arrangements that promote the conservation and sustainable use of biodiversity. The Gambia is a Party to the Nagoya Protocol whose objective is the fair and equitable sharing of benefits arising from the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to the technologies, and by appropriate funding thereby contributing to the conservation of biological diversity and the sustainable use of its components. The implementation of the Protocol thus contribute to improving livelihoods especially of local communities, secure human wellbeing, and promote conservation, sustainable use and equitable benefit sharing of biodiversity. The proposed project, therefore, will enable The Gambia to make its national contribution to the global environmental benefit of conserving biodiversity and sustainably using its components by building national capacity to implement ABS. The implementation of a functioning robust, transparent National ABS mechanism in The Gambia will bring significant opportunities for research, technology development, innovation, products and processes with expected great economic and social returns. At the same time, adopting such green economic opportunities will provide durable incentives for biodiversity conservation. The consolidation of ABS will generate a wide variety of benefits, monetary and non-monetary, for providers of genetic resources and ATK, some of which will be reinvested in the biodiversity conservation and sustainable use. The resulting benefits will also support scientific capacity development, economic growth and the consolidation of The Gambia's biodiversity.

The project will, therefore, contribute towards the achievement of a number of CBD Aichi Targets, namely: Target 1, by increasing the awareness of people in Gambia about the values of biodiversity and the steps they can take to conserve and use it sustainably; Target 12, by preventing the extinction and/or improving the conservation status of threatened species; Target 13, by maintaining the genetic diversity of cultivated plants and of wild relatives, including other socio-economically as well as culturally valuable species, and by developing and implementing strategies for minimizing genetic erosion and safeguarding their genetic diversity; and Target 18, by better involving and respecting the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity.

The project will also be contributing to the GEF-7 core indicators, namely Indicator 1.1. **Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares). The value for this indicator is 12, 360 ha of PA under improved management.

The project has been designed to strengthen the capacity of people and government of The Gambia to sustainably harness the potential economic benefits of the country's rich biological diversity. Besides, the project will enhance the fair and equitable sharing of benefits from the country's biodiversity and genetic resources among the people and entities that have a direct stake, in form of business, employment, research, technology transfer, and capacity development opportunities. These new opportunities brought about by bioprospecting and biodiscovery will lead to the conservation of The Gambia's genetic resources and associated traditional knowledge. The project will contribute to global environmental benefits through the creation of incentives from implementation of the ABS regime and Nagoya Protocol on ABS. This will focus attention on the unique biodiversity and genetic resources of The Gambia, some of which has not received the necessary scientific or governance attention. Targeted and robust scientific research and development will provide added value to genetic resources, which, together with the clear, coherent, and complete regulatory and institutional frameworks for the ABS mechanism, will contribute to ensuring The Gambia's valuable natural resources are conserved for the

future generations. At the project area, a total of 12,360 hectares of protected forest including the Kiang West National Park will be brought under improved management.

Through improved access rights to genetic resources for communities adjoining the Nyambai Forest Park complex, the project will contribute to numerous efforts underway in the country to prevent the extinction of endangered ecosystems and their species. This will be achieved through a multi-sectoral approach in project implementation, awareness creation and capacity building at the local level thereby enhancing expertise on species conservation as well as human livelihoods. A total of 5,400 households will directly benefit from the implementation of agreements for bioprospecting in the Nyambai Forest Park complex. This will include 2,400 Women and 3,000 Men[1].

7) Innovativeness, sustainability, and potential for scaling up. ?

Innovativeness

The key innovation of this project is the use of a public-private partnership as 'proof of concept' on bio-prospecting (i.e., the process of screening for and discovery and commercialization of new products based on biological resources) which is a novel field for national agencies and corporate partners in The Gambia to demonstrate the value of ABS implementation in The Gambia. This innovation is extended through the establishment of partnerships with national and international research institutions, civil society organizations and local communities in order to increase the knowledge base and build in-country capacity for research on genetic resources and associated traditional knowledge.

The project also applies an innovative approach by using the corporate demand and market prospects to direct inventories and bioprospecting work, which is well connected with corporate partners, rather than screening a broad range of biological and genetic resources and look for possible market interest for these. In addition, under the bio-prospecting activities, the project will use advanced technologies such as biotechnology for innovation and replication.

Once innovations have been piloted and found to merit scaling up, the programme will first promote the innovation through appropriate means (demonstration plots, presentations in weekly markets, trade and innovation fairs) and will then mobilize project knowledge management and communications personnel, farmers' organizations, and the agricultural value chain interaction platforms to build demand for the innovation. The project will look to its strategic partnerships with government, donors and relevant private sector operators to co-finance the scaling up of the key innovations.

Sustainability

Environmental sustainability: Environmental sustainability: The improved capacity of national and local stakeholders to use the ABS mechanism to support biodiversity conservation and sustainable use is the foundation for the project's environmental sustainability. The project will fund pilot projects to create products derived from the use of genetic resources, which will generate monetary and non-monetary benefits that will be used to support conservation efforts in key biodiversity areas. Furthermore, the project will establish a local foundation that will be critical for the long-term conservation of the biological and genetic resources found in these areas. This will be accomplished by collaborating closely with local communities and IPs, who have extensive traditional knowledge in these areas, as well as through the fair and equitable sharing of benefits derived from the use of genetic resources.

Institutional sustainability: Institutional sustainability will be achieved through the improved capacity of the stakeholders associated with ABS across the Gambia (government agencies, public and private research organizations, the private sector and key industries, and local communities/IPs) to effectively manage access to genetic resources and ensure the distribution of benefits. The establishment of fundamental and functional institutional arrangement for ABS management with involvement of national and local institutions associated both with access to biological resources and related traditional knowledge will provide an institutional structure that will be expected to provide the backbone for future ABS in The Gambia. At the national level, strengthening the national framework for implementing ABS in accordance with the NP will greatly contribute to change the way access and

sharing benefit of genetic resources is managed in The Gambia, leading to a more equitable, fair, and sustainable use of genetic resources. After the completion of the project, awareness, and capacity of all stakeholders on implementation, compliance, monitoring and tracking of the national ABS framework will be significantly enhanced. Providers will better understand the value of genetic resources they own and become more capable of negotiating with the user on benefit sharing in accordance with the ABS principles. Users will be more aware of their responsibility to share benefits of genetic resources with the providers, thus creating a legal MAT for clarification and transparency related to use of genetic resources for commercial and research purposes, as well as ensuring benefits from utilization of genetic resources are shared equitably and fairly between the state and communities. This provides the basis for ensuring the sustainability of the public-private community partnerships in genetic resource use and management of ABS related concerns that overall contribute to biodiversity conservation and social security at the household and community levels.

Social sustainability: It is anticipated that the following activities will contribute to social sustainability: (i) capacity building; (ii) gender equality and gender mainstreaming at the institutional and community levels; and (iii) participatory approaches. By institutionalizing ABS mechanisms at the state, regional, and local levels, the project will strive to ensure long-term ownership of the project's outputs while also ensuring that the project is implemented efficiently. Gender analysis will be carried out during the project's implementation, and a gender equality strategy will be developed to enable the project to identify and support opportunities for the inclusion of female participants in the project's activities during the project's implementation. Furthermore, a gender perspective was taken into consideration during the implementation of all three project components.

Financial sustainability: Financial sustainability will be achieved through the development of a clear and transparent permit system; the project will contribute to encourage private investments in bioprospecting and lead to future benefits for other communities and ecosystems. Moreover, at the pilot scale, when products are successfully produced and sold, the value chain and the distribution of benefits derived from it will be maintained. The increases of financial flow from users of genetic resources will not only directly benefit target pilot sites but also the broader communities living in genetic resource diversity areas due to increased opportunities for income from activities such as collecting, cultivating, harvesting, and transporting the targeted species for commercialization products. Outcomes from Component 3 will demonstrate the various approaches to increased financial and economic sustainability. Through policy support for ABS, including delineating clear and accountable institutional arrangements and financing for ABS implementation, the project will also work to unlock available financing for ABS through the national budget.

Potential for scaling up

The project has strong potential for replication and up-scaling because it will establish an ongoing process through institutional and professional education and training, including enhancement of national and international networks of relevant organizations. The field survey activities to be supported by the project will provide models that can be replicated at many other sites within the country. In addition, these demonstration activities will establish a model framework for bioprospecting and assessments of biodiversity / genetic resources and associated traditional knowledge, which can be up-scaled into broader national policies and regulations.

The project also applies an innovative approach by using the corporate demand and market prospects to direct inventories and bioprospecting work, which is well connected with corporate partners, rather than screening a broad range of organisms and look for possible market interest for these. In addition, under the bio-prospecting activities, the project will use advanced technologies such as biotechnology for innovation and replication.

Once innovations have been piloted and found to merit scaling up, the programme will first promote the innovation through appropriate means (demonstration plots, presentations in weekly markets, trade and innovation fairs) and will then mobilize project knowledge management and communications personnel, farmers' organizations, and the agricultural value chain interaction platforms to build demand for the innovation. The project will look to its strategic partnerships with government, donors and relevant private sector operators to co-finance the scaling up of the key innovations.

[1] The number of direct beneficiaries from the project is estimated from the population that is living in the vicinity of the Nyambai Forest Park complex. This refers to populations in the communities that share a direct boundary with the park complex. The communities include: ? Jambur; ? Busumbala; ? Brikama; ? Jalambang; and ? Jabangjali

[1] Genesis T. Yengoh, Ousainou Touray, Modou A. Sowe (2021). Baseline survey of drivers of land use, land cover changes, ecosystem dynamics, and changes in protected areas, and livelihoods of the project communities. Land/Seascape planning and restoration to improve ecosystem services, and livelihoods, expand and effectively manage protected areas. National Environment Agency, Kanifing, The Gambia.

[2] Department of Forests 2010. National Forest Assessment; Government of The Gambia and FAO.

[3] Sillah, J. 2007. Ecology and Climate Change of the Mangrove Ecosystems of Mauritania, Senegal, Gambia, Guinea Bissau, Guinea and Sierra Leone. IUCN and Department of Forests. 2010. National Forest Assessment. Government of The Gambia and FAO

[4] Ministry of Agriculture (2010) Gambia National Agricultural Investment Plan (GNAIP). Government of The Gambia

[5] Energy Division (2004) Energy Division Report. Government of The Gambia

[6] Department of Forests (1999) Study on Forest and Wildlife Management. Government of The Gambia

[7] Energy Division, op.cit

[8] Sillah, J. 2014. Natural Resources Management with Relevance to Biodiversity Degradation in The Gambia. WWF

[9] DPWM (2021b) *The national context of Access Benefit Sharing in The Gambia ? implementation potentials at the local and sectoral levels*. Thematic study for the ?Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of the Gambia? project. Department of Parks & Wildlife Management (DPWM), MECCNAR. Banjul, The Gambia.

[10] DPWM (2021c) *Baseline analysis of the environmental and socioeconomic context for the implementation of the Nagoya Protocol and Access Benefit Sharing in the Gambia*. Thematic study for the ?Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of the Gambia? project. Department of Parks & Wildlife Management (DPWM), MECCNAR. Banjul, The Gambia.

[11] DPWM (2021a) *Thematic overview of the Nagoya Protocol and the implementation of Access Benefit Sharing in the Gambia*. Thematic study for the ?Effective Implementation of Access and

Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of the Gambia? project. Department of Parks & Wildlife Management (DPWM), Ministry of the Environment, Climate Change and Natural Resources (MECCNAR). Banjul, The Gambia.

[12] Ibid: DPWM (2021a).

[13] Ibid: DPWM (2021a).

[14] Ibid: DPWM (2021a).

[1] Department of Forests. 2010. National Forest Assessment; Government of The Gambia and FAO

[2] Sillah, J. 2007. Ecology and Climate Change of the Mangrove Ecosystems of Mauritania, Senegal, Gambia, Guinea Bissau, Guinea and Sierra Leone. IUCN and Department of Forests. 2010. National Forest Assessment. Government of The Gambia and FAO This destruction is in turn having a severe and negative impact on large mammal species, compounding the which are also subjected to heavy hunting pressure they already suffer.

[1] Petr Pyšek and David M. Richardson (2010). Invasive Species, Environmental Change and Management, and Health. Annual Review of Environment and Resources 2010 35:1, 25-55.

[2] Ibid: Petr Pyšek and David M. Richardson (2010).

[1] The number of direct beneficiaries from the project is estimated from the population that is living in the vicinity of the Nyambai Forest Park complex. This refers to populations in the communities that share a direct boundary with the park complex. The communities include: ? Jambur; ? Busumbala; ? Brikama; ? Jalambang; and ? Jabangjali

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

The Geo-Coordinates are: 13.2994° N, 16.6703° W

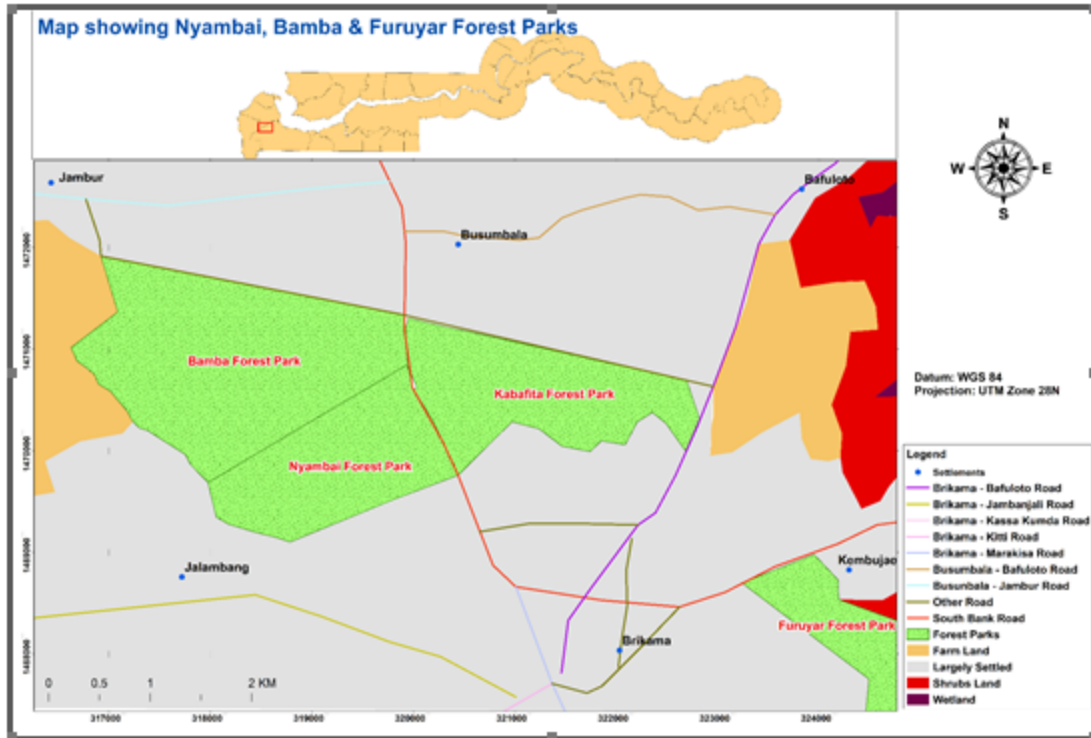


FIGURE 1 THE NYAMBAI FOREST COMPLEX, CONSTITUTING THE NYAMBAI FOREST PARK, BAMBA FOREST PARK AND THE KABAFITA FOREST PARK.

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

During project development, there were a series of engagements involving information sharing and consultation activities with a range of project stakeholders. Detailed stakeholder consultations were held during the project preparatory phase (PPG) to identify and clarify complementarities, overlap,

synergies and support with other projects and activities. The stakeholder consultations during project design enabled the project to formalize in-country coordination with other GEF-financed and other donor-funded projects that will continue throughout the project period. Among the stakeholders were national government agencies, local authorities, training and research institutions, civil society organizations, private sector and local communities. After GEF approval of the Project Information Form (PIF), the project preparation phase was interrupted with the outbreak of the COVID-19 pandemic in line with government restrictions. The strong commitment of project stakeholders resulted in the constitution of a Technical Advisory Group that carried out regular consultations (both in-person and virtual). These are some of the key highlights of the consultations with stakeholders during the project preparation phase:

? In the early days of the project preparation, a site visit was undertaken to the Nyambai Forest Park complex on May 6th, 2021, to acquaint the project team with the physical geography, populations, and socioeconomic realities of the project area (see Site visit at the Nyambai Forest Park).

? A three-day stakeholders' consultation meeting was held from 5th to 7th August 2021 to tease out different thematic areas for the development of Access and Benefit Sharing (ABS) Project document development workshop for The Gambia. This meeting was also used to identify the roles and responsibilities of different stakeholders in the potential project implementation.

? Several meetings were held with each of the institutional stakeholders of the project. These include the Food and Agriculture Organization of the United Nations; Medical Research Council; National Environment Agency; National Agricultural Research Institute; University of The Gambia; etc. (see associated meeting reports).

? A project validation workshop was held on October 12th, 2021, bringing together all stakeholders to discuss the draft project document that had been shared several weeks in advance of this meeting. Here, thematic working groups examined and discussed key themes covered by the project and proposed areas of revision (see ABS validation workshop report).

? Field/community visits were undertaken from October 3rd to 7th, 2021 as an essential process to collect data for the thematic studies that supported the development of this project. During this phase, local communities were given the opportunity to express their needs, expectations, and concerns regarding the project. The main conclusions of these consultations have been considered in the project document. These field visits led to the development of four thematic studies in support of project development (see Annex H: Thematic Studies undertaken in support of the project preparation).

Table 1 Stakeholders and their roles in the project implementation.

Stakeholder	Role in the project
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<p>Department of Parks and Wildlife Management (DPWM)</p>	<p>Lead implementing agency for CBD and Nagoya Protocol in The Gambia. The Department which is responsible for the implementation of the Biodiversity Act (2002) and CBD targets will be the Executing Agency of the project. The DPWM will take the lead in all the activities related to conservation of key biodiversity, provide policy guidance on Protected Areas, advise on biodiversity conservation and genetic resource base of The Gambian wildlife fauna access.</p> <p>The DPWM provides co-financing of USD 2,000,000, spread across all Outcomes of the project. The DPWM will work with NARI to evaluate botanicals of indigenous plant Neem (<i>Azardichtica indica</i>) (Neem extracts) for the control of Fall Army Worms FAW (<i>Spodoptera frugiperda</i>) on pearl millet in The Gambia. DPWM will also collaborate with UTG and TRAHASS in the with TRAHASS in the biodiscovery and certification of at least 25 plant-based bioactive compounds in the Gambian traditional medicine landscape.</p>
<p>National Environment Agency (NEA)</p>	<p>NEA coordinates all environmental issues in the country. It will play the role of monitoring the smooth implementation of the Project through GEF recommended guidelines. NEA will be an active partner in the implementation of Outcome 1.1 and Outcome 1.2. These Outcomes align with the role of NEA as a governmental body responsible for inter-institutional and body for environmental and natural resources matters in The Gambia. NEA will provide co-financing to the tune of USD 2,500,000 to support the implementation of activities within its core mandate ? regulatory and legal frameworks for environment and natural resources. NEA will also provide technical expertise and support in the implementation of the project through collaborative research, knowledge management and capacity building.</p>
<p>Ministry of Environment, Climate Change, Water, and Natural Resources (MECCNAR)</p>	<p>The Permanent Secretary of The Ministry, which is responsible for forestry and wildlife management and includes departments of Forestry and Parks and Wildlife. It will be an executing partner and Chair the Project Steering Committee (PSC).</p> <p>MECCNAR will be supporting Outcomes 1.1, 2.1 and 3.1 of the Project with co-financing to the tune of USD 7,000,000, of which 1,000,000 will be in grants and 6,000,000 in kind. This co-financing will support diverse project activities associated with the legal and regulatory framework of ABS, capacity building and enforcement, as well as partnerships at a higher level.</p>
<p>Department of Forestry (DFor)</p>	<p>The department, which is responsible for forest policy, legislation, etc. at national and local levels, will provide guidance on all issues related to forest management, advise on biodiversity conservation and genetic resource base of The Gambian Flora Act. DFor will provide technical guidance and support in matters related to management and use of forest products, including those sourced from community forests and non-timber forest products management schemes. Also, guidance on matters related to trade in wild plants and animals and their products within the legal framework of the Forest and Nature Conservation Act 1995 and CITES. It will collaborate with NEA and Parks and Wildlife Department for the rehabilitation of Nymbai Forest Park complex. It will be a Member of PSC.</p> <p>DFor is providing co-financing of USD 1,000,000 to support local communities (especially women) in the sustainable utilization of non-timber forest resources during project implementation, promote forest restoration practices associated with ABS-compliant collaborative forest management, and mobilise and increase community and household participation in the sustainable management of forest cover in the Nyambai Forest Park Complex complex.</p>

<p>The Medical Research Council Unit The Gambia at the London School of Hygiene and Tropical Medicine (MRC Unit The Gambia at LSHTM)</p>	<p>The MRC Unit The Gambia at LSHTM will undertake the implementation of two pilot studies that involve access to and use of genetic resources for research. These cases will be used as a basis for collaborative agreements and the implementation of PIC and MAT with relevant stakeholders and institutions. The MRCG at LSHTM is providing co-financing support of USD 398,357 to support the following:</p> <ul style="list-style-type: none"> ●Storage and management of genetic materials (Biobanking) for samples collected during the project implementation; ●Providing access to their fully-equipped genomics platform for genetic studies associated with soil microbiota at the project locations; ●Training on research methods and associated expenses.
<p>Department of Fisheries</p>	<p>The department, which is mandated to plan, manage and develop the fisheries sector in the country, will provide policy guidance on fisheries, advise on biodiversity conservation and genetic resource base of The Gambian marine. Member of PSC</p>
<p>Ministry of Agriculture</p>	<p>The Ministry, which is responsible for agricultural development and promoting production technologies that reduce land degradation, and together with the Ministry of Higher Education, support R&D focusing on conservation of food crops and animal genetic resources. It will also Technical guidance and support in matters related to domestic propagation of medicinal and aromatic plants, and spices. Member of PSC.</p>
<p>Ministry of Health</p>	<p>To support the systematization of information about the potential value of medicinal plants and biosafety on plant and animal genetic resources.</p>
<p>Ministry of Gender, Children and Social Welfare</p>	<p>The Ministry contribute to the development of the principle of equality in the country, inclusiveness, and protecting the rights of women and children and the integration and protection of vulnerable and excluded groups.</p> <p>The Ministry will support the mainstreaming of benefits from the implementation of ABS to women and other vulnerable groups. Member of PSC</p>
<p>Ministry of Justice</p>	<p>To support the development of legislation of genetic resources and biosafety laws in line with the provisions of the Nagoya Protocol and the Cartagena Protocol, respectively, including trade in genetic resources within and beyond The Gambian borders. Branch of the Office of the Attorney General will be reviewing any proposed project implementation component, proposed ABS policy or legislation.</p>
<p>Ministry of Higher Education, Science and Technological Innovation</p>	<p>To support and promote research, science & technology related to conservation of genetic resources for both flora and fauna. The Ministry of Higher Education is the apex coordination and oversight body for research programs in The Gambia. Through the University of The Gambia, this Ministry will serve as a member of the Scientific Review Committee for ABS. It will have a potential role in collaborative research and knowledge-sharing on animal and plant genetic resources of commercial value</p>
<p>Local Government Authorities</p>	<p>Under Local Government Act 2002, these authorities have been given responsibility for the management of natural resources and of waste collection systems in their respective areas</p>

National Agricultural Research Institute	NARI, which is mandated to conduct adaptive research in agriculture and natural resources, will participate as a member of the PSC and will be actively involved in the consultation process and work closely with the Ministry of Agriculture and the Ministry of Higher Education on conservation of genetic resources for both flora and fauna.
Local Communities <i>?Nyambai Forest Park communities</i> ? Jambur ? Busumbala ? Brikama ? Jalambang ? Jabangnjali	Immediate users and custodians of biological resources, traditional knowledge practitioners, and primary beneficiaries of ABS. At least 10 local communities that are neighbors top the Nyambai will be the primary local beneficiaries of this project based on trial (and eventually formalized) access agreements based on mutually agreed terms. Local communities will play an active role in the negotiation of the mutually agreed terms (MATs) and to give Protocol compliant Prior Informed Consent for all agreements. In Pilot 6, Local Communities will be working with the DPWM to implement ABS-compliant collaborative forest management practices.
Traditional Healers Association of The Gambia (TRAHASS)	With mandates related to: Local actions on access, PIC, MAT, and benefit sharing; support for biodiscovery. Genetic resources and traditional knowledge (TK) associated with genetic resources; Social and local community mobilization; and Support of biodiscovery. In the context of the project, they will support the implementation of activities related to finalization of ABS policy, implementation of PIC, MAT, and contracts, capacity-building, and awareness raising and Support local level implementation of the ABS framework, including sectoral guidelines. The association will participate in providing input into the legal frameworks and preparing community protocols as part of capacity-building activities. The experience of this Association could also help to develop the sui generis TK registers working with IPR authorities. Project implementation, monitoring issues and ABS contract development. TRAHASS is providing co-financing support of USD 550,000 in support of biodiscovery activities associated with Gambian traditional medicine practices.
Private sector ? Yaxare Herbal Infusions ? Koz Jameel ? Jain?s Cosmetics ? Innovators Spaces	<p>? <i>Yaxare Herbal Infusions</i> will contribute to the development of quality standards and their promotion within the private sector ? specifically in the herbal foods and supplements sector</p> <p>? <i>Koz Jameel</i> will contribute to the development of quality standards and their promotion within the private sector ? specifically in the cosmetics sector. Also support the development of procedures for empowering women in the development of initiatives for the use, value addition, and market access within the context of ABS.</p> <p>? <i>Jain?s Cosmetics</i> will contribute to the development of quality standards and their promotion within the private sector ? specifically in the cosmetics sector. Also support rationalization of a mode of operation with foreign pharmaceutical and cosmetic companies and supplies raw materials, essential oils, plant extracts</p> <p>? <i>Innovators Spaces</i> will collaborate in a) pilot case studies to add value to Genetic Resource use, and b) capacity building for communities and the private sector in business development vis-?-vis genetic resources, the development of sustainability plans for the harvesting and use of genetic resources value addition and market access for products derived from genetic resources.</p>

UN System and other bilateral / multilateral donors	UN System agencies, such as UNEP, FAO, UNDP, and World Bank, and other bilateral/multilateral donors, such as the European Union, African Development Bank, Arab Bank for Economic Development in Africa, Islamic Development Fund, Kuwait and Saudi Funds, will primarily provide assistance for social and infrastructural sectors and otherwise provide co-financing and direct investment of environment activities under the project framework.
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In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Stakeholder engagement plan

Representatives of these institutions (above) have already consulted and engaged on the Project during the project preparation phase and contributed to discussing their roles and expectations in project implementation. Although the PSC will be the main mechanism that policy-level stakeholders will participate in the Project, various project implementation and coordination mechanisms, including through sub-contracted work as well as co-management committees, communications as well as various co-funding partnerships will enable a strong and broad stakeholder participation, both at governmental as well as non-government levels. It will also be the responsibility of PSC to take into account interests and concerns of stakeholders on all key issues affecting the whole process of project implementation. Importantly, the PSC member institutions will have their institutional counterparts at the district and provincial level that will participate in relevant project activities. At the level of the protected areas, biodiversity management, and genetic resources management, in addition to staff from decentralized services of relevant ministries, local communities will participate in the co-management of pilot activities such as in biodiscovery and bioprospecting to genetic resources with potential for value addition. In addition, it is scheduled to implement a significant number of project-supported activities through sub-contracts that will provide a means to engage government agencies at provincial and county levels, key think tanks, universities and research institutions in the Project. Public - private partnerships have already been established with key institutions associated with the use of genetic resources in The Gambia, such as the Medical Research Council of The Gambia at the London School of Hygiene and Tropical Medicine. More of these partnerships will be explored during project implementation in a bid to encourage greater participation among key stakeholders in the Project.

Project implementation will begin with an inception workshop that will be designed to include wide participation from interested stakeholders. The workshop will be used to provide stakeholders with the latest information on the Project as well as identify and agree on collaboration. Depending on the number of invited stakeholders and budgetary constraints, annual stakeholder consultations will be scheduled as part of the PSC meetings (e.g., as side meetings). Over lifetime of the, any adjustments required to project design, implementation and management will be made in close consultation with the relevant stakeholders, facilitated by the PMU and PSC and to be endorsed by UNEP. A grievance redress mechanism will be established and stakeholders will be informed on where, how and when they can reach out to raise their concerns. The mechanism be actively disclosed and communicated. This is included in stakeholders engagement plan in CEO Endorsement document in Table.

Table 2. Stakeholder engagement plan

Engagement technique	Stakeholders and partners	Purpose of engagement	Timing
Information Centre and Information Boards	? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities	? Establish Information Boards in each Project area community.	Year 1 Q2
Correspondence by phone, email, text, and instant messaging	? Government officials ? NGO?s and conservation Organisations ? Private sector ? National institutional partners	? Distribute project information to government officials, organizations, agencies and companies ? Invite stakeholders to meetings	Continuous
Print media and radio announcements	? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities	? Disseminate project information to large audiences, and illiterate stakeholders ? Inform stakeholders about consultation meetings	Continuous
One-on-one interviews	? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations	? Solicit views and opinions ? Enable stakeholders to speak freely and confidentially about controversial and sensitive issues ? Build personal relations with stakeholders ? Recording of interviews	According to workplan (but at least biannual)
Formal meetings	? Government officials ? NGO?s and conservation Organisations ? Private sector ? National institutional partners	? Present project information to a group of stakeholders ? Allow the group of stakeholders to provide their views and opinions ? Build impersonal relations with high level stakeholders ? Distribute technical documents ? Facilitate meetings using PowerPoint presentations Record discussions, comments/questions raised and responses	According to workplan (but at least biannual)

Public meetings	<ul style="list-style-type: none"> ? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation Organisations ? Private sector ? Local communities ? National institutional partners 	<ul style="list-style-type: none"> ? Present project information to a large audience of stakeholders, and in particular communities ? Allow the group of stakeholders to provide their views and opinions ? Build relationships with neighbouring communities ? Distribute non-technical project information Facilitate meetings using PowerPoint presentations, posters, models, videos and pamphlets or project information documents ? Record discussions, comments/questions raised and responses 	Quarterly
Workshops	<ul style="list-style-type: none"> ? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities ? National institutional partners 	<ul style="list-style-type: none"> ? Present project information to a group of stakeholders Allow the group of stakeholders to provide their views and opinions ? Use participatory exercises to facilitate group discussions, brainstorm issues, analyse information, and develop recommendations and strategies ? Recording of responses 	According to workplan (but at least biannual)
Focus group meetings	<ul style="list-style-type: none"> ? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities 	<ul style="list-style-type: none"> ? Allow a smaller group of between 8 and 15 people to provide their views and opinions of targeted baseline information ? Build relationships with neighbouring communities ? Use a focus group interview guideline to facilitate discussions ? Record responses 	According to workplan
Surveys	<ul style="list-style-type: none"> ? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities 	<ul style="list-style-type: none"> ? Gather opinions and views from individual stakeholders ? Gather baseline data ? Record data ? Develop a baseline database for monitoring impacts 	According to workplan

Grievance redress mechanism	? Neighbouring communities ? Vulnerable Groups ? NGO?s and conservation organisations ? Local communities	Stakeholders will be informed on where, how and when they can reach out to raise their concerns. The mechanism be actively disclosed and communicated.	Continuous
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Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Gender considerations in the access to and use of biological and genetic resources.

Women form a sight majority of the population of The Gambia. Women also constitute the majority of the economically active population working in agriculture in The Gambia. In rural and peri-urban areas, women engaged primarily in food and horticultural production and raising small ruminants and poultry; in the fisheries sector, women are fish off-loaders and fish processors, while in forestry women are engaged in planting seedlings and managing woodlots.

It is important to note that The Gambia has a Gender Inequality Index (GII) value of 0.612, ranking it 148 out of 160 countries in the 2017 index (UNDP, 2018). The majority of women farmers are unskilled agrarian wage earners and are responsible for about 40 percent of the total agricultural production in the country. In The Gambia, women play a crucial role in the use and conservation of genetic resources, mainly due to their dominant role in managing household food resources and consumption as well as their involvement in traditional medicinal practices. The Gambia is committed to the elimination of all forms of gender discrimination as enshrined in the preamble and further emphasized in section 28, subsection (1) and (2) and section 33, subsection 1 of the Gambian constitution which recognizes the equality of all individuals before the law and enjoyment of fundamental freedoms, including equal access and participation of women and men in public office and in political, economic and social life. This commitment has been codified by the ratification of the

Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), in essence, recognizing that women[4]: 1) have the same legal capacity as men in civil matters, 2) have equal rights with regard to the conclusion of contracts and the administration of property, and 3) can benefit from all community and extension services, in particular to increase their technical skills. A fully fledged Women, Children and Social Welfare has been created and is responsible for the promotion of women and gender on the one hand, and gender mainstreaming on the other. The latter would provide the locus for gender mainstreaming in ABS processes in the country.

Notwithstanding the active role played by women in natural resources use and management, these are a range of obstacles that hamper the ability for women to meet their full potential in The Gambia. The levels of literacy are one such challenge. The literacy rates are lower for women in The Gambia, irrespective of whether they are rural or urban[5]. These low literacy rates reduce the potential for compounding gains in basically a socio-economic activity undertaken by those affected. This may partly explain why the significant contribution of women to agriculture does not translate into improved social status, in part because their productive activities are mainly subsistence-based and for home consumption. In addition, women lack access to and control and ownership of productive resources (farm inputs, implements, land, and capital).

These constraints affect food self-sufficiency and food security and constrain the ability of women to move from subsistence to commercial farming to maximize their income (see Table 3). This reduced productivity and income for women increases their health risks and reduces their ability to engage in other productive ventures. On the positive side, the formulation of the National Gender and Women Empowerment Policy 2010-2020 encourages the participation of women in the management of environmental resources. This represents a shift as a result of the introduction of environmental management strategies that recognize the role of women in the sustainable management of natural resources. Some of the gender differentiated attributes of participation in biological and genetic resources management, access to benefits from the use or commercialization of genetic resources, and free, prior and informed consent on the exploitation of genetic resources are summarized in Table below.

Table 3 Gender differentiated attributes of participation in biological and genetic resources management, access to benefits from the use or commercialization of genetic resources, and prior and informed consent on the exploitation of genetic resources

Key areas	Level of participation	The current situation	Impacts	Reasons for the current situation	Possible response
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Control over crop genetic resources (including seeds)	Male: Low Female: High	Rural women's key role as food providers and food producers links them directly to the management of genetic resources for food and agriculture and has given them a unique knowledge and decision-making role about local species, ecosystems and use acquired over centuries of practical experience.	Genetic resources are important to humans because they provide a pool of genetic diversity that has commercial value and promotes food security. If the main food producers are not being empowered to conserve and control the pool of genetic diversity in current use, opportunities may be missed for safeguarding these resources for posterity	The country (as is the case with most other countries in the sub-region) is increasingly relying on imported high-yielding species of food crops to improve production	Support a systematic and organized search for useful products derived from bioresources including plants, microorganisms, animals, etc., that can be developed further for commercialization and overall benefits of the society (bioprospecting).
Control over animal genetic resources	Male: High Female: Low	Women in Gambia tend to keep fewer livestock than men. While men's livestock tends to be heavier high earning ruminants, kept in large herds, women keep fewer ruminants and local poultry on free range around the homes	Lack of attention to the differential roles of men and women in animal genetic resource management is a serious shortcoming, as ignoring this angle will negatively affect projects aimed at the conservation and sustainable use of animal genetic	The country (as is the case with most other countries in the sub-region) is increasingly relying on imported high-yielding species of food crops to improve production	Support for women to diversify the genetic stock of the animals kept at home, even at small scale

<p>Preservation of traditional knowledge</p>	<p>Male: High Female: High</p>	<p>As the responsibilities of rural women mainly lie in providing daily subsistence for their families, they possess a strong traditional ecological knowledge, and interest in environmental protection and management, often suppressed in male dominated environments.</p>	<p>Women's traditional knowledge is readily integrated in the development of natural products, vital in product development, yet is not officially acknowledged by the employers and national legislation.</p>	<p>While women's traditional knowledge is rich, they generally lack avenues in which this knowledge can be expressed in support of decision-making</p>	<p>Women must fully participate in the decision-making process.</p>
<p>Forest and ecosystem management</p>	<p>Male: High Female: Low</p>	<p>Men tend to be leaders and make a major decision on ecosystem management and direction to take in conservation, on the other hand, women are mainly bystanders when it comes to decision making.</p>	<p>The impact of these is found to be low participation of women as well as low economic gain for the female folks</p>	<p>Gambian societies in general, (and rural Gambia in particular) are patriarchal; women as tend to be followers rather than leaders more so in the natural resource management</p>	<p>There is a high need to sensitize as well as integrate the women folk into the resources management thus reduce the culture of by standing</p>

Decision-making on natural and biological and genetic resources management	Male: High Female: Low	In the patriarchal Gambia societies, most of the decision-making on natural and biological/genetic resources management lies with the men. The contribution of women's voices and views tends to be minimal or poorly represented in management outcomes	The perspectives on natural and biological or genetic resources management are limited (leaving out the voices of the population that is most active in shaping the outcomes of natural and biological/genetic resources management)	The societies in The Gambia in general, (and rural Gambia in particular) are patriarchal [same as above]	Women must fully participate in the decision-making process
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This project recognizes that women play a critical role in managing natural resources and are also partners with men in being keepers of traditional knowledge in The Gambia. While, women and men possess different knowledge(s) and transmit it in various ways due to their respective roles and responsibilities in the private and public spheres, women both historically and currently are primarily responsible for food preparation and distribution and for ensuring the short and long-term health of the family and community. Gambian women have a greater knowledge of the flora and fauna surrounding them and play very important roles in biodiversity conservation sectors, for example, for daily livelihood, women play significant role in preserving and maintaining the generic diversity of plant species as result of selection preference based on food habits, food culture, taste, nutrition, and the health benefits of different species. However, it has frequently been considered a sector dominated by men, making it difficult for women's participation on access to genetic resources and the fair and equitable of benefits arising. Women (especially rural women) have a strong connection with the natural environment and with one another because women, since they're in charge of collection water, as well as food, medicinal plant, and fuel for their family. Thus, women immediately perform a significant part in the protection of the forest that will be quite critical to the achievement of the preservation plan in addition to it using forest resources. The cultural and culinary practices of indigenous and smallholder farmers play a significant role in preserving and maintaining the generic diversity of plant species as result of selection preferences based on food habits, food culture, taste, nutrition, and the health benefits of different species.

Action plan to ensure equitable access to participation and benefits

The project recognizes four main considerations for ensuring gender equality. These include: (i) Ensuring women's representation and participation in natural resources management sectors; (ii) Creating enabling conditions for women's participation; (iii) Enhancing women's capacity to participate in decision-making processes; and (iv) Maintaining gender disaggregated records to enable monitoring of policies and projects to ensure women's inclusion. The project will therefore ensure that activities around community codes, genetic resources registers, Prior Informed Consent (PIC), associated TK, communication and awareness creation, as well as ABS negotiations make a special effort to reach out to and enable the equal participation of men, women and youth. Attention will be

given to gender issues to ensure that roles and responsibilities between women and men on ABS are clearly spelled out and agreed upon. Gender mainstreaming in ABS implementation will take into account the international and national political, legal and institutional framework. The project has therefore been designed in conformity with the GEF gender policy which requires projects to move from a gender-neutral approach to one that promotes targeted measures to reduce gender inequality and empower women where appropriate. Since 2014, the GEF has implemented its Gender Equality Action Plan which defines actions to be taken to ensure that gender equality is taken into account in the project cycle, including in knowledge, results-based management and capacity building. Gender issues will therefore be addressed holistically throughout the project cycle, and promote knowledge sharing that ensures full access to data and information by stakeholders in all gender categories.

The intent of this Gender Analysis and Mainstreaming Action Plan is to enhance the role of women in defining policies, regulations and administrative systems for access and benefit sharing in the country. It will also provide voice for women in the local decision-making process related to conservation, sustainable resource use and distribution of benefits and other local level activities. The indicative activities for the output include (see Table 4 for details on strategic objectives and activities):

- Implementation of a gender assessment and mainstreaming action plan so that: (i) a gender and socially inclusive perspective is applied to every set of activities; (ii) awareness on gender and social roles in ABS informs resulting policies, legislation and practices and ensures equitable distribution of benefits; and (iii) information is collected and shared across gender and social divides.
- Training of staff on application of gender mainstreaming in project communication and project activities and the conduct of awareness and outreach activities will enhance the role of women in local decision-making processes, particularly in relation to use of genetic resources and associated traditional knowledge activities;
- Participation in national workshops and meetings (via events organized by the national and provincial networks) to establish and facilitate administrative and permitting procedures for ABS in the country;
- Review and regular update of Monitoring and Evaluation (M&E) plan, including results framework baselines, Theory of Change to subsequently adopt these findings to implement all aspects of the project; and
- Conduct mid-term (if necessary) and terminal evaluation in line with UNEP/GEF requirements and incorporate and adapt recommendations of MTR to revised project plans and monitor their implementation, and terminal evaluation to assess progress in meeting planned project objectives.

Table 4. Strategic issues, objectives and activities to achieve gender equality in the project implementation.

Strategic issue	Strategic objective	Expected result	Activities
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<p>1. Weak & Limited Institutional and Human Resource Capacities for gender mainstreaming in the biodiversity and genetic resources sectors</p>	<p>1: Enhance capacity-building and knowledge management in access to and use of the environment and natural resources</p>	<p>1.1 Increased number of institutions in the public and private sectors at the national and country levels that effectively mainstream gender and women's and youth's empowerment in their policies, development plans and corresponding strategies to promote gender equality and equity in the management and use of biodiversity and genetic resources.</p> <p>1.2 Increased number of staff knowledgeable and skilled the use of frameworks/tools for gender mainstreaming and women's empowerment</p>	<p>i. Conduct gender analysis and advocate for and support incorporation of gender mainstreaming targets in Laws and policies that are under review.</p> <p>ii. Develop a gender mainstreaming toolkit for effective gender mainstreaming in respect of the use of biodiversity and genetic resources.</p> <p>iii. Undertake training and capacity needs assessments among gender focal points and planners in line ministries, various authorities and in all counties and develop appropriate training programmes.</p> <p>iv. Develop and implement a gender mainstreaming capacity building program at national and sub national levels in collaboration with strategic partners</p> <p>v. Strengthen the capacity of DPWM and MECCNAR to mainstream gender in environmental conservation and sustainable development programmes and projects at the national, district, ward, and institutional levels.</p> <p>vii. Strengthen the capacities of county structures to mainstream gender in use of biodiversity and genetic resources.</p>
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<p>2. Knowledge gap on linking the environment, gender equality and sustainable development, and gender mainstreaming in natural resources management and poverty reduction programmes</p>	<p>2. Enhance gender responsiveness in environmental conservation, management of natural resources and poverty reduction programmes.</p>	<p>2:1 Increased number of women and men equitably accessing the environment and natural resources and benefits thereof at the national and sub-national levels across various development sectors.</p> <p>2.2. Gender mainstreamed in all poverty eradication programmes at national and county levels.</p>	<p>i. Conduct public education, sensitization and training on the causal link between gender, the environment and poverty reduction.</p> <p>ii. Promote gender equality and mainstream use of biodiversity and genetic resources issues in existing economic empowerment programmes through sensitization and training.</p> <p>iii. Empower communities and civil society organizations to demand equality and equity in genetic resource exploitation and use (lobby to legalize and promote free prior informed consent (FPIC)).</p> <p>v. Develop in a participatory and inclusive manner guidelines and a toolkit for effective PIC and empower the public, women in particular, to demand for fairness and equality.</p>
<p>3. Insufficient gender responsive and gender disaggregated data and effective use of what is available.</p>	<p>3. Strengthen policy analysis and gender-responsive research, data management and monitoring and evaluation systems</p>	<p>3.1 Credible sex/gender disaggregated data available and used by the public and private sectors, civil society organizations and academic institutions for policy, decision-making, planning and programming at all levels and across sectors.</p> <p>3.2 Increased number of donors and development organizations funding gender responsive research and dissemination of the same.</p>	<p>i. Develop and enhance internal monitoring and evaluation systems at the DPWM and promote its use to track gender mainstreaming with regard to the environment and natural resources.</p> <p>ii. Build the capacity of county officers and community-based organizations working on gender responsive monitoring and evaluation to track gender equality in the use of biodiversity and genetic resources.</p> <p>iv. Initiate and support policy research on gender, environment and poverty reduction and building a sex/gender disaggregated data bank at the MECCNAR level.</p> <p>vii. Conduct a mid-term and final (at the end of 4 years) evaluation of the implementation of the gender strategy.</p>

4. Limited and ineffective partnerships and coordination for gender mainstreaming in development sectors in the public, private and CSOs.	4: Promote partnerships, linkages and sharing of best practices on gender mainstreaming in the management and use of biodiversity and genetic resources nationally.	Outcome 4: Partnerships and linkages established and functioning to support gender-responsive access to and use of the environment and natural resources at the national and subnational levels	i. Identify and develop partnerships with key project stakeholders and the private sector for training, capacity-building, and research activities that are responsive to gender dimensions of use of biodiversity and genetic resources; iii. Launch and support a community of practice on gender mainstreaming with regard to the environment and natural resources and promote the sharing of best lessons on gender, climate change and the green economy.
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[1] GBOS 2017. Integrated household survey - 2015/16. Volume I - Statistical Abstract. Gambian Bureau of Statistics (GBOS). Banjul, Gambia.

[2] Gender Inequality Index ? Human Development Reports-UNDP

http://hdr.undp.org/sites/default/files/2020_statistical_annex_table_5.pdf

[3] Extract from UN Women Global Gender Equality Constitutional Database ? Category: Equality and Non-Discrimination.

<https://constitutions.unwomen.org/en/countries/africa/gambia?provisioncategory=b21e8a4f9df246429cf4e8746437e5ac>

[4] Convention on the Elimination of All Forms of Discrimination against Women - Concluding comments: Gambia. CEDAW/C/GMB/CO/1-3. United Nations Organization. New York, USA.
<https://www.un.org/womenwatch/daw/cedaw/cedaw33/conclude/gambia/0545030E.pdf>

[5] GBOS 2017. Integrated household survey - 2015/16. Volume I - Statistical Abstract. Gambian Bureau of Statistics (GBOS). Banjul, Gambia.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The private sector will work as partners in bioprospecting and biodiscovery initiatives. These initiatives have been organized around pilots that will be supported by the project. These pilots include the following:

Pilot 1 and 2: Medical Research Council Unit, The Gambia (MRC) ? PAMGEN Project

Title 1: Genetic interactions between human populations and malaria parasites in different environmental settings across Africa.

Background: The driving question for this project is how environmental variations (*Plasmodium* spp and Anopheline spp, climate and human populations) across sub-Saharan Africa have shaped the diversity and interactions between red blood cell glycoprotein receptors, the malaria parasite and disease phenotypes. Malaria infection can be asymptomatic or result in either uncomplicated (an undifferentiated febrile illness), or severe disease (i.e., cerebral malaria, severe anemia). However, some individuals and populations are "resistant" to these clinical forms because of immunity or heritable traits including erythrocyte polymorphisms that modulate cell invasion and parasite development. From current knowledge, *Plasmodium falciparum* binds and invades human RBCs using two described families of adhesins; the Duffy binding ligands (DBL; Erythrocyte binding antigens, EBA-175, 140, 181, 165 and EBL-1) and Reticulocyte binding like protein homologues (RBLs; RH-1, 2a, 2b, 4 and one truncated version, RH5). We had previously shown that *P. falciparum* DBLs and other invasion ligands are under diversifying selection in different African populations. Meanwhile, recent studies have identified a large array of structural polymorphisms on their human receptors, the glycoproteins, describing population-specific association with protection against severe malaria. We hypothesize that population-specific interactions between parasite-ligand and host- receptor variants influence the prevalence and clinical outcome (uncomplicated or severe) of malaria infection across Sub-Saharan Africa (SSA). We believe that environmental variance has impacted on the co-evolution between humans and the malaria parasites across SSA, accounting for the heterogeneity in malaria disease.

Pilot description: This research involves sequencing mosquito samples from The Gambia at the Wellcome Trust Sanger Institute in United Kingdom. In the project, MRC is conducting parasite sampling and will collect at least 100 specimens per year of local malaria vector species using Centers for Disease Control (CDC) light traps and indoor resting catches, at the peak of the transmission season. Then, 1 vial (50uL) of each DNA sample from malaria infected individuals will be sent to the Wellcome Trust Sanger institute (WTSI) for parasite genome sequencing.

Synopsis: This research is driven by the hypothesis that population-specific interactions between parasite-ligand and host- receptor variants influence the prevalence and clinical outcome (uncomplicated or severe) of malaria infection across Sub-Saharan Africa. We believe that environmental variance has impacted on the co-evolution between humans and the malaria parasites across Sub-Saharan Africa, accounting for the heterogeneity in malaria disease. The driving question for this project is how environmental variations (*Plasmodium* spp and Anopheline spp, climate and human populations) across sub-Saharan Africa have shaped the diversity and interactions between red blood cell glycoprotein receptors, the malaria parasite and disease phenotypes. The research will strive to achieve three objectives: (1) Develop a comprehensive profile of human glycoprotein receptor diversity across a gradient of malaria transmission in sub-Saharan Africa; (2) Determine the correlation between human receptors and diversity of parasite ligands; and (3) Collect background data on malaria vector diversity.

Title 2: Influence of environmental variations (*Plasmodium* spp and Anopheline spp, climate and human populations) on the diversity and interactions between red blood cell glycoprotein receptors, the malaria parasite and disease phenotypes across Sub-Saharan Africa.

Activities: Although this proposal focuses on genetic interactions between the malaria parasite and the human host, it needs to be borne in mind that malaria parasites also undergo evolutionary selection during their development within the mosquito vector, and that genetic interactions between the parasite and the vector could affect the process of transmission between human hosts. While it is beyond the scope of the present proposal to examine parasite-vector or human-vector interactions in any detail, we wish to ensure that the data generated by this project are of maximal long-term value for malaria research, and therefore we consider it important to collect background data on malaria vector diversity at the same time as sampling the human and parasite populations. We propose to achieve this through integration with the *Anopheles gambiae* 1000 Genomes Project (Ag1000g) which is already sampling at multiple locations across Africa (Miles et al 2017, www.malariagen.net/projects/ag1000g) with plans to extend to other major African vector species within the timeframe of this proposal. One factor which is common across PAMGEN sites is the use of long-lasting insecticidal nets, and a key question is how these impacts on the local malaria vector populations. In the locations where we are conducting parasite sampling, we will also collect at least 100 specimens per year of local malaria vector species using CDC light traps and indoor resting catches, at the peak of the transmission season. Mosquito DNA will be extracted locally prior to sequencing at the Sanger Institute, and the analytical pipelines already established for Ag1000G will be utilized for genotype calling and haplotype phasing. We will perform principal component analysis and model-based methods to determine population structure, and we will then calculate SNP allele frequencies and metrics of population size and recent evolutionary selection within local sub-populations. These data will provide an initial picture of the spatial and temporal diversity of vector populations across our study sites, and of major signals of recent selection. They will also provide a foundation for longer-term studies of whether there is clustering of parasite and vector sub-populations, and how variability across vector populations correlates with parasite genetic diversity and malaria transmission. This will be particularly interesting for study sites where both *P. falciparum* and *P. vivax* co-exist.

Pilot 3. University of The Gambia

Title: Bioprospecting for potential antimicrobial agents extracted from Gambian traditional medicinal plants

Pilot description: This pilot will assess the efficacy of plant extracts for use as antimicrobial pesticides against five biofilm bacteria, *Pseudomonas aeruginosa* and *Staphylococcus aureus*, *Salmonella choleraesuis*, *Clostridium difficile*, and *Mycobacterium bovis* (BCG). The goal will be to support the value chain towards the development of the following types of antimicrobial formulations: (i) Liquid; (ii) Spray; and (iii) Towelette.

Activities: (i) Develop the necessary ABS protocols and TK safeguards to set the framework for collaboration between key stakeholders; (ii) Work with local communities to identify plant extract candidates for assessment in the Nyambai Forest Park Complex; (iii) Develop assessment protocols and undertake assessments; and (iv) Report and discuss results of assessments with key stakeholders; establish necessary partnerships where necessary to develop the value chain for positive results within the ABS framework. (v) Undertake market studies on the formulated bio-products to establish acceptability and customer preferences. (vi) Develop a product dossier detailing the attributes of the medicinal products so as to inform the registration process. (vii) Register the developed bio-products with The Gambian registry services as owned by the provider communities where the plant genetic resources originated.

Pilot 4. The University of The Gambia and the Traditional Healers? Association of The Gambia (TRAHASS)

Title: Collaboration with TRAHASS in the biodiscovery and certification of at least 25 plant-based bioactive compounds in The Gambian traditional medicine landscape; and partnerships to support value chain development within ABS frameworks.

Figure 11 The bioprospecting is expected to lead to the discovery, registration and value addition of products in the fields of pharmaceuticals, cosmetics, food processing, etc. (Please see image on page 65 of the CEO Endorsement Request Document)

Background: Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. Traditional healers in these regions are still sought-after. They are affordable and accessible for local communities ? making them a vital part of well-being and the belief systems in these parts of the world. The healers usually use plants and natural elements to treat a wide variety of ailments and diseases. Plant-based remedies, such as those most commonly used in many parts of The Gambia (and Sub-Saharan Africa in general), are effective at treating a number of symptoms and ailments. While they may not cure diseases and heal all chronic conditions, herbal remedies can ease the symptoms of

these ailments. They can treat coughs, colds, flu, fevers and sore throats using plants such as African wormwood. Some remedies can support the entire immune system, making them ideal for supplementary medication. In The Gambia, the Traditional Healers' Association of The Gambia is the main body that brings together practitioners of traditional medicine within one umbrella.

Pilot description: This pilot will collaborate with the TRAHASS to undertake biodiscovery of the resources of the Nyambai Forest Park Complex. The goal will be to identifying, categorize and certify bioactive compounds for potential use in the pharmaceutical industry, food processing, cosmetics, etc. A number of smallscale operators (participating in the transformation of local produce into finished products) were identified during the baseline study. These include Yaxare Herbal Infusions; Koz Jameel; Jain's Cosmetics; and Innovators' Spaces. These local actors and small-scale businesses will serve as test beds for value addition in bioproducts and genetic resources developed within the project.

Activities: (i) Develop the necessary ABS protocols and TK safeguards to set the framework for collaboration between TRAHASS and other third party stakeholders; (ii) Work with TRAHASS to identify plant extract candidates for assessment; (iii) Develop assessment protocols and undertake assessments; and (iv) Report and discuss results of assessments with key stakeholders; establish necessary partnerships where necessary to develop the value chain for positive results within the ABS framework. (v) Undertake market studies on the formulated bio-products to establish acceptability and customer preferences. (vi) Develop a product dossier detailing the attributes of the medicinal products so as to inform the registration process. (vii) Register the developed bio-products with The Gambian registry services as owned by the provider communities where the plant genetic resources originated.

Pilot 5: National Agricultural Research Institute (NARI)

Pilot 5: Evaluating botanicals of indigenous plant Neem (*Azardichtica indica*) (Neem extracts) for the control of Fall Army Worms FAW (*Spodoptera frugiperda*) on pearl millet in The Gambia.

Background: The utilization of inorganic pesticides is the main method of control practiced by farmers in The Gambia. Chemical pesticides are quick in action but highly harmful to the environment and consumers. Alternative control methods such as use of Botanical pesticides are naturally occurring agricultural pest management agents which are based on plant extracts. In modern times these have been used as alternatives to synthetic chemicals in organic pest management. The practice of using plant materials against field and storage pests however has a long history in many indigenous and traditional farming communities across the world. Botanical extract has shown significant results against pests affecting crops. Previous research results have showed significant reduction of pest damage in crops treated with Neem extracts. Therefore, the objective of this study is to evaluate the efficacy of the Neem extracts that is (Neem leaves, Neem stem bark, and Neem seeds) in the management of the fall army worm in pearl millet production.

Pilot description: The main objective of this study is to introduce pest control methods that will help to increase production and productivity with less negative impact on the environment and the consumers. Specific objectives include: (i) Determine the effect of Neem extracts on the incidence of Fall Army Worms (FAW); and (ii) Evaluate the efficacy of Neem on the damage of fall army worm on pearl millet. The experiment will be conducted at four locations i.e. NARI horticultural unit West Coast Region (WCR), Kiang Kwinella in Lower River Region (LRR), Mamutfana Mix farming Centre in Central River Region (CRR) and Mankamang kunda in Upper River Region (URR) .The sites are

selected based on the availability of water in all year around and the experiment will be conducted in both season (wet and dry).

Private sector consulted in The Gambia

During the project preparation phase, many local initiatives associated with the use and transformation of genetic resources were contacted. Of this lot, four were retained for direct engagement with the current project. These include: (i) *Yaxare Herbal Infusions* is a Gambian small-holder firm which focuses on processing local and indigenous herbs and organic ingredients into consumable usable products for the national market. Its products include a range of herbal infusions and teas from hibiscus, moringa, mint, *Lippia multiflora* (locally referred to as mbor mbor), *Combretum micranthum* (locally called kinkiliba), lemongrass, as well as several wild and domestic spice and herb blends. (ii) *Koz Jameel* is a women-run and women-focused value addition enterprise, producing natural oils, soaps, lip balms, skin and hair products that are extracted from raw Gambian natural products such as coconuts, avocado, moringa, neem, etc. (iii) *Jain's Cosmetics* is a women-run small-scale initiative which processes hand-made detergents and cosmetic products from natural herbs and vegetables like moringa leaf, bay leaves, neem, and carrots. (iv) *Innovators spaces* is a woman lead private consultancy and business support services firm. We provide entrepreneurship, quality management and financial literacy services that support both potential migrants, startups, farmers and existing businesses formalize their businesses from ideation to operationalization and grow.

1. Yaxare Herbal Infusions

Yaxare Herbal Infusions is a woman owned herbal tea processing and packaging of different types of natural tea flavors enterprise registered in 2018 in The Gambia. The enterprise collaborates with women farmers in the production and processing of herbal tea bags.

Vision: Be the lead producer and distributor brand of herbal infusions in the West African sub-region by 2025, through excellent product offering and efficient distribution channels.

Mission: Processes natural herbs into branded tea bags that will be appreciated by both our existing and potential customers.

Product line: is the Hibiscus (Wonjo) Tea, Moringa Tea, ?Female? Tea, Mint Tea, Mbor Mbor Tea, Kinkiliba Tea, Lemongrass Tea.

Business name & address: Yaxare Herbal Infusions; Bakau New Town

Mobile: +220 3590202

Facebook: yaxare herbal tea; **Twitter:** yaxare herbal tea; **TikTok:** yaxare

Website: www.yaxareherbs.com



2. Koz Jameel

Koz Jameel is a women-focused, value addition enterprise, producing natural oils, soaps, lip balms, skin and hair products that are extracted from raw Gambian natural products such as Coconuts, Avocado, Moringa, Neem, etc.

Mission: Our mission is to empower our customers especially women to feel comfortable and free through the use of our natural products while empowering female farmers and entrepreneurs in villages by providing market access for their produces through our value-added processing and product

marketing channel with in Gambia and abroad using technology and e-commerce as a tool to potentially break the export glass ceiling of locally produced value added products.

Vision: Our vision is become Gambia's first environmentally conscious natural body care processing brand and global distributor of natural body care products that empowers youths and women in every aspect of its value chain from the farmers to the retail store /e-commerce.

Email: sabelkodou@gmail.com

Mobile / WhatsApp: +220 3193438

Address: Kanifing ? Kanifing Municipal Council (KMC)

(Please see image on page 69 in the CEO Endorsement Request Document)

3. Jain's Cosmetics

Jain's Cosmetics was established in April 2021 after completing an accelerator program with Innovators Spaces. We are into processing hand-made detergents and cosmetic products from natural herbs and vegetables like Moringa leaf, Bay leaves, Neem, and Carrots. Our main clients are women. All other raw materials are sourced from the Gambia, with the exception of the bottles used for packaging the finished products which are sourced from Senegal.

Mission: To make our natural products reach every household in The Gambia and train some youths and women on the processing skills for natural products.

Vision: To process quality sanitary products made from natural herbs, to be among the best detergent and cosmetic producers in West Africa.

Product line: Bleach, hand wash, hand sanitizer, bay leaf soap, and cosmetic products.

Email: jainabajallow004@gmail.com

Mobile / WhatsApp: 5093118

Address: Jabang Highway

•(Please see image in pg 70 of the CEO Endorsement Request Document)

4. Innovators Spaces and The Banana Farm

Innovators spaces is a woman lead private consultancy and business support services firm. We provide entrepreneurship, quality management and financial literacy services that support both potential migrants, startups, farmers and existing businesses formalize their businesses from ideation to operationalization and grow. For more than two years we are supporting hundreds of businesses and partnered with renowned international and governmental institutions seeking to create sustainable decent employment through entrepreneurship.

Mission Statement to provide business capacity building programs that promote the creation of sustainable Medium, Small, and Micro Enterprises (MSMEs), provide support structure and co-working spaces to help entrepreneurs with ideas build innovative and competitive businesses.

Vision to become a center for excellence in the provision of business development services in The Gambia, to prove to businesses that success can be achieved at home without blocks, and to ensure that this principle spreads around the MSME industry. Our vision complements the millennium development goals.

The Service we conduct and facilitate entrepreneurship trainings, business coaching, and mentoring services, provide influential experts, who are willing to give their time, and advice to build and nurture businesses.

Our Growth Expectations / Strategy at Innovators Spaces we forecast to reach 1000 aspiring entrepreneurs train them to be investment ready by December 2023 and support them to have access to finance their growth strategy.

Website on this link <https://innovatorsspaces.com/>

Email: Innovators.spaces@gmail.com

Our social media handles

<https://www.facebook.com/inoovatorsspaces>

<https://twitter.com/Innovatorspaces>

<https://www.instagram.com/>

(Please see image in page 71 of the CEO Endorsement Request Document)

The introduction to the official text of the Nagoya Protocol on ABS includes the terms of 'sustainable development' and 'human wellbeing'. By including these terms in the introductory section of the NP, the Protocol sets the direction of travel towards what should be the ideal outcome of the process of formulation, and the effective implementation at the national level of the access, as well as benefit sharing mechanisms. To achieve sustainable development and human wellbeing, the prerequisite is the promotion of the use of GRs and associated TK under an enabling ABS regulatory environment that opens opportunities for the fair and equitable benefit sharing arising from the utilization of GRs and associated TK. This link between ABS and sustainable development, which is included in the introduction of the Protocol, is effectively deployed in the text of the protocol: For example, in the objective (article 1) that stresses the link between the fair and equitable benefit sharing and their contribution to conservation and sustainable use of its components; and article 9 that calls on users and providers to direct benefits arising from the utilisation of GRs towards conservation and sustainable use of its components.

While the ambition to use the ABS formulae in pursuit of domestic sustainable development outcomes as set out in the NP is commendable, it can be expected that private sector engagement in ABS will play a critical role in the process. The role of the private sector cannot just be limited to enabling ABS to deliver the benefits that can be re-invested into conservation and sustainable use of GR-, a development outcome that can be viewed as 'linked to SDGs 14 and 15' as far as the marine, plants, animals etc. GRs are concerned. There is in fact a growing body of evidence about the contribution of ABS to a wide range of SDGs and specific targets - all of them facilitated by a significant engagement/implication of the private sector. For example, the United Nations Development

Programme (UNDP) published a report in 2018 ahead of the 14th meeting of the conference of the parties to the CBD, and the 3rd meeting of the parties to the Nagoya Protocol in Sharm El-Sheikh. According to this report, genetic resources are not only SDGs accelerators, contributing to poverty alleviation (SDG 1), food security (SDG 2), good health and well-being (SDG 3), gender equality (SDG 5), innovation (SDG 9), and life on land (SDG 15), but also the biodiscovery cases covered in this report also provide examples of national and international partnerships (SDG 17) (UNDP, 2018) where the private sector play an important role.. More recently in March 2021, a compendium with detailed analysis of eleven cases of ABS operations examined how the ABS regulatory context was used to establish workable partnerships connected to these cases across different regions in the world. This compendium analyzed the actors involved, the resources that were accessed, and the benefits (monetary and non-monetary) that the cases generated, as well as the implications of these benefits with specific SDGs and targets. The compendium was produced within the framework of the project ?ABS in practice ? Benefits for increasing global funds for the conservation of biodiversity?, commissioned by the German Federal Agency for Nature Conservation with funds from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. In a variety of ways, private sector engagement in many of the cases examined in the compendium was very instrumental in the generation of the benefits and the private sector was engaged through typical ABS cases viewed through the lenses of utilization of GRs as defined by the NP and BioTrade.

To exploit the rich and largely, commercially and economically untapped biodiversity of the forest ecosystems of The Gambia e.g., from the Nyambai Forest Park complex, there is need to engage the private sector in the identification and piloting of commercially rewarding biodiversity-based businesses that offer the platform for substantive investment and the creation of workable public-private partnerships. The GEF investment sought in this proposal will be used to address the barriers that the project identified as currently obstructing the country?s ability to effectively harness the economic potentials of its rich and diverse pool of biological and GRs in the interest of domestic socio-economic development.

In the process of lifting the barriers identified, stakeholders can apply some of the key lessons emerging from the approaches explored by UNEP, IUCN and other partners in harnessing the implications of the private sector in the mobilization of the investment needed for the development of socio-economic opportunities under the Great Green Wall of the Sahara and Sahel Initiative (GGWI). Indeed, there is a strong parallel to be drawn between the current project on ABS implementation in The Gambia and integration into planned co-management in the NFPc and the Great Green Wall Initiative of the Sahara and Sahel. While the ultimate goals of each of them can be paraphrased as addressing the conservation and sustainable management of biodiversity, landscapes and ecosystems and contribution to domestic socio-economic transformation and enhancement of human wellbeing, the realization of these goals will be facilitated by the identification and promotion of economic development opportunities from these ecosystems and landscapes, an approach that will benefit greatly from the participation of the private sector. During an e-Conference organized from 23-25 March 2021, UNEP and the IUCN brought together several actors involved in the Great Green Wall Initiative (GGWI) to address knowledge and capacity gaps on private sector investment and to create opportunities for public-private-partnerships for investment in sustainable land management. The aim was to connect diverse groups of actors to share experiences, promote innovation, and stimulate investment in the Great Green Wall. The conference also explored ways to strengthen the participation of women, youth and marginalized groups in entrepreneurial activities. The e-conference was able to

estimate the scope of the investment required for land restoration, and the investment required to achieve the goals of the GGW. Furthermore, the e-conference highlighted the need for innovations from both the private and public sector based on partnerships between the private and public investors as a key incentive for private sector engagement and investment that will ensure the up-scaling of the actions that can help deliver the goals of the GGWI. Good information, awareness-raising, and implementation of relevant pilots among others, are identified as the requirements to overcoming the barriers to investment to GGWI. Furthermore, the government, as well as development partners, are called to support and promote innovative investments (e.g., PPP or blended financing) in the GGWI to address long term investment needs.

With the GEF investment mobilised through this project, the government of The Gambia can indeed use the pilot cases, e.g., the valuable resources identified in the NFPc, for example, their food, medicinal or cosmetic uses, to develop commercially profitable value chains, by bringing in the private sector based on win-win partnerships. It should be stressed that the innovative financing that can be envisaged by the Government of The Gambia including the PPP and blended financing (among others) will only be effective if stakeholders have a good knowledge of the opportunities to which the financing is aimed. This means that good market research, for example of the commercial potentials associated with the utilisation of the selected pilot cases of NFPc GRs under the new national ABS governance framework. It also means an investment in domestic valorization and transformation capabilities, as will be conceived in the valorization strategy.

[1] Ibid: DPWM (2021a).

[2] Ibid: DPWM (2021a).

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

The risk analysis below assigns the level of potential risks to the project, and mitigation measures incorporate into the project design and implementation to address these risks. These risks and mitigation measures would be further assessed and monitored through project implementation. Although no significant environmental or social impacts were identified for the project, implementing agencies will monitor and ensure that the principles of prior and informed participation and consent are obtained from indigenous communities on every aspect of the project to ensure that traditional rights and community access and tenure related to natural resources and IP rights are not violated. Overall, the impact of the project is expected to be overwhelmingly positive from an environmental and social perspective. It is expected to contribute positively to the conservation of biodiversity and maintenance of ecological stability by providing financial incentives for local communities and assurances that they will receive a fair and equitable distribution of revenues from genetic resource development ventures. The improved legal framework for ABS will enable indigenous and local communities to have increased potential to benefit from bio-prospecting activities, including improved prospects for the preservation of their traditional knowledge. The PIC and MAT processes are also expected to provide opportunities for alleviating potential environmental and social risks that may be associated with the ABS agreements. The risk matrix for the project has been updated from the PIF and is provided below:

Table 11 Outline of risks, their rating and mitigation measures to be used in addressing them.

Risk	Rating	Mitigation measures
ABS is not a priority in the political agenda of national and provincial authorities	Low	To mitigate this risk, the project will highlight the potential benefits of the Nagoya Protocol and implementing ABS (including monetary and non-monetary benefits derived from the use of genetic resources) as a strategy to foster the development of science and technology in The Gambia. This will include the development of activities to raise awareness among decision-makers about ABS, the CBD, and the Nagoya Protocol. Additionally, the project will provide training related to ABS (e.g., processing access applications, negotiating ABS agreements, and monitoring and tracking to ensure compliance) and facilitate the development of tools (e.g., an integrated national information system on genetic resources and traditional knowledge, protocols for the conservation/management of genetic resources promoted in this project) that will strengthen their roles while maintaining their commitment to ABS and the project. Additionally, national and provincial authorities will actively participate in the design and implementation of the project, will serve as members of the project's Steering Committee, and will be invited to participate in the project's Scientific Advisory Board. The project will maintain continuous and close communication with all national and provincial authorities associated with biodiversity conservation and genetic resources in order to maintain a fluid dialogue.
Local communities, indigenous people and stakeholders are not fully committed	Medium	The project will coordinate efforts to ensure that the awareness-raising activities in ABS integrate key stakeholders. The strengthening and the adequacy of ABS-related norms (e.g., PIC, MAT, sustainable biodiversity, and protection of traditional knowledge) will further contribute to the involvement of all stakeholders. Additionally, the project will develop a stakeholder participation plan to ensure that local communities, indigenous people, and other stakeholders participate in all stages of the project (design, planning, implementation, and evaluation) in order to promote their commitment to the project and ABS.

Changes in local, provincial or national government authorities might lead to a change in ABS policies	Low	To minimize this risk, the project will to keep the various members of the existing and future local, provincial, or national governments up-to-date on the progress, outcomes, and outputs to maintain their interest in the project and emphasize its social and environmental benefits. In addition, the project will develop awareness-raising and information dissemination activities to enhance local knowledge about ABS and ensure the participation of all institutions and organizations identified as key stakeholders, including local, provincial, and national government authorities.
Possible shifts in government priorities and policy changes could hinder the establishment of an ABS regime and/or constrain the development of public-private partnerships on biodiversity and genetic resources.	Medium	The project will strengthen political commitment and support by raising the awareness of decision makers, institutions, and communities on the capacity of biodiversity and genetic resources to provide economic benefits to resource owners / stewards and to commercial partners, and to contribute to science and national research capacities generally. The project also will strengthen the capacity and understanding of decision makers, institutions, and communities on the potential benefits of an ABS regime through targeted training modules and access to best practice tools and ABS success stories. The benefits and costs of ABS implementation, based on case studies from other countries, will be highlighted during the project inception phase in order to increase support by decision-makers.
Uncontrolled exploitation of forests and other natural ecosystems at field survey sites continues to negatively impact marine and terrestrial ecosystems and their genetic resources.	Medium	By establishing ABS regulations and by building in-country capacity for bioprospecting, the project aims to generate monetary and non-monetary benefits to The Gambia and its communities. These benefits (e.g., increased knowledge of the value of genetic resources, income from locally developed products) are expected to provide incentives for the protection of natural ecosystems (e.g., reefs and forests). The project is thereby expected to reduce the pressure of encroachment and conversion to other destructive purposes. If a genetic resource of interest is found and grown for commercial purposes, the project will make sure that its harvest is sustainable and does not negatively affect ecosystems, based on the know-how and experience of MAF and other project partners.
Limited coordination / communication between sectorial agencies and/or ministries	Medium	The project will support the development of inter-agency collaboration protocols by building on existing structures and initiatives. Under Output 1.2.2, the project will also consider the establishment of a Biodiversity Working Group to discuss and follow up on activities related to biodiversity, including genetic resources. It will also seek to get all sectorial agencies with responsibilities related to biodiversity and genetic resources to be designated as Competent Sector Authorities (CSAs) and to incorporate ABS into their routine responsibilities.

<p>Private companies utilizing and commercializing the cultural heritage of TK holders by patenting traditional remedies from the wild and selling them at a vast profit, allowing little or none of that profit to go back to the country or indigenous and local communities of origin</p>	<p>Low</p>	<p>The Project aims to ensure the fair sharing of benefits throughout targeted value chains. Appropriate agreements will be put in place to prevent private companies from excluding local and indigenous communities from the value chains and to disable the situation, where the TK is commercialized, without any profits going back to the community. Altogether, the project will mainstream, within the plant bioprospecting segment, ABS compliant practices such as obtaining Prior Informed Consent (PIC) from communities in addition to developing a variety of mechanisms for equitable benefit sharing.</p>
<p>Local communities and holders of traditional knowledge do not agree to share information and grant access to their genetic resources.</p>	<p>Medium</p>	<p>A fair and clear process needs to be designed and followed as part of the Community Protocols and the PIC/MAT agreements to gain the trust and long-term partnership of the communities. This will be facilitated by project partners that have experience in community engagement and co-management arrangements, in particular Conservation International and MAF. Additionally, an independent legal expert will be made available to the communities by the project team to provide independent advice and guidance to the communities.</p>
<p>No genetic resources of commercial value are identified</p>	<p>Low</p>	<p>During the project preparation phase, an initial assessment of potential genetic resources of value in the local environment was undertaken. There is evidence already that there are genetic resources of potential value to in the pharmaceutical industry (such as those being used in Gambian traditional medicine to cure a range of ailments). The project is partnering with The Gambian Traditional Healers' Association in identifying these resources. Other genetic resources have been undergoing preliminary investigations by the University of The Gambia and the National Agricultural Research Center. These are all partners in the project implementation with potential roles to further investigations on their on-going efforts. The Medical Research Council (an international research organization with a long history of working with genetic resources in The Gambia) is partnering with the project in this effort.</p>

Climate change impacts	Medium	Climate change is expected to have adverse impacts on ecosystems and communities of The Gambia, in particular through increased droughts, more intense rainfall events leading to erosion and landslides, and rising sea temperatures. These changes may negatively affect project stakeholders and limit their capacity to participate in project activities. Climate change, combined with other factors, is also expected to have negative impacts on biodiversity and genetic resources in The Gambia, which could affect the value and diversity of genetic resources in the future. On the other hand, some species found in The Gambia may prove to be valuable resources due to their climate resilience. In order to mitigate this risk, the project will collaborate closely with the National Directorate for Climate Change and climate change related initiatives implemented in The Gambia, in particular with regard to its commitments under the UNFCCC.
Traditional and cultural considerations	Medium	Traditional and cultural considerations may delay the implementation of the community models if they are not in sync with community values. The project will work with communities that have already been mobilized and have been participants in many ABS engagements. During the project preparation phase, key actors associated with community values (such as traditional rulers, traditional healers, and local common initiative groups) were consulted and actively participated in the design of the project activities. This contributes to reducing traditional and cultural incompatibilities that can potentially arise from the implementation of the project.

Besides the risks identified in this table, owing to the current impact of global environmental changes and the worldwide health emergency, there is need to expand further on three critical risks below. These are the risk of climate change, the risk posed by the Corona Virus (Covid-19), and the potential risk of political instability that may be associated with the upcoming national elections in The Gambia.

The impact of climate change on access to, and the management of genetic resources

Manifestation of climate change in The Gambia: The Climate Change Knowledge Portal (CCKP) is the hub for climate-related information, hosted by the World Bank Group (WBG). It identifies two key aspects of climate change in Gambia: (i) changes in temperature; and (ii) change in precipitation. With regards to temperature, in West Africa (in general), air temperatures have noticeably increased since the 1940's, and in the period 1970 to 2010, temperatures have risen with greater magnitude during the latter 20 years, than the former 20 years. In The Gambia, mean annual temperatures have increased by 1.0°C since 1960, an average rate of 0.21°C per decade. The rate of increase has been most rapid in the months of October, November and December, at 0.32°C per decade. Since the 1950s, routine observation indicates that minimum temperatures across the country have increased steadily at the rate of 0.4 to 0.67°C per decade. With regards to precipitation, linear trends indicate that wet season (July, August and September) rainfall in The Gambia has decreased significantly between 1960 and 2006, at an average rate of 8.8 mm per month per decade. The length of the rainy season has also been decreasing with increasing variability in inter-annual rainfall. There are insufficient daily rainfall observations available from which to determine changes in extremes indices of daily rainfall.

Implications of climate change: Climate change has become a significant concern to many policy makers. Changes in natural and genetic resources due to climate change that can already be observed or that have been projected to occur over the next 50 years include: (i) Changes in the suitability of land for different

types of crops and pasture. (ii) Shifts in ecological zones and resulting impacts on (agro-) biodiversity. (iii) Changes in the health and productivity of forests. (iv) Changes in the distribution, productivity and community composition of marine resources. (v) Changes in the incidence and vectors of different types of pests and diseases (including for human health). (vi) Loss of biodiversity and ecosystem functioning of natural habitats (vii) Changes in the distribution of good quality water for crop, livestock and inland fish production, and (viii) Loss of arable land due to increased aridity and associated salinity, groundwater depletion and the rise in sea level. All of these changes can be expected to modify the environmental services provided by natural and managed ecosystems to rural people, such as the amount of food produced, the availability of water supplies, or the climatic, disease and nutrient regulation functions of ecosystems. Within the context of the current project, the need to recognize the custodians of genetic resources, recognize the need for local involvement in their conservation, develop systems to ensure the equitable access to these resources, and the sharing of derived benefits is vitally important.

Corona virus (Covid-19) risk

The coronavirus also known as COVID-19 has been rapidly spreading globally since December 2019 when it was first discovered in Wuhan, China. It has since been declared a global pandemic by the WHO. The Gambia has not been spared of the global COVID-19 pandemic, both in terms of the suffering from disease and loss of life that this health emergency brought to the world. The Gambia registered its first case on March 17th, 2020, an imported case. As of April 28th 2021, there were a total of 5,882 cases of Covid-19 cases registered in The Gambia, with 5,309 recovered and 174 dead. On Monday May 10th 2021, the Reporting Service on COVID-19 of The Gambian Ministry of Health was reporting a total case load of 5,935. These include 96 active cases, 5,664 recoveries and 175 fatalities.

Since the outbreak, the Government of The Gambia has undertaken a number of measures at different times of the evolution of the disease to deal with its spread and impacts. Among other things, the Government suspended non-essential travels by Government officials, including Ministers, Permanent Secretaries, Managing Directors and Directors of all Ministries, Departments and Agencies. All travelers from hotspot countries were to be isolated for 14 days upon arrival in The Gambia. The border between The Gambia and Senegal was closed on Monday 23rd March 2020 for a period of 21 days but the closure will not affect essential services, such as movement of security personnel, foodstuff, medical services, related items and equipment between the two countries. The Government approved a GMD500 million COVID-19 Emergency Fund. The Government also produced a National COVID-19 Response Plan with an indicative budget of US\$8.8 million to address the situation in the country. The UN System in The Gambia is providing support in all areas of the response including coordination, case management, logistics and safety, epidemiological and laboratory surveillance, risk communication and social mobilization and psychosocial care and support. The UN is also working with the Government to kick-start recovery efforts mainly to safeguard livelihoods and sustainable development progress.

The Gambia has a small, undiversified economy heavily reliant on tourism, trade, remittances and substance agriculture. The country is heavily dependent on imports from abroad to sustain the economy with some of the main imports being fuel and oils, iron and steel, cereals, sugars, vehicles and cement. Imports amount to about 32 percent of GDP compared to 7 percent for exports. Looking at trade over the course of the year, trade is usually heaviest in the periods during Ramadan and Tobaski which take place respectively in late April and late July this year respectively. The closure of land and air spaces will have a significant negative impact on trade. Wholesale and retail trade accounts for about 33 percent of GDP and

a significant negative shock will have an equally negative effect on the country's growth outlook in 2020 and beyond. Indeed, the Minister of Finance and Economic Affairs of The Gambia stated that the economic impact of the COVID-19 outbreak would be a loss of GMD2.5 billion and that the economy will shrink to by 3 percentage points to 3.3 percent from a projected growth rate of 6.3 percent in 2020. This will also have implications on the budget and net domestic borrowing negatively impacting the concessionary fiscal stance the Government had been undertaking in recent years[4].

The Covid-19 situation has the potential of bringing many obstacles regarding contractual obligations, availability of resources, deliverables, health and safety measures, and project delays or cancellations. In the light of this situation, project-related contracts will among other things have to assess their contractual obligations and the impact to back up and validate nonperformance on agreed-on milestones and scope (associated to Covid-19 related delays). To deal with the repercussions of COVID-19, project stakeholders will have to realize a specific approach in order to evaluate the overall progress of their projects and plan the recovery road map. Since the beginning of 2021, the Government of The Gambia has made efforts to procure vaccinations for its populations. While the preventive measures have been urged and implemented, vaccinations have been going on ? improving the potential for the country to have a grasp of the situation if everything goes well.

The risk of future COVID-19 transmission not only affects the project's risk mitigation, but it also poses substantial cost implications. Health and safety protocols for a worker infected with the virus could lead to workplace closures and enhanced cleaning measures, both resulting in major cost implications for institutions associated with the project. Given the high person-to-person infection patterns of COVID-19, sending out project staff to contact and interact with hundreds of vulnerable individuals across communities and geographies poses a serious public health risk to both project staff and to the communities in which they will be working. Moreover, there is a high likelihood of mistrust of outsiders within communities under threat of COVID-19, ensuring that success of continued face-to-face research efforts is not guaranteed.

In this context, the project will identify relevant support to enable the country to cope with the consequences of this pandemic, in particular its implication on pressure on natural resources and different value chains. The project will therefore promote the adoption of an approach where communities in general, and women and youth (who are the majority in rural areas and who are essential in the production and processing of agricultural, forestry and pastoral products) in particular, will be central to the process of creating goods and services and generating wealth. This will ensure the possibility of creating jobs and wealth around specific sectors without forgetting the plants used by rural populations to fight against diseases (e.g. malaria,), through the promotion of the local pharmacopoeia, particularly the cultivation of appropriate medicinal plants. UNEP, as the Implementing Agency of this project, will consider the project in the current dynamic of ?Rebuilding the post-pandemic world, better?. This will be through the Re-examining, retool, accelerating UNEP work on: i) Green Jobs: Towards decent work in a sustainable, low - carbon world (UNEP, ILO, IOE, ITUC, 2008); ii) Global Green New Deal (2009); iii) Green Economy and iv) Sustainable Consumption and Production.

The project will also take the following steps: a) Identify critical stakeholders whose absence could result in unplanned delays; b) Consider the legal and financial implications of the COVID-19 which are directly related to the project and develop a mitigation plan at the outset; c) Communicate any disruptions due to

COVID-19, to all stakeholders, project staff, and UNEP partners; d) Conduct a scenario analysis and consider alternate delivery methods such as virtual or online meetings, radio programs, recorded messages and guidelines, personal protective equipment, or any other measures that will allow the project to be completed on time and on budget, even if some stages are delayed.

This risk will also be mitigated by the central tenet of all ABS initiatives ? that of conservation of genetic diversity, benefits for people for nature and sharing of benefit from genetic resources and traditional knowledge. This directly contributes to the post-2020 global biodiversity framework to provide nature-based solutions to pandemics and other acts of nature. Emerging evidence indicates that such outbreaks of animal-borne diseases are on the rise, mostly due to environmental degradation, poorly managed exploitation and use of wild biological and genetic resources, and the intensification of livestock production and trade in livestock and wildlife. In the Gambia, human-wildlife-livestock interactions are increasing as human populations expand, and urbanization and economic activities (such as wildlife trade, husbandry, agriculture, fishing, infrastructure development, mining, and logging) encroach into wildlife habitats. This greater proximity enhances the probability of disease spillover from wildlife to humans, or wildlife to livestock to humans. By supporting the conservation of habitats for biological diversity and genetic resources, developing structured approaches to harvesting, researching, and interaction with genetic diversity, the current project supports approaches can contribute to transforming human-nature relations and to developing a greener, more resilient and more inclusive ?new normal?.

Political instability associated with upcoming elections

The Gambia has enjoyed two decades of relative peace and a stable political environment, despite two failed attempted coups, in 2006 and 2014. Located in a generally volatile political geography (West Africa) that has over the last decade witnessed multiple events of political strife, there is the risk of spill-over effects that may affect the smooth implementation of project activities in the country. This means that notwithstanding the general atmosphere of peace, there are economic and political dynamics and uncertainties that may expose the project implementation to risks. Such risks may include limited resource mobilization potential in the case of political instability in the upcoming election cycle; high attrition rates within the Government, and brain drain, loss of institutional memory and limited continuity, which exacerbate the already weak capacities of implementing partners, and possible disruptions in the project implementation due to the planned elections. The project will formulate a contingency plan to respond to electoral risks and will regularly update the continuity plan.

[1] <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.

[2] COVID-19 Dashboard, Ministry of Health, The Gambia. <https://www.moh.gov.gm/>

[3] UNDP 2020. Update on the socio-economic situation following Covid-19 outbreak in The Gambia. The United Nations Development Programme (UNDP), Brief #1: 27 March 2020. <file:///C:/Users/Genesis/AppData/Local/Temp/Socio-Economic-Impact-COVID-19-Gambia-Policy-Brief-1-UNDP-March-2020.pdf>.

[4] Ibid: UNDP 2020.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

UNEP ECOSYSTEMS DIVISION is the **Implementing Agency (IA)** for this GEF project. UNEP ECOSYSTEMS DIVISION shall in its role as GEF Implementing Agency, provide project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. It shall also in partnership with MTE and other key project partners engage in promoting the project with a view to mobilizing resources and partnership. Project supervision will be entrusted to the UNEP ECOSYSTEMS DIVISION Director who will discharge this responsibility through the assigned Task Manager who represents the UNEP ECOSYSTEMS DIVISION Director on the Project Steering Committee. Project supervision missions by the Task Manager shall constitute part of the project supervision plan. UNEP ECOSYSTEMS DIVISION will perform the liaison function between UNEP and the GEF Secretariat and report on the progress against milestones outlined in the CEO approval letter to the GEF Secretariat. UNEP shall inform the GEF Secretariat whenever there is a potentially substantive co-financing change (i.e. one affecting the project objectives, the underlying concept, scale, scope, strategic priority, conformity with GEF criteria, likelihood of project success, or outcome of the project). It shall rate, on an annual basis, progress in meeting project objectives, project implementation progress, risk, and quality of project monitoring and evaluation, and report to the GEF Secretariat through the Project Implementation Review (PIR) report prepared by the Executing Agency (EA) and ensure that the Evaluation and Oversight Unit of UNEP arranges for an independent terminal evaluation and submits its report to the GEF Evaluation Office.

The Department of Parks and Wildlife Management (DPWM) is the **Executing Agency (EA)** of the project and shall take responsibility to ensure that the project is implemented in accordance with the (a) agreement to be signed with UNEP ECOSYSTEMS DIVISION, (b) agreed objectives, activities and budget and deliver the outputs and demonstrate its best efforts in achieving the project outcomes. It shall also coordinate activities with the other key Government and other relevant partners and address and rectify any issues raised by UNEP with respect to project execution in a timely manner. As Executing Agency (EA), the Ministry is committed to make best use of project resources and implement the project in the most effective manner.

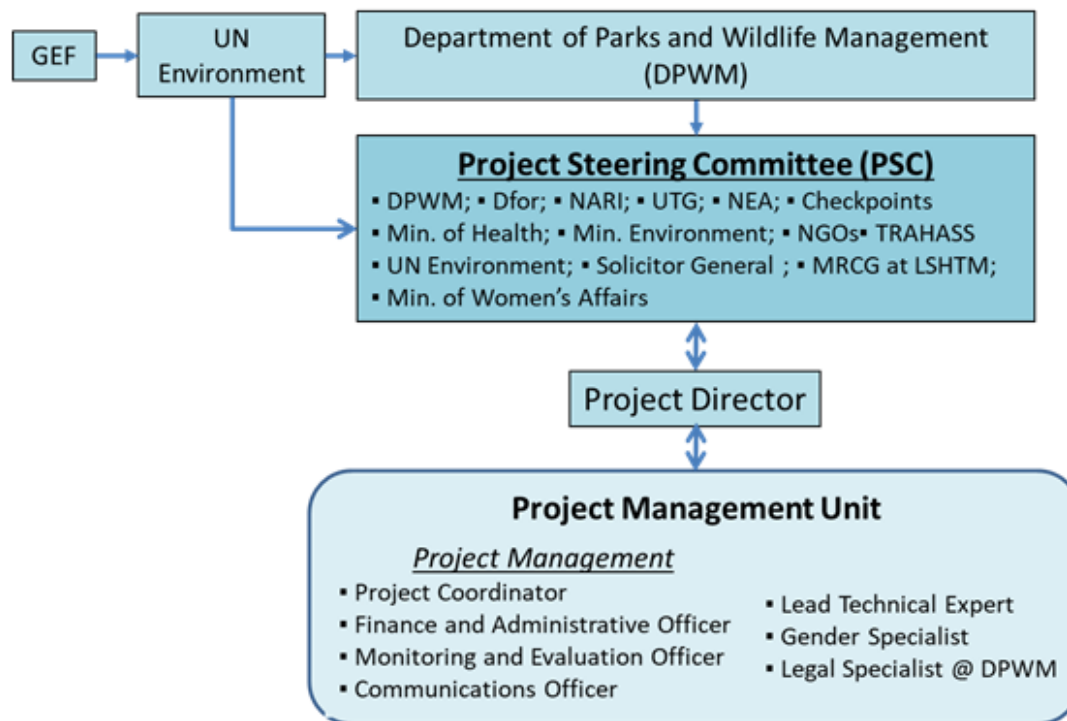


FIGURE 2. INSTITUTIONAL FLOW CHART.

The Project management structures will be comprised of the following:

A **Project Steering Committee (PSC)** will be established to oversee the GEF project. Strategic monitoring of project activities will be the responsibility of the Project Steering Committee (PSC), which acts as the Project Orientation Board. The PSC will meet annually, or extraordinarily as may be warranted, in order to:

- ? Provide overall guidance and ensure coordination between all parties;
- ? Provide monitoring for project implementation;
- ? Review and adopt the annual work plans and budgets prepared by the Project Coordinator and Chief Technical Advisor, in conformity with the project objective and subject to the rules of GEF and UNEP;
- ? Review the six-monthly progress reports to be prepared by PMU and oversee the implementation of corrective actions, when necessary;
- ? Enhance synergy between the GEF project and other initiatives being implemented in the project area; and
- ? Provide advice on policy and strategic issues to be taken into account during project implementation.

The members of the PSC will include:

- o **Chair**: the designated Senior Staff from the Ministry of Tourism and Environment
- o **Co-Chair**: UNEP ECOSYSTEMS DIVISION Task manager or mandated UNEP Official
- o **Members**: GEF Operational focal point and representatives of various ministries, in particular those in charge of the environment, forests, protected areas, agriculture, livestock, fisheries, mines, finance, spatial planning, land, women, tourism, scientific research and administration of the territory, as well as special economic zones. The specific roles within the PSC are based on the mandates assigned to each ministry.

The Secretariat to the PSC will be provided by the Project Management Unit.

As may be required on specific issues, an Advisory group can be formed to offer any other guidance or expertise as required by the specific agenda of the PSC.

A Project Management Unit (PMU): The daily management of the project remains with the project team under the watchful eye of the designated Project Director. The PMU will serve as the critical link between the Agency, the project partners assuming the lead of thematic areas, and the different groups engaged on project activities, will ensure project planned activities are adequately executed and that lessons learned are shared among sites and within national committees and to provide visibility of the project at the national and international level. The PMU will be responsible for ensuring adequate communication of information to all national and international partners. The PMU will elaborate and submit to the IA technical and financial progress reports. The Project Management Unit consists of:

? Project Lead Technical Expert ? International

? Project Director / Stakeholder Engagement Officer- national (the Director of the Executing Agency, DPWM)

? Project Monitoring and Evaluation Expert ? national

? Project ABS Legal Officer ? national

? Administration and Financial Officer ? national

? Communication Specialist ? national

? Gender Specialist ? Consultant

? Support staff ? national

See Appendix 5: Terms of Reference for Project Personnel for detailed overview of PMU roles.

The PMU will be hosted by Department of Parks and Wildlife Management (DPWM). The hosting costs will be covered by the Government.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The starting point for understanding the existing framework for ABS of genetic resources is the Convention on Biological Diversity (CBD). The CBD is one of the multilateral treaties that opened for signature at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil. The Gambia being one of the parties to the CBD recognizes the importance of biological diversity and genetic resource conservation. The Gambia's environmental management framework are supported by various biodiversity-related sectoral laws; and the implementation of ABS in The Gambia aligns with several national environmental policies, laws, national strategies, and developmental targets.

The project is consistent to relevant national policies and strategies that supports the implementation of CBD convention and it related Nagoya Protocol on ABS in The Gambia. The policies and strategies to which the project is consistent include:

United Nations Convention on Biological Diversity: The Government of The Gambia ratified the UNCBD in 1994, with national reports submitted for the 1st round in 1998, 2nd in 2003, 3rd in 2006, and 5th in

2014. The goal of engagement with this convention was to ensure the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from commercial and other utilization of genetic resources. The current project contributes to achieving these aspirations by supporting access to benefits from GRs and aTK to local communities of the project locations.

National Biodiversity Strategy and Action Plan (NBSAP) for 2015-2020: The project is also consistent with The Gambia's national strategies and plans. The country is currently implementing the National Biodiversity Strategy and Action Plan (NBSAP) for 2015-2020[1] focuses on five strategic goals, which are closely relevant to ABS, namely: 1) Increased awareness of the value of biodiversity (including knowledge sharing to inform and guide decision-makers and stimulate investment in biodiversity conservation); 2) Reduced pressure on biodiversity (including promotion of sustainable use through good governance, rational management and reduced loss and degradation of ecosystems); 3) Improved state and valuation of biodiversity (including means to safeguard ecosystems, species and genetic diversity); 4) Strengthening benefits from biodiversity (including reference to implementation of the Nagoya Protocol and ABS); and 5) Knowledge management and capacity building (including setting up a system to protect traditional knowledge). Objective 16 of The Gambia's NBSAP specifically notes that *'By 2020, the Nagoya Protocol on Access and Benefits Sharing is in force and operational?'* in accordance with national legislation and the actual needs of the Gambian people. Strategic guidelines to achieve the objective include the requirement that structures are set up to implement a program of activities to operationalize the Nagoya Protocol and ABS. The strategic goal of this objective (Strategic Goal E) is to strengthen implementation of Nagoya and ABS through participatory planning, knowledge management and capacity building. This project will address Objective 16 through activities targeting the strengthening of policy, legal and institutional frameworks (Component 1), creating operational mechanisms (Component 1 and Component 3), ensuring coherent collaboration between stakeholders and effective monitoring (Component 2 and Component 3), and improving knowledge and understanding of target actors and the Gambian population in general? to ensure that biodiversity is used sustainably (Component 2 and Component 3).

Aichi Targets: The project also supports The Gambia in achieving three key Aichi Biodiversity Targets. *Target 1:* By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. *Target 16:* By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation. *Target 19:* By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

[1] GOTG (2015) *National Biodiversity Strategy and Action Plan (2015-2020)*. Ministry of the Environment, Climate Change, Water and Wildlife (MECNARR), Government of The Gambia. <https://www.cbd.int/doc/world/gm/gm-nbsap-v2-en.pdf>. NB: The new document to replace this current one is not yet validated.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

During the first meeting of the Parties to the Nagoya Protocol that was held in Pyeongchang, Republic of Korea, 13-17 October 2014, NP parties adopted Decision NP 1/8 on measures to assist in capacity building and capacity development in accordance with article 22 of the NP. This decision includes a strategic framework for capacity building and development to support the effective implementation of the NP on ABS, which comprises of five key areas. Two of the five key areas are the pillars upon which the knowledge management approach considered in this project is anchored:

- ? Key area (2) Capacity to develop, implement and enforce domestic legislative, administrative or policy measures on access and benefit-sharing and,
- ? Key area (5) Capacity of countries to develop endogenous research capabilities to add value to their own genetic resources.

Specifically, under key area 2, the strategic framework contemplates under 2.5 among others, facilitating the sharing of knowledge and expertise on ABS measures through on-job-training and peer-to-peer exchange programmes, regional and sub-regional learning communities and networks, the provision of technical assistance for the development of administrative procedures for implementing the ABS measures, development of guidelines for differentiating requests for access to genetic resources for commercial and non-commercial use, and development of guidelines for establishment of simplified measures on access to genetic resources for non-commercial research purposes. On its part, under key area 5, the strategic framework contemplates several actions spread across sub areas 5.1 to 5.3 such as the development of methodologies for assessing the potential commercial value of specific GRs and TK, building on good practices in the context of ABS, facilitation of the development of inter-linkages with other initiatives/methodologies/instruments for valorising GRs and TK, for example through knowledge exchange; documentation and dissemination of case studies on good practices and lessons learned in order to develop understanding of the value chain through analysing business models; provision of technical assistance to develop research capabilities of domestic institutions and universities to add value to genetic resources, supporting collaborative approaches to technical and scientific research and development programmes, providing technical assistance to support the development or strengthening of genetic resources databases, organization of trainings on bioprospecting and value-addition for genetic resources for IPLCs, small and medium enterprises and private sector, organization of trainings on research and taxonomic studies related to conservation of biological diversity and sustainable use of its components and building capacity to undertake research and development of genetic resources to the commercialization stage.

The role of the private sector cannot just be limited to enabling ABS to deliver the benefits that can be re-invested into conservation and sustainable use of GR-, a development outcome that can be viewed as ?linked to SDGs 14 and 15? as far as the marine, plants, animals etc. GRs are concerned. There is in fact a growing body of evidence about the contribution of ABS to a wide range of SDGs and specific targets - all of them facilitated by a significant engagement/implication of the private sector. For example, the United Nations Development Programme (UNDP) published a report in 2018 ahead of the 14th meeting of the conference of the parties to the CBD, and the 3rd meeting of the parties to the Nagoya Protocol in Sharm El-Sheikh .

According to this report, genetic resources are not only SDGs accelerators, contributing to poverty alleviation (SDG 1), food security (SDG 2), good health and well-being (SDG 3), gender equality (SDG 5), innovation (SDG 9), and life on land (SDG 15), but also the biodiscovery cases covered in this report also provide examples of national and international partnerships (SDG 17) (UNDP, 2018) where the private sector play an important role.. More recently in March 2021, a compendium with detailed analysis of eleven cases of ABS operations examined how the ABS regulatory context was used to establish workable partnerships connected to these cases across different regions in the world. This compendium analyzed the actors involved, the resources that were accessed, and the benefits (monetary and non-monetary) that the cases generated, as well as the implications of these benefits with specific SDGs and targets. The compendium was produced within the framework of the project 'ABS in practice: Benefits for increasing global funds for the conservation of biodiversity?', commissioned by the German Federal Agency for Nature Conservation with funds from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. In a variety of ways, private sector engagement in many of the cases examined in the compendium was very instrumental in the generation of the benefits and the private sector was engaged through typical ABS cases viewed through the lenses of utilization of GRs as defined by the NP and BioTrade . In the process of lifting the barriers to private sector engagement in plants material business, stakeholders can apply some of the key lessons emerging from the approaches explored by UNEP/GEF/IUCN and other partners under the Great Green Wall of the Sahara and Sahel Initiative (GGWI) in harnessing the implications of the private sector in the mobilization of the investment needed for the development of socio-economic opportunities. Good information, awareness-raising, and implementation of relevant pilots among others, are identified as the requirements to overcoming the barriers to private sector engagement.

Knowledge management and sharing, as well as its contribution to the overall impact is so important to this project that the approach taken is to assign it under overall responsibility of the Project Management Unit (PMU) and the oversight of the Project Technical Adviser (PTA). In effect, the monitoring and evaluation officer as a recruited full time paid staff in the PMU team working directly under the supervision of the PTA will be undertaking some of the day to day knowledge management activities throughout the project and reporting to the PTA. As we described subsequently, considering the broader scope of knowledge management activities especially in terms of recording key learning topics over the course of the project, the other experts and consultants will be instrumental in the overall delivery of the knowledge management approach considered herein. The knowledge management activities that will be carried out during the project will be drawn from the gamut of activities suggested under the specific sub areas 2.5, 5.1 and 5.3 of the strategic framework for capacity building and development to support the effective implementation of the NP on ABS. The activities thus selected for this project will be approved by the PMU/PTA during the initial meeting (see below), but in general will encompass a great deal of recording, processing and disseminating key lessons, knowledge areas and experiences generated throughout the project. The implementation of the activities planned under the three components of the project will certainly offer opportunities to record learning and best practices so that these can be shared widely and thus facilitate smooth implementation of the ABS measures when they are adopted. Such opportunities will certainly appear during e.g., the consultations, discussions pertaining to the design of the key elements to consider within the access authorisation procedures and the permitting system in the Gambia, in the deliverance of PIC and in negotiations of mutually agreed terms/ABS contracts. Other opportunities will be linked to the

updating of relevant sectoral policies and other operational instruments such as the national parks research and partnerships policies in terms of streamlining the ABS principles in these sectors. Further opportunities for learning and best practices include the development of community protocols, and the approaches to include local communities and community forest owners in the PIC and MAT when their GRs and traditional knowledge associated with GRs are sought; the process of developing the valorisation strategy and its uptake and implementation by national stakeholders e.g. in connection with the establishment of PPP to mobilise funds and capacities to harness the scientific and commercial potential of GRs and traditional knowledge associated with GRs in line with the procedures prescribed by the new domestic NP compliant ABS governance framework. The monitoring and evaluation officer will not only use the planned field visits under M&E framework to record key learning and best practices from the various stakeholders of the project under the M&E budget, but he/she will also be part of the training workshops and will join the pool of consultants recruited by the project during their field activities using the budgetary allocations for field activities. Another approach to record the key areas of learning and best practices worth wider dissemination will be by requesting the consultants and other technical experts who will be recruited to pay attention to key lessons, best practices etc in the execution of their assignments (e.g., during the various training and consultations), highlight and report on these issues in their reports. These will then be picked up by the M&E expert and processed accordingly towards the delivery of the wider dissemination.

From the outset of the project a knowledge management platform will be established. This platform will comprise the pool of consultants and experts recruited by the project, staff of the PMU, especially the PTA, and the monitoring and evaluation officer and any other external resource person from academia as may be deemed necessary by the PMU. Guided by the ambition to deliver continued learning and exchange of best practices long after the project lifetime, the establishment of communities of practices (CoPs) will be among the priorities of the platform. These CoPs will essentially be organised around the main stakeholders? groups, notably local and indigenous communities, the scientific/research community, the private sector and policy and administrative officers, all of whom will have been involved in one way or another in the development of the panoply of ABS tools and best practices during the lifetime of this project. The number of CoPs to be formed will be decided at the initial meeting but is likely to be 4 CoPs (Local and indigenous communities; Private sector/civil society; research/scientific community; administrative/policy officers). The principal components of the Knowledge management approach can be outlined as follows:

- ? Initial meeting dedicated specifically to internal PMU discussions on the knowledge management approach that will be pursued throughout the project, brainstorming and preliminary identification/selection of prospective specific knowledge management activities.
- ? Constitution of the communities of practices (CoPs)
- ? Consultations by the project monitoring and evaluation officer with the consultants/experts on the recording of knowledge generated and best practices along the way
- ? Recording, processing and storing key learning topics and best practices
- ? Organisation of interactive knowledge and experience sharing and best practices amongst CoPs
- ? Wide dissemination of key learning topics generated through the project (publication in CHM e.g., in the form of guidelines and production of flyers, opens access publications)

? Compilation of detailed knowledge management report

The products emanating from the knowledge management activities will be shared nationally and will feed into the continued learning and training of stakeholders on ABS implementation in the Gambia. The products of knowledge management activities in term of best practices, success stories, will be formatted as e.g., guidelines, flyers and a manual of best practices. They will be part of the legacy of the project and will be used in the benefit of other ABS actors long after the implementation of this project to ensure long term impacts of the effective implementation of the Access and Benefit Sharing of the Nagoya Protocol in the Gambia and co management of other Forest parks and reserves and community forests. The costs areas in the table below under point 5 (organisation of two interactive workshops), point 6 (in respect of the production of flyers, and the compensation of the expert time for the compilation of open access materials) and point 7 (compilation of detailed knowledge management report) are distinctly budgeted on the GEF investment and the in-kind contributions). The remaining activity areas of the knowledge management approach points 1 to 4 in the table below, are embedded in the operating budgets of the PMU, the travel budgets for M&E activities, while the PTA, M&E and communication officers and the paid consultants will be involved in the normal course of project implementation.

Table 5 Components, products, timeline and budget of the knowledge management approach

No	Components	Actors involved & (responsible)	Product/timeline	Budget from GEF investment	Comments
1-	Initial meeting of the knowledge management platform	PMU (Project officers M&E, communication and PTA) Invited experts	Report/within the first quarter of the project	0 Training to be covered by UNEP Task Manager during Project mission	An initial meeting will be needed. The meeting will be held in the premises of the executing agency in the Gambia, the ministry of the Environment, Climate Change and Natural resources. This will be an internal meeting within the PMU, chaired by the PTA and involving technical staff of the PMU to set the ball rolling on the knowledge management approach of the project. The meeting will brainstorm on the knowledge management activities and outline them in the report.
2-	Formation of Communities of Practices	PMU (Project officer M&E, communication and PTA)	Report/within the first quarter of project implementation	0 The project team will elaborate the List	The CoPs will be constructed around the main categories of actors. The formation of the CoPs will be based on consultations undertaken by the project officer M&E and the PTA.

3-	Consultations by the project M&E officer with the consultants/experts on the recording of knowledge generated and best practices along the way	(Project officer M&E, and communication and PTA)	Report or summary notes / within the first six months of project implementation	\$20,000	The M&E officer, under the supervision of the PTA, will interact continuously with experts/consultants reminding that in the realisation of their various assignments, they should pay attention in recording lessons, best practices and challenges throughout the project and outline them in their reports.
4-	Recording, processing and storing key learning topics and best practices	Project Officer M&E and other experts and consultants	M&E reports and technical reports from consultants/ongoing activity from the start of project activities until the detailed knowledge management report is completed	\$20,000	The M&E reports from field visits of the M&E officer will include knowledge management sections with records of key lessons, learning topics and best practices. The same will apply to the technical reports produced by consultants.
5-	Organization of two interactive workshops for sharing of knowledge, experiences and best practices amongst CoPs	Consultants hired by the project, members of CoPs (project officer M&E and PTA)	Two Reports / first report based on first workshop organised around midterm of the project and second report based on second workshop organised three months before project completion.	\$10,000	Training and capacity building sessions, as well as sensitization, awareness raising, and education sessions will provide the opportunities for these interactive exchanges. In addition, two cross CoPs knowledge and experience sharing interactive workshops will be organised if deemed necessary.

6-	Wide dissemination of key learning topics generated through the project (publication e.g., in the form of guidelines in CHM and production of flyers, opens access publications)	CHM publishing officer, designated consultant (project officer M&E and communication, Project Technical Adviser)	Briefs, flyers, open access publications/ on an ongoing basis as materials become available.	\$10,000	Useful information that is CHM publishable will be submitted to the national publishing agency after validation by relevant authority(ies). The expert who will be selected to compile the detailed knowledge management report will ideally be an academic with strong command in writing and publishing
7-	Compilation of detailed knowledge management report	M&E and communication project officer, PTA and (an expert identified by the PMU)	Detailed knowledge management report/ Last year of the project period	\$10,000	The compilation of and editing of the final report will be assigned to the international expert on communication and awareness raising, or to the national expert on communication, sensitization and awareness raising or to an independent academic who will be specially invited to join the knowledge management platform from the outset. The expert will work closely with the M&E expert under the supervision of the PTA.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Template for Costed M&E Workplan (to be inserted in the CEO endorsement template)

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Inception Meeting	Project Management Unit (PMU) UNEP	10,000	25,000	Within 2 months of project start-up
Inception Report	PMU	0	3,000	1 month after the project inception meeting
Measurement of project progress and performance indicators	Project Management Unit (PMU) UNEP		5,000	Annually
Baseline measurement of project outcome indicators, GEF Core indicators and project indicators monitoring (Tracking tools)	Project M&E Expert PMU UNEP	70,000	25,000	Annually

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Semi-annual Progress/ Operational Reports to UNEP	Project Lead Technical Expert with inputs from partners	0	2000	Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July
Project Steering Committee (PSC) meetings	Project Lead Technical Expert PMU UNEP	60,000	80,000	Once a year minimum
Reports of PSC meetings	Project Lead Technical Expert PMU UNEP	0	2000	Annually
Project Implementation Review (PIR) report	Project Lead Technical Expert PMU UNEP	0	2000	Annually, part of reporting routine
Mid Term Review/Evaluation	UNEP TM/ UNEP Evaluation Office PMU	30,000	50,000	At mid-point of project implementation
Terminal Review/Evaluation <i>(whether a project requires a management-led review or an independent evaluation is determined annually by UNEP's Evaluation Office)</i>	UNEP TM/ UNEP Evaluation Office PMU	40,000	90,000	Typically initiated after the project's operational completion
Audit	PMU	0	50,000	Annually
Project Operational Completion Report	Project Lead Technical Expert with inputs from partners	0	2,000	Within 2 months of the project completion date
Co-financing report (including supporting evidence for in-kind co-finance)	Project Lead Technical Expert and input from other co-financiers	0	2,000	Within 1 month of the PIR reporting period, i.e. on or before 31 July
Publication of Lessons Learnt	Project Lead Technical Expert with inputs from partners	0	25,000	Annually, part of Semi-annual reports & Project Final Report
		210000		

Project Inception Phase

A Project Inception Workshop (IW) will be held within the first two (2) months of project start-up with the participation of the full project team, relevant counterparts, co-financing partners, and the UNEP Focal Point, as appropriate. A fundamental objective of the 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 and the GEF Tracking Tool. 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, finalizing the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Specific targets for the first-year implementation progress indicators together with their means of verification will be developed at the inception workshop. These will be used to assess whether the implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan.

Additionally, the purpose and objective of the IW will be to a) introduce project staff to project stakeholders that will support the project during its implementation; b) detail the roles, support services, and complementary responsibilities of UNEP staff in relation to the project team; c) provide a detailed overview of UNEP-GEF reporting and M&E requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), mid-term review, final evaluation and financial reporting. Equally, the Inception Workshop will provide an opportunity to inform the project team on UNEP project-related budgetary planning, budget reviews including arrangements for the annual audit, and mandatory budget re-phrasings. The IW will also 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 (ToRs) for project staff and decision-making structures will be discussed again, as needed, in order to clarify each party's responsibilities during the project's implementation phase. A report on the Inception Workshop is a key reference document and must be prepared and shared with participants.

Monitoring Responsibilities and Events

A detailed schedule of project review meetings will be developed by the project management in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: a) tentative timeframes for Project Steering Committee meetings (and other relevant advisory and/or coordination mechanisms); and b) project-related M&E activities.

Day-to-day monitoring of implementation progress will be the responsibility of the Project Lead Technical Expert based on the project's Annual Work Plan and its indicators. The Project Director will inform the UNEP, on behalf of the Executing Agency 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 Director 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 UNEP Task Manager.

At the inception workshop, specific targets for the first-year implementation progress indicators together with their means of verification will be developed. Targets and indicators for subsequent years will be defined annually as part of the internal evaluation and planning processes undertaken by the project team. Measurement of impact indicators related to global benefits will be done during the annual evaluation.

Periodic monitoring of implementation progress will be undertaken by the UNEP Task Manager through six-monthly exchanges 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 UNEP Task Manager, 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/AWP to assess first-hand project progress. Any other member of the Steering Committee can also take part in these trips, as

decided by the Steering Committee and as determined by project resources. A Field Visit Report will be prepared by the UNEP Task Manager and circulated no less than one month after the visit to the project team, all Steering Committee members, and UNEP-GEF.

Annual monitoring will occur through the Project Steering Committee (PSC) meetings. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to the Project Steering Committee meeting at least once every year.

The first such meeting will be held within the first twelve (12) months of the start of full implementation. The Project Lead Technical Expert will prepare an Annual Project Report (APR) and submit it to UNEP GEF Task Manager at least two weeks prior to the PSC for review and comments. The APR will be used as one of the basic documents for discussions Project Steering Committee meeting. The Project Lead Technical Expert will present the APR to the PSC, highlighting policy issues and recommendations for the decision of the PSC. The Project Lead Technical Expert will also inform the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary. UNEP has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be conveyed by UNEP to project stakeholders at the IW, based on delivery rates and qualitative assessments of achievements of outputs.

The Terminal PSC Review is held in the last month of project operations. The Project Lead Technical Expert with support of M&E Officer and guidance from UNEP is responsible for preparing the Terminal Report and submitting it to UNEP GEF. It shall be prepared in the draft at least two months in advance of the PSC meeting in order to allow review and will serve as the basis for discussions in the PSC meeting. The terminal PSC 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 the sustainability of project results, and acts as a vehicle through which lessons learned can be captured to feed into other projects being implemented.

Project Monitoring Reporting

The Project Lead Technical Expert, with support from M&E officer and guidance from UNEP-GEF 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)** 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. This work plan will include the dates of specific field visits, support missions from the UNEP Task Manager or consultants, as well as timeframes for meetings of the project's decision-making structures. The IR will also include the detailed project budget for the first full year of implementation, prepared on the basis of the AWP, and including any M&E requirements to effectively measure project performance during the targeted 12-month timeframe. The IR will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions, and feedback mechanisms of project-related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the IR will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to the IR's circulation, the UNEP/GEF will review the document.

- **The Annual Project Report (APR).** An APR will be prepared on an annual basis prior to the PSC Review, to reflect the 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 format of the APR is flexible but should include the following sections: a) project risks, issues, and adaptive management; b) project progress against pre-defined indicators and targets, c) outcome performance; and d) lessons learned/best practices.

- 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 on-going projects. Once the project has been under implementation for one year, a PIR must be prepared by the project management and submitted by UNEP to the GEF. The PIR should then be discussed in the PSC meeting so that the result would be a PIR that has been agreed upon by the project counterparts and the UNEP. The individual PIRs are collected, reviewed, and analysed by the UNEP Operational Focal Point prior to sending them to the GEF by UNEP-GEF Coordination Office.

- Half year (July/December) Progress Reports** outlining main updates in project progress will be provided every six months to the UNEP/GEF Task Manager. The January ? June progress report stands as the PIR described above.

- Specific Thematic Reports** focusing on specific issues or areas of activity will be prepared by the project team when requested by UNEP-GEF or the project implementing partners. The request for a Thematic Report will be provided to the project team in written form by UNEP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learned exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNEP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

- A Project Terminal Report** will be prepared by the project team during the last three (3) months of the project. This comprehensive 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. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's activities.

- Publications/Technical reports.** The project intends to publish some documents covering specific themes. In the Inception Report, the project team will prepare a draft list of publications that are expected during the course of the project and tentative due dates. Where necessary, this publications list will be revised and updated, and included in subsequent APRs. Publications may also be prepared by external consultants and should be comprehensive and specialized analyses of clearly defined theme of research within the framework of the project. These publications will represent, as appropriate, the project's substantive contribution to specific issues, and will be used in efforts to disseminate relevant information at local, national, and international levels.

Project Evaluation

In line with the GEF Evaluation requirements and UNEP's Evaluation Policy, GEF Full-Sized Projects and any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project's operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes:

- (i) to provide evidence of results to meet accountability requirements, and
- (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and executing partners.

While a TE should review use of project funds against budget, it would be the role of a financial audit to assess probity (i.e., correctness, integrity etc.) of expenditure and transactions.

The TE report will be sent to project stakeholders for comments. Formal comments on the report will be shared by the EO in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the EO when the report is finalized. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process.

The direct costs of reviews and evaluations will be charged against the project evaluation budget.

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

Socioeconomic benefits at the national level

The Government of The Gambia recognizes the economic potential of biodiversity in socio-economic development and has a strategy to develop and implement policies to support sectors of agricultural,

forestry, and fisheries products that meet international standards for conservation and sustainable use of biological resources (NBSAP 2015-2020, and the National Development Plan - NDP 2018 - 2021). To achieve these objectives, it also recognizes the need to establish conditions that facilitate the creation and development of linkage between stakeholders based on the sustainable use of biodiversity, particularly the use of biological, genetic, and derivative resources, and of biotechnology, which also ensures the fair and equitable distribution of those benefits derived from the use of those resources between the owners and users of the biodiversity. Sustainable use of genetic resources through the project will have direct socioeconomic benefits for the national economy through improved control over the benefits accruing from the use and commercialization of genetic resources in The Gambia. The ABS framework will establish a mechanism for fair and equitable distribution of benefits that will support both the central government and the local level. By implementing the Nagoya Protocol and implementing ABS regulations, a wide range of sectors in The Gambia, pharmaceuticals, research and food industry, and forestry, will be able to receive benefits such as technology transfer, and research findings from the access of The Gambia's genetic resources. This will have a positive impact on the national economy and will help to drive innovation.

Socioeconomic benefits at the local level

Communities that are custodians of genetic resources at the local level will benefit from livelihood support, skills training, and conservation methods to enhance the sustainability of genetic resource use and fair access to benefits. The social and economic feasibility of modifying existing and promoting alternative livelihoods and their likely impacts on achieving global biodiversity conservation have been assessed. Most of the communities to be involved at the pilot sites are ethnic minorities, renowned for their traditional knowledge of plant species and medicinal uses. The project will also ensure that there is a strong involvement of ethnic minority communities and that their traditional knowledge and beliefs are incorporated into the development of an ABS regime and demonstration activities. During the PPG, a thorough local-level socioeconomic assessment and consultation were conducted to obtain the consent of the ethnic minorities to participate in the project pilot. Full environmental and Social Screening was also conducted during the project preparation phase. The project has ensured that a strong gender concern is built into its actions, and a proper gender analysis was undertaken during project preparation. Especially at the local level, the project will strengthen women's capacity needs as they are the gatekeepers of traditional knowledge and the primary providers/collectors/managers of natural and genetic resources. The project will ensure that the national ABS regime takes on a gender lens in the implementation of its program. The pilot and demonstration activities will also integrate gender focus and data in their design and monitoring processes to ensure that women are empowered to participate fully and also benefit from the use of genetic resources.

At the selected pilot demonstration site, the use of non-timber forests products such as the medicinal plant and product collection is not currently a significant source of income for the people living in the West Coast Region (the district in which Nyambai Forest Park Complex is located). A long-term solution to the relationship between poverty and biodiversity that the demonstration will support is the sustainable use of agro-forest products through successful commercialization of their biological and genetic resources will result in fair and equal payments for the entire community. The project pilot aims to create a way that leads to monetary and non-monetary benefits to the state and the communities through creation and commercialization of indigenous medicinal plants with a distribution of those benefits that follows the provisions set out by The Gambia's regulations and the Nagoya Protocol, and to use the case study to contribute as test some new legislative regulations relate to benefit-sharing.

The demonstration pilots will contribute to the conservation and development of indigenous medicinal plants creating raw materials in order to improve the livelihoods of populations neighbouring the Nyambai Forest Park complex. At the end of the project, it is expected that at least 250 families in the West Coast Region district will receive income from cultivation of indigenous medicinal plant species. Similarly, the project will promote the local economy through contracts that are generated in the value chain (harvesters, transporters, supplies, etc.).

Global environmental benefits

Globally biodiversity is in decline and many factors are contributing to the decline. The Millennium Ecosystem Assessment report of 2005 identifies human activities as the main cause of changes in biodiversity and these include over-exploitation, pollution, and the impacts of Invasive Alien Species, among others. The Nagoya Protocol on ABS has the potential to reduce loss of biodiversity through access and benefit sharing arrangements that promote the conservation and sustainable use of biodiversity. The Gambia is a Party to the Nagoya Protocol whose objective is the fair and equitable sharing of benefits arising from the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to the technologies, and by appropriate funding thereby contributing to the conservation of biological diversity and the sustainable use of its components. The implementation of the Protocol thus contribute to improving livelihoods especially of local communities, secure human wellbeing, and promote conservation, sustainable use and equitable benefit sharing of biodiversity. The proposed project, therefore, will enable The Gambia to make its national contribution to the global environmental benefit of conserving biodiversity and sustainably using its components by building national capacity to implement ABS. The implementation of a functioning robust, transparent National ABS mechanism in The Gambia will bring significant opportunities for research, technology development, innovation, products and processes with expected great economic and social returns. At the same time, adopting such green economic opportunities will provide durable incentives for biodiversity conservation. The consolidation of ABS will generate a wide variety of benefits, monetary and non-monetary, for providers of genetic resources and TK, some of which will be reinvested in the biodiversity conservation and sustainable use. The resulting benefits will also support scientific capacity development, economic growth and the consolidation of The Gambia's biodiversity.

The project will, therefore, contribute towards the achievement of a number of CBD Aichi Targets, namely: Target 1, by increasing the awareness of people in Gambia about the values of biodiversity and the steps they can take to conserve and use it sustainably; Target 12, by preventing the extinction and/or improving the conservation status of threatened species; Target 13, by maintaining the genetic diversity of cultivated plants and of wild relatives, including other socio-economically as well as culturally valuable species, and by developing and implementing strategies for minimizing genetic erosion and safeguarding their genetic diversity; and Target 18, by better involving and respecting the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity.

During the project development, consultations with local communities and institutional stakeholders led to the decision to combine the three parks (Nyambai Forest Park which is 202 hectares; Kabafita Forest Park with 243ha; and Bamba Forest Park with 389ha for) as one pilot area for the implementation of the project. It was also agreed that the Kiang West National Park should be added (area 11,526 ha under IUCN category II). This increases the area to benefit from project investment while diversifying the ecologies and

genetic resources to benefit from biodiscovery and bioprospecting. The total area to benefit from project investment is therefore 12,360ha.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Gambia ABS SRIF_101221	CEO Endorsement ESS	
SRIF ABS - Gambia CRC	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project title: Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of The Gambia						
	Indicator	4. Baseline	5. Mid-term target	6. End of project target	Sources of verification	Assumptions
<p>Project objective: (i) Provide technical support for developing ABS policy, legal, institutional and regulatory frameworks for The Gambia; (ii) Undertake piloting of administrative or policy measures to implement community protocols, bioprospecting, and/or biotechnology research; and (iii) Promote ABS-compliant management of</p>	<p><i>Indicator 1:</i> Gender responsive national law on ABS strengthens the conservation and sustainable use of genetic resources and associated traditional knowledge.</p>	<p>No National ABS Law exists. Some individual laws address specific types of GR access that could be integrated into a national ABS framework.</p>	<p>Gap analysis complete for defining needs for ABS legal and regulatory frameworks and draft ABS policy under discussion</p>	<p>Draft national law on ABS enacted into law and implemented</p>	<p>Enacted national ABS Law in the official gazette</p>	<p>- Government is fully committed to the conservation and sustainable use of the country's genetic resources and strengthening of national ABS framework.</p>
	<p><i>Indicator 2:</i> Increased level of institutional and professional capacity for implementation of the national ABS framework</p>	<p>Only one (1) national level institution (DPWM) has a minimal ability to effectively implement and coordinate ABS activities and frameworks.</p>	<p>At least two (2) institutions at national, subnational and community levels are able to effectively implement ABS processes</p>	<p>At least four (4) institutions at national, subnational and community levels are able to effectively implement ABS processes</p>	<p>Training reports, UNDP capacity scorecard</p>	<p>The Government of the Gambia stands ready to enhance its commitment for the implementation of the NP</p>

protected areas that support improvements in the conditions of biological and genetic resources for the Nyambai Forest Complex.	<i>Indicator 3:</i> National ABS Clearing-House Mechanism (ABS-CHM) and Checkpoints established, operational and regularly monitored for compliance -	ABS-CHM and checkpoints do not exist	ABS-CHM website online and potential checkpoints identified	ABS-CHM website online with updated information and validated by the CBD Secretariat, checkpoints selected and included in the draft law	ABS-CHM website; confirmation emails from the CBD Secretariat and the ABS team; and draft ABS Law	Government agencies and institutions are willing to share information to support the usefulness of the ABS-CHM; and committed to ensure the surveillance of the utilization of genetic resources.
	<i>Indicator 4:</i> Area of landscapes under improved management to benefit biodiversity	There are currently areas in the country under management, but ABS-compliant approaches to conserved area management do not exist	Management plans are revised for PA totaling 12,360 ha in the NFP complex to incorporate ABS-compliance	The 12,360 ha of protected areas in the NFP complete are fully implementing ABS-compliant conservation management approaches	Project reports	There is a fruitful collaboration between key stakeholders in addressing limitations to the adoption of ABS-compliant management approaches in the NFP complex
Component 1: Enhancing The Gambian national policy, regulatory framework, institutional capacity and knowledge base needed to implement the Nagoya Protocol						

<p>Outcome 1.1 The Government of Gambia adopts a National ABS policy and supportive regulatory frameworks</p>	<p><u>Indicator 5:</u> National ABS regulatory frameworks in place and operational</p> <p><u>Targets</u></p> <p>? At least three (3) regulatory frameworks (ABS, CFM and Revenue Sharing) guidelines and regulations in place</p> <p>? ABS Administrative Measures in place and posted on the ABS-CHM</p> <p>? Online permit management system in place and operational</p> <p>? Electronic system for monitoring compliance to the Nagoya protocol in place and operational</p>	<p>Existing legal framework are insufficient and not in full compliance with the Nagoya Protocol provisions and obligations</p> <p>There is also no electronic system for monitoring compliance to ABS framework and permits can only be applied for within the country</p>	<p>? Two regulatory frameworks (regulations, guidelines and policy) are developed and/or updated</p> <p>? An online permit management system compliant with the Nagoya Protocol is developed</p> <p>? Electronic system for monitoring compliance to the Nagoya protocol developed</p>	<p>? At least three (3) regulatory frameworks (ABS, CFM and Revenue Sharing) guidelines and regulations in place</p> <p>? ABS Administrative Measures in place and posted on the ABS-CHM</p> <p>? Online permit management system in place and operational</p> <p>? Electronic system for monitoring compliance to the Nagoya protocol in place and operational</p>	<p>Revised and updated National ABS, CFM and Revenue Sharing guidelines</p> <p>Website of the operational online permit management system as we as that of the electronic system for monitoring compliance</p>	<p>- Prerequisite competencies for revision and development of sound legislative frameworks is available</p> <p>- Prerequisite competencies development and deployment of online permit management system as we as that of the electronic system for monitoring compliance</p> <p>- Availability of subject matter expertise</p>
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<p><u>Indicator 6:</u> A financial mechanism designed to reinvest revenues for ABS agreement to support biodiversity conservation</p> <p>-</p> <p><u>Target</u> All provisions for ABS financial mechanism are functioning and supporting conservation and sustainable use of biological resources</p> <p>-</p>	<p>No financial mechanism exists for reinvestment of ABS revenues for biodiversity conservation</p>	<p>At least one set of provisions for financial mechanism created and a financial mechanism effectively created supporting conservation and sustainable use of biological resources</p>	<p>All provisions for ABS financial mechanism are functioning and supporting conservation and sustainable use of biological resources</p>	<p>Legal document validating establishment of financial mechanism</p> <p>Bank account information</p>	<p>Political willingness and commitment for setting up ABS structures remains strong</p>
<p><u>Indicator 7:</u> Institutional framework compliant with the Nagoya Protocol in place and operational</p> <p><u>Target</u> Checkpoints to monitor the utilization of genetic resources in The Gambia selected and included in the draft ABS law</p>	<p>Government agencies at both national and sub-national levels are not fully implementing their responsibilities and obligations under the Nagoya Protocol due to inadequate capacity and skills.</p> <p>In addition, there is no ABS CHM for information sharing in the Gambia and checkpoints to ensure monitoring and surveillance of the utilization of the genetic resources and therefore compliance with the NP.</p>	<p>Potential checkpoints to monitor the utilization of genetic resources identified</p>	<p>Checkpoints to monitor the utilization of genetic resources in the Gambia selected and included in the draft ABS law</p>	<p>Activity reports</p>	<p>- Relevant institutions are willing and able to participate in the training sessions</p>

<p>Outcome 1.2 Relevant actors from public, private, academic, scientific, technical, society, and indigenous people take measures to strengthen implementation and enforcement of the National ABC policy and regulatory framework.</p>	<p><u>Indicator 8:</u> Improved capacities of relevant agencies and stakeholders for ABS implementation as measured by an increase in UNDP ABS capacity development scorecard [Training ratio of 50% men to 50% women]</p> <p><u>Targets</u> ? Out of 3,000 beneficiaries, at least 400 scientists, social workers and lawyers [200 men and 200 women] are trained and have knowledge and skills in articulating and negotiating PIC and MAT ? A 45% increase in capacity across the board as measured by UNDP ABS scorecard</p>	<p>Given the limited experience in the implementation of ABS in The Gambia, it is assumed that capacities for ABS implementation is low ? the exact level will be assessed at project inception</p>	<p>At least 300,000 stakeholders [150,000 men and 150,000 women] (including scientists, social workers and lawyers) are trained and have knowledge & skills in articulating and negotiating PIC and MAT. A 15% increase in capacity across the board as measured by UNDP ABS scorecard</p>	<p>At least 400 scientists, social workers and lawyers [200 men and 200 women] are trained and have knowledge and skills in articulating and negotiating PIC and MAT. A 45% increase in capacity across the board as measured by UNDP ABS scorecard At least 220,000 local population use ABS entry points to manage the local forests</p>	<p>Workshop reports; Training reports; UNDP capacity scorecard</p>	<p>Tertiary institutions are willing to mainstream ABS in their training programmes</p>
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	<p><u>Indicator 9:</u> Level of public awareness in the communities adjoining the NFP complex on issues and processes related to ABS</p> <p><u>Targets</u> ? At least 80% of the general public (50% men and 50% women) are aware of ABS issues and processes</p>	<p>Less than 1% of the Gambia's population are aware of issues and processes related to access to genetic resources and sharing of benefits arising from their utilization[1]</p>	<p>? At least 50% of the public (50% men and 50% women) are aware of ABS issues and processes</p>	<p>? At least 80% of the general public (50% men and 50% women) are aware of ABS issues and processes</p>	<p>? Survey on the effectiveness of the awareness campaign</p>	<p>Government is fully committed to the conservation and sustainable use of the country's genetic resources and strengthening of national ABS framework</p>
<p>Output 1.1.1. Programming and institutional alignment established of selected line government agencies on policy application of ABS</p> <p>Output 1.1.2. Policy, legal, and regulatory frameworks governing ABS drafted and approved by the legislature, including the appointment of a National Focal Point and ABS Competent National Authority</p> <p>Output 1.1.3 National guidelines on ABS, reflecting intellectual property rights, traditional knowledge, gender, and benefit-sharing contracts, developed and adopted to complement the ABS framework and facilitate implementation by all relevant actors</p> <p>Output 1.2.1. Awareness-raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, society, communicators, and the general public.</p> <p>Output 1.2.2. Interactive training modules, including negotiation skills designed and directed for specific target groups to facilitate access to genetic resources, based on the national law and the Nagoya Protocol. Special attention will be put on strengthening of indigenous research and development capabilities.</p> <p>Output 1.2.3. Online information system on ABS developed (including information on species) and operational in collaboration with all relevant stakeholders</p>						
<p>Component 2. Supporting research for valorization, value addition and commercialisation of selected genetic resources in Nyambai Forest Park</p>						

<p>Outcome 2.1 Valorisation of biodiversity improves conservation and sustainable use of selected genetic resources in Nyambai Forest Park</p>	<p><u>Indicator 10:</u> Terrestrial protected areas under improved management effectiveness</p> <p><u>Target</u> 12,360 ha of biodiversity conservation initiatives being undertaken by local communities or biodiversity focused common initiative groups (such as TRAHASS) are supported to achieve enhanced management.</p>	<p>Enhanced protected area management in The Gambia suffers from limited attention to long-term sustainability</p>	<p>12,360 ha of protected areas have adopted, and are implementing improved management practices</p>	<p>12,360 ha of protected areas have adopted, and are implementing improved management practices and at least two biodiversity conservation initiatives being undertaken by local communities or biodiversity focused common initiative groups (such as TRAHASS) are supported to achieve enhanced management</p>	<p>Project reports</p>	<p>Common initiative groups associated with biodiversity initiatives are keen to collaborate with the project to enhance their capacity for improved management</p>
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<p><u>Indicator 11:</u> Biodiversity management plan for in-situ conservation and management of biological resources integrated into pilot agreement</p> <p>-</p> <p><u>Target</u> All three protected areas in the NFP complex are implementing biodiversity management plan of in-situ conservation</p>	<p>No such plan exists as no ABS related initiatives have been piloted in The Gambia</p>	<p>At least one draft biodiversity management plan of in-situ conservation developed and tested for one of the protected areas in the NFP complex</p>	<p>All three protected areas in the NFP complex are implementing biodiversity management plan of in-situ conservation</p>	<p>Biodiversity management plan endorsed by the DPWM.</p> <p>Project report on the implementation of biodiversity management plan in the NFP complex</p>	<p>Availability of subject matter expertise</p>
<p>Output 2.1.1 Valorisation of biodiversity of native genetic resources and associated traditional knowledge in Nyambai Forest Park, supported by the project to comply with The Gambian ABS national legislation and Nagoya Protocol throughout the value chain.</p> <p>Output 2.1.2 Benefits derived from the use of genetic resources and traditional knowledge in the Nyambai Forest Park, are identified, classified, and assessed to strengthen the expertise and capacity of national authorities, including setting the basis for future negotiations.</p> <p>Output 2.1.3 Commercial and non-commercial utilization of native genetic resources and benefit-sharing of selected genetic resources are researched, legislated, and included in the test for The Gambian national ABS monitoring system.</p>					
<p>Component 3. Enhancing partnerships among relevant actors to improve equitable access and use of genetic resources and traditional knowledge</p>					

<p>Outcome 3.1: Partnerships for commercial and non-commercial bioprospecting opportunities strengthened by stakeholders and actions taken to establish ABS contracts at the community-level (FPIC, MAT)</p>	<p><u>Indicator 12:</u> Number of ABS pilot agreements negotiated and implemented enabling equitable sharing of benefits between users and providers</p> <p><u>Target</u> At least three ABS agreements developed and operationalized for initial commercialization of at least 3 trial products incorporating PIC, MAT and fair and equitable benefit sharing provisions</p>	<p>No officially approved ABS agreements</p>	<p>Local communities enter into at least one ABS agreement approved in accordance with the legal framework to provide access to genetic resources and commercialization of at least one product</p>	<p>At least three ABS agreements developed and operationalized for initial commercialization of at least 3 trial products incorporating PIC, MAT and fair and equitable benefit sharing provisions[2].</p>	<p>ABS legal agreement</p>	<p>The parties will faithfully work together to implement the provisions of the agreement and that there will be no external interference to the partnership.</p>
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<p><u>Indicator 13:</u> Number of potential ABS products identified and tested for potential commercial application</p> <p>-</p> <p><u>Target</u> At least 2 ABS products identified and tested benefit from project support for value chain development towards commercial application</p> <p>-</p>	<p>Bioprospecting and biodiversity in The Gambia is still at its infancy ? there are no formal processes being implemented that can reap the benefits offered to local populations through ABS mechanisms</p>	<p>At least 5 ABS products identified and tested for potential commercial application</p>	<p>At least 2 ABS products identified and tested benefit from project support for value chain development towards commercial application</p>	<p>Activity report</p>	<p>The relevant skills in bioprospecting are available to support these initiatives</p>
<p><u>Indicator 14:</u> Gender-smart and ABS compliant value chain for identified genetic resources mapped</p> <p>-</p> <p><u>Target</u> At least two analyzed value chains are supported with project investments with attention to gender balance (50% women and 50% men)</p>	<p>Several potentials for markets for ABS compliant value chain development and market potential have been identified during the project preparation , but not analyzed</p>	<p>At least three value chains analyzed, and a strategic road map for their development completed</p>	<p>At least two analyzed value chains are supported with project investments with attention to gender balance (50% women and 50% men)</p>	<p>Activity report that analyzed the ABS compliant value chain for genetic resources.</p> <p>Activity report on project investments supporting these value chains</p>	<p>Availability of subject matter expertise</p>
<p>Output 3.1.1. Partnership management mechanisms established and piloted in Nyambai Forest Park to support and regulate commercial and non-commercial bioprospecting opportunities through a national partnership platform</p> <p>Output 3.1.2. National inventory and pre- feasibility for bioprospecting projects established, leading to a new collaboration and ABS contracts (PIC, MAT) in Nyambai Forest Park</p> <p>Output 3.1.3. Developed a provider-user model agreement mechanism in high biodiversity Nyambai Forest Park to test proposed national ABS co-management regulations of biodiversity resources</p>					

[1] DPWM (2021b) *The national context of Access Benefit Sharing in the Gambia ? implementation potentials at the local and sectoral levels*. Thematic study for the ?Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of the Gambia? project. Department of Parks & Wildlife Management (DPWM), MECCNAR. Banjul, The Gambia.

[2] The agreements should also include in situ and/or ex situ conservation measures for the concerned biological resources.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Responses to Council comments

Source	Comment	Response
Germany	Germany would like to acknowledge the relevance of the proposed objective and the involvement of the government agencies to strengthen the implementation. We would like to emphasize that the foreseen outcomes and outputs for setting up an effective national ABS system are sequential and interdependent. The proposal needs to set up a logic timeline that e.g. foresees negotiation of ABS contracts coming after the adoption of the legal basis.	<p>The logic and interdependence are recognized. The setting up of the legal and regulatory basis is the first group of activities to be undertaken by the project (Component 1). These take up basically the entire first year of the project (see Workplan and Timetable, Annex 5). All other activities follow from these.</p> <p>The negotiation of ABS contracts begins in the second year of project implementation.</p>
	The project logic should take into account that monetary benefit sharing in many cases only can be expected after many years of R&D with no guarantee for commercial success. In order to securing monetary benefit sharing in support of biodiversity conservation, the project should focus on developing ABS approaches for high-value biodiversity-based value chains.	<p>This is taken into account, this is why many case initiatives focus on developing ABS approaches for high-value biodiversity-based value chains that have already been recognized by local TK.</p> <p>Another approach to ensure early harvesting of potential benefits from project implementation consists of developing ABS-compliant collaborative forest management initiatives in protected areas of the case studies. (see Outcome 3.1). These will contribute to more direct environmental benefits for local communities in the short term.</p>

	<p>Germany also suggest reviewing those outputs/outcomes that mention ?adoption? of official documents. The result of acts of parliament / government are not under control of a (GEF) project and should not be element of project outcomes/outputs.</p>	<p>The use of the term ?adoption? has been removed when it pertains to acts of parliament or government.</p>
<p>Canada</p>	<p>The objective of this project does not clearly relate to the problem diagnosis which is a description of the many interrelated threats facing biodiversity in The Gambia, including habitat loss, pollution and uncontrolled wildfire, caused by complex drivers. According to the STAP assessment, it is not clear how these broad biodiversity threats will be addressed by establishing an ABS regime. The project itself plans to only establish the enabling environment and some pilot efforts ? it does not appear feasible to actually deliver the stated global environmental benefits in the timeframe involved. The STAP assessment has identified minor issues to be considered during project design and cleared the project for technical clearance. Canada supports the Secretariat?s recommendation.</p>	<p>The objective of the project has been redefined to better reflect the complexity of the challenges to be addressed by the project. It is not 3 in number and now reads:</p> <p><i>(i) Provide technical support for developing ABS regulatory and institutional frameworks for The Gambia; (ii) Undertake piloting of administrative or policy measures to implement community protocols, bioprospecting, and/or biotechnology research; and (iii) Promote ABS-compliant management of protected areas that support improvements in the conditions of biological and genetic resources for the Nyambai Forest Complex and the Kiang West National Park.</i></p>

UK

For the United Kingdom comments below, an initial agency response has been provided and can be found in the list of documents specific to the project in the GEF Portal.

? This is a lot of money for creating an 'enabling environment' and 'commercialisation of genetic resources' from a Forest Park. Will there be safeguards or vetting in place? If the project is a Payments for Ecosystem Services scheme to help an otherwise underfunded protected area, that's acceptable, but this seems like it could have unintended consequences.

? Also, the project's COVID19 screening. It seems like UNEP projects used similar language across two projects (this one and one in Madagascar) to explain why countries can handle COVID ('long experience of pandemic disease management?'). Is this an accurate assessment of the situation?

When compare to standard ABS project to put in place the enabling conditions for ABS regime, we concur with the reviewer the project deviate from the common projects amount. However, it is good to note that this project is innovating by taking a step further to pilot the ABS regime to be designed. Furthermore, the pilot testing is oriented toward supporting women ABS enterprise which is a positive shift in West Africa where the gender balanced and women empowerment for economic opportunities is always a challenge.

As indicated in the Safeguard Risks Identification form (SRIF), **Safeguard Standard 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management, it is recognized that** 'The enabling condition for exploitation of biodiversity resources may cause pressure on biodiversity and risks of overexploitation. This will be mitigated by rigorous application of the ABS regime of the country to be supported in component 1 and the capacity building and awareness raising, communities management of natural resources activities envisaged in the project'. These measures will be based on the action recommended by the UNEP Safeguard Unit which requested to ?

xxxxx

Carry out further assessments (e.g., site visits, experts' inputs, consult affected communities, etc.)

The enabling condition for exploitation of biodiversity resources may cause pressure on biodiversity and risks of overexploitation. This will be mitigated by rigorous application of the ABS regime of the country to be supported in component 1 and the capacity building and awareness raising, communities management of natural resources activities envisaged in the project.

As for the COVID 19 screening the UNEP language is based on explanation provided by Africa Health Officials as indicated by The head of the Africa Centres for Disease Control (CDC) Dr Dr Nkengasong who noted that 'the emphasis on community-driven initiatives, and experience in contact-tracing from fighting diseases like Ebola, had helped countries to tackle the virus'[1].

Responses to GEFSEC comments

Comment	Response
<p>6. Considering the project also includes with a significant investment the Biodiversity objective BD 2-7 (Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate), we can expect to obtain corresponding Global Environmental Benefits reported in terms of hectares under improved management/practices. Please consider adding the appropriate result in the Core Indicator worksheet.</p>	<p>12,360 ha of protected area will adopt improved management practices, therefore contributing to the BD2-7: Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate), as highlighted by the review. These have been reported in the Core Indicator worksheet</p>
<p>The objective 2.7 of the BD Focal area is now dropped as the Nyambai Forest (202ha) do not have Protected area status. However, the use of the site as pilot for ABS measures implementation will help to applied good landscape management in that area, thereby generating GEB. 12,360</p>	<p>Yes it will.</p> <p>A specific case initiative has been developed for the purpose of enhancing management here. It is Case 6: Development of ABS-compliant collaborative forest management practices in the Nyambai Forest Park Complex and the Kiang West National Park.</p> <p><i>Note:</i> the 92,549ha may be referring to all protected areas in The Gambia as a whole. Recent statistics obtained from the DPWM report that for the year 2021, the total land area of protected areas is: 94,709ha.</p>
<p>Additional source of co-financing has now been identified which increase the ratio to more than 1:3. The national executing partners committed to put extra efforts during PPG to bring more cofinancing particularly from private sector and other donors.</p>	<p>Total co-financing pledged in support of the current project stands at USD 13,448,357, with the GEF investment representing 22.9%, or a ration of more that 1:4</p>

<p>Section 4 on Private sector is now amended. Current few private sector institution engaged in Natural Resources Management are Tourism oriented and no recorded entities dealing with ABS issues directly. The PPG process will be used to conduct a deep assessment and possible ones or those potentially interested in engaging in the ABS issues if probably incentives are available.</p>	<p>There are few private sector actors working with or on genetic resources and traditional knowledge in the Gambia. During the project preparation, one of the most influential of these (the Medical Research Council Unit of The Gambia at the London School of Hygiene and Tropical Medicine) was engaged. They have been taking active part in all consultations associated with project development.</p> <p>The MRCG at LSHTM is providing co-financing support of USD 398,357 to support the following:</p> <ul style="list-style-type: none"> ●Storage and management of genetic materials (Biobanking) for samples collected during the project implementation; ●Providing access to their fully-equipped genomics platform for genetic studies associated with soil microbiota at the project locations; ●Training on research methods and associated expenses. <p>Others engaged are The Gambia Beekeepers? Association. Others will be engaged during project implementation.</p>
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Response to STAP comments

Source	Comment	Response
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<p>STAP Overall Assessment and Rating</p>	<p>This is an ambitious project, with considerable potential, but which needs considerable strengthening during PPG phase. The problem statement is comprehensive, but the argument as to how this intervention will address these problems is not clearly made at any point.</p> <p>It appears very unlikely the project can achieve the stated global environmental benefits (GEBs) over the project timeframe, although there is a valid argument to be made that it is an important step toward achieving them (this, however, needs to be clearly articulated).</p> <p>A number of elements of the project remain vague (e.g. knowledge management), and the elements of the components (particularly 2 and 3) need much more careful development, in order to include all necessary and sufficient outputs/outcomes (and remove unrelated ones, such as invasive alien species).</p> <p>The graphic TOC is very welcome - however, it needs considerable further development to clearly convey the logical steps toward achieving the project's goals.</p>	<p>The project intervention logic has been developed in Section 3.4.</p> <p>Together with the key assumptions and the project theory of change, this intervention logic demonstrates the casual link between the project thematic objectives, investment priorities, specific objectives, result indicators, planned type of actions and output indicators.</p> <p>The direct GEB to be reaped from project implementation has to do with implementing the 6th ABS case initiative ? the implementation of ABS-compliant collaborative forest management in the Nyambai Forest Pak Complex and the Kiang West National Park. Other benefits will be indirect, such as the valorisation and governance on biological and genetic resources management nationwide (see Section 3.1).</p> <p>Knowledge management has been given specific attention in Section 3.10.</p> <p>Clarification of concepts have been made in Components 2 and 3; and the dimension of invasive species has been removed.</p> <p>The TOC has been reworked to provide a comprehensive description and illustration of how and why a desired change is expected to happen within the context of ABS in The Gambia. The current formulation presents a sound and evidence-based strategy, with assumptions, threats and barriers clearly analysed and spelled out.</p>
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<p>Is the objective clearly defined, and consistently related to the problem diagnosis?</p>	<p>This is a clear objective, but it is not clearly related to the problem diagnosis, which is a rich description of the many interrelated threats facing biodiversity in The Gambia, including habitat loss, pollution and uncontrolled wildfire, driven by a complex of deeper drivers. It is not made clear how these broad biodiversity threats will be addressed</p> <p>by establishing an ABS regime. The project itself is aimed only at establishing the enabling environment and some pilot efforts - it does not</p> <p>appear feasible to actually deliver GEBs in the time frame involved (which would involve successful commercialisation delivering returns to local communities who in turn are incentivised/capacitated to conserve the local environment better). This should be made clear in the quantification of GEBs.</p> <p>Achieving the objectives of this project is arguably an important step laying the basis for generation of GEBs - however, the reasoning and logic through which an ABS regime can generate benefits for conservation, and the pathway to doing so over a longer timeframe, should both be articulated here.</p>	<p>The objectives have been redefined to align with the strategies of each of the components. These include to: (i) Provide technical support for developing ABS regulatory and institutional frameworks for The Gambia; (ii) Undertake piloting of administrative or policy measures to implement community protocols, bioprospecting, and/or biotechnology research; and (iii) Promote ABS-compliant management of protected areas that support improvements in the conditions of biological and genetic resources for the Nyambai Forest Complex and the Kiang West National Park.</p> <p>A comprehensive section of the project rationale and logic have been developed and presented in Section 3.1 and 3.4 respectively. These articulate the reasoning and logic through which an ABS regime can generate benefits for conservation within the context of the current project.</p>
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<p>A description of the expected short-term and medium-term effects of an intervention.</p> <p>Do the planned outcomes encompass important adaptation benefits?</p>	<p>These are clear, noting that the project objectives do not encompass actually delivering improved on the ground conservation outcomes.</p> <p>The project does set out GEBs, corresponding to improved management of the NP that is the target of the pilot ABS - GEBs are quantified in the PIF, but the mechanisms to actually achieve on-the- ground improved management are not included within the project scope (see objective, above).</p>	<p>The project objective has been revised to include a last one that encompass actually delivering improved on the ground conservation outcomes. This last objective is buttressed by a case to be applied on the ground on the implementation of ABS-compliant collaborative forest management initiatives in the case studies. This will lead to the direct enjoyment of GEBs though project investments</p>
<p>Is the problem statement well-defined?</p>	<p>Yes, the problem sets out with considerable detail an array of threats to biodiversity in The Gambia. However, it does not make any clear logical link between these threats and an ABS regime, or clarify how establishing this regime will reduce these threats.</p>	
<p>Does it provide a feasible basis for quantifying the project's benefits?</p>	<p>Not really.</p>	<p>Six case applications for ABS have been included in the project design. Each of these provide a direct basis for quantifying benefits in biodiscovery, capacity building, changes in the management of biological and genetic resources, and the presence or absence of physical and digital infrastructure for the implementation of ABS in The Gambia (see Component 2)</p>

<p>Are the lessons learned from similar or related past GEF and non-GEF interventions described; and</p>	<p>No ? the project mentions many related projects and says lessons will be learned from them, but it would be good to see specific lessons learned from other ?</p> <p>How did these lessons inform the design of this project?</p>	<p>Lessons learned have been incorporated into the project document (see Section 2.6).</p> <p>Table 9 shows how these lessons are used to inform the design of the current project.</p>
<p>3) The proposed alternative scenario with a brief description of expected outcomes and components of the project</p>	<p>A graphic TOC is included, which is good to see, but the TOC here is really just a rearranged logframe, and needs further work in order to set out the sequence of logical steps to achieving the objective ?</p>	<p>The TOC has benefitted from substantial reworking (see Figure 7)</p>

What is the sequence of events (required or expected) that will lead to the desired outcomes?

What is the set of linked activities, outputs, and outcomes to address the project's objectives?

Component 2, which aims at valorization, value-adding and commercialization of the genetic resources of Nyambai Forest Park, is very unclear in its scope: there are a lot of ambiguities here and lack of clarity about what exactly the outputs and outcomes are here. It is not clear what is meant by valorisation: is this economic valuation, or assessment of the current values/benefits of the PA to stakeholders? It is also not clear how understanding current values of the biodiversity in the PA will necessarily identify opportunities for value-adding or commercialization - this requires knowledge on the market and characteristics of demand. This component also appears to be talking at times about straightforward harvesting, value-adding and sale of wild resources by local communities rather than understanding what genetic resources may be of interest to market players. The complexities of identifying relevant traditional knowledge associated with genetic resources and understanding what potential market values the genetic resources and associated traditional knowledge may have do not appear to be recognised here - it is not a straightforward process of cataloguing what is out there.

In Component 3 (enhancing ABS partnerships in the Park), again, this is likely to be a long and complex process. For instance, where traditional knowledge is involved the legitimate holders of that knowledge will need to be identified

Component two has been developed and the expected deliveries of this component detailed clearly.

Valorization here refers to the process of creating value from knowledge by making knowledge suitable and/or available for economic and/or societal use and translating that knowledge into competitive products, services, processes and entrepreneurial activity. Think in this project the process of converting forms of traditional knowledge or knowledge on genetic resources to forms that can benefit local communities and indigenous populations economically.

In Component 3, the partnerships have already been identified and engaged during the project preparation. In The Gambia, there is a national body (The Gambia Traditional Healers Association - TRAHASS) that have members in almost all local communities of the country. As a preliminary step, the project will work with local communities through their representatives in TRAHASS in the identification of traditional knowledge. The benefits will accrue to the community as a whole (and not to the members only).

Scientific actors are engaged in this component. For example:

(i) The Medical Research Council of The Gambia at the London School of Hygiene and Tropical Medicine will be using 2 research projects to pioneer the implementation of ABS agreements; _

(ii) The University of The Gambia will be taking part in bioprospecting for potential antimicrobial agents extracted from Gambian traditional medicinal plants

(iii) University of The Gambia in collaboration with TRAHASS will be undertaking biodiscovery and certification of at least 25 plant-based bioactive compounds in The Gambian traditional medicine landscape; and partnerships to support value chain development within ABS frameworks.

<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p>	<p>The valorisation step and the link from it to successful partnerships includes a lot of assumptions - for instance, that there will be partners who want to form partnerships around the specified resources, that ownership of the resources can be determined and is not subject to contestation, ?</p>	<p>The development of these partnerships has been properly engaged during the project preparation phase, leading to plans for collaboration in the identification of TK, bioprospecting, biodiscovery, non-commercial research, etc. (see Component 2 and 3)</p>
<p>Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?</p>	<p>No, this is not clear.</p>	<p>Some potential changing conditions are discussed as risks to the project. Some of the most important of these conditions that may occur are political instability associated with the election cycle in The Gambia, and disruptions associated with the ongoing COVID-19 pandemic. These have been discussed in detail in Section 3.5</p>

<p>GEF trust fund: will the proposed section activities lead to the delivery of global environmental benefits?</p>	<p>While a plausible argument can be constructed that this project will lay the necessary groundwork for achievement of GEBs at a later stage through incentivizing biodiversity conservation, it appears very unlikely to actually achieve these GEBs over the project lifetime.</p> <p>The proposal suggests the area of Nyambai NP will be land under improved management due to the pilot partnerships around use of genetic resources. However, to get to the point where all the IP issues have been addressed, an agreement has been negotiated, the agreement is delivering local benefits, and those benefits are actually improving on-ground management, is likely to be a very long process, judging by global experiences (and a very uncertain one).</p> <p>It is entirely reasonable that for a project aimed at establishing a fundamental policy framework, like this, that quantifiable biodiversity benefits cannot be established. That is fine, but there is still the need to articulate how - through what logical pathways - this project is (eventually) expected to deliver biodiversity benefits. This is the job of a good TOC.</p>	<p>Yes the project does lay a groundwork for the achievement of GEBs in the long-term, and these are discussed under the sustainability of the project.</p> <p>Within the life of the project, enhanced management of an expanded size of protected area will contribute to GEBs. See Outcome 3.1 and the case application of ABS through ?Pilot 6: Development of ABS?compliant collaborative forest management agreements for communities around the Nyambai Forest Park Complex and the Kiang West National Park.?</p>
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<p>Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?</p>	<p>No, not over the project duration. There is definitely an argument that this project is laying an essential basis for GEBs further down the track, but a realistic TOC showing all the key steps that are necessary to reach this goal, and clarifying what this project is likely to be able to achieve over this timeframe, is an important step in planning.</p>	<p>Over the project duration, there will be enhanced protected area management activities that contribute to GEBs. See Outcome 3.1 and the case application of ABS through ?Pilot 6: Development of ABS?compliant collaborative forest management agreements for communities around the Nyambai Forest Park Complex and the Kiang West National Park.?</p>
<p>Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation?</p>	<p>No.</p>	<p>Indicators have been developed in the Results Framework of the project (Appendix 4). One of the indicators potentially measuring a GEB attribute is the ?Number of protected areas implementing ABS-compliant protected area management?</p>
<p>What activities will be implemented to increase the project?s resilience to climate change?</p>	<p>None are identified.</p>	<p>Activities have been developed for each Output in the project Workplan and Timetable (Appendix 5)</p>
<p>Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?</p>	<p>This appears quite comprehensive, although the local communities in and around the Forest Park should also be engaged.</p>	<p>Local communities, including Village Development Committees and Community Service Organizations have been extensively consulted during the project development phase, and their role in the project implementation remains vital. See Section 5: Stakeholder Participation</p>
<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project?s control?</p>	<p>The list of risks are a good start, but there are others such as the risk no genetic resources of value to commercial actors will be identified, that</p>	<p>The list of risks have been revised and expanded to encompass all relevant risks. The risk of ?No genetic resources of commercial value are identified? has also been added as one of the potential risks.</p>

<p>Are there social and environmental risks which could affect the project?</p>	<p>Biopiracy occurs, that conflicts over IP or benefit- sharing occur among/within communities, that</p>	<p>Yes there are. For example:</p> <p>Private companies utilizing and commercializing the cultural heritage of TK holders by patenting traditional remedies from the wild and selling them at a vast profit, allowing little or none of that profit to go back to the country or indigenous and local communities of origin.</p> <p>Local communities and holders of traditional knowledge do not agree to share information and grant access to their genetic resources.</p>
<p>For climate risk, and climate resilience measures:</p> <p>?How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately?</p> <p>?Has the sensitivity to climate change, and its impacts, been assessed?</p> <p>?Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with?</p> <p>?What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?</p>		<p>Climate change is one of the risks that has been identified as worthy of a more comprehensive exploration and analysis in the project document. The manifestation of climate change is examined, and its implications on biodiversity and genetic resources (Section 3.5).</p> <p>However, the institutional framework for addressing climate risks and resilience enhancement measures is outside of the competence of the Department of Parks and Wildlife Management (the Executing Agency of this project).</p> <p>Nonetheless, the recognition is made that the enhanced management and conservation of genetic resources contributes to the resilience of communities and the country as a whole to the adverse effects of climate change.</p>

Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?	No. There is one specific lesson mentioned, but it appears in the Knowledge Management section, and doesn't seem to bear any relation to the activities/outputs/outcomes in the main proposal.	Lessons learned have been incorporated into the project document (see Section 2.6). Table 9 shows how these lessons are used to inform the design of the current project.
Is there adequate recognition of previous projects and the learning derived from them?	No, this is quite weak.	
Have specific lessons learned from previous projects been cited?	See above.	
How have these lessons informed the project's formulation?	See above.	
Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?	This is not clear.	
What overall approach will be taken, and what knowledge management indicators and metrics will be used?	There are so many forms of knowledge dissemination mentioned in this section it is hard to gain a clear sense of what is actually planned in this project, and how it will be managed. Only the last paragraph seems to be actually about knowledge management in the project, and it is quite vague.	Section 3.10 comprehensively described the information dissemination and knowledge management approach of the project. It also includes a knowledge management plan (see Table 12)
What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?	These appear to remain vague at this stage.	

[1] Coronavirus: Health chief hails Africa's fight against Covid-19, <https://www.bbc.com/news/world-africa-54248507>.

**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing status
in the table below:**

<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
National Consultants	50000	50000	0
International Consultants	30000	30000	0
Travel on Official business	25,000	25,000	0
Meetings and Stakeholders consultations	30,000	30,000	0
Supplies	1986	1986	0
Total	136.986	136.986	0

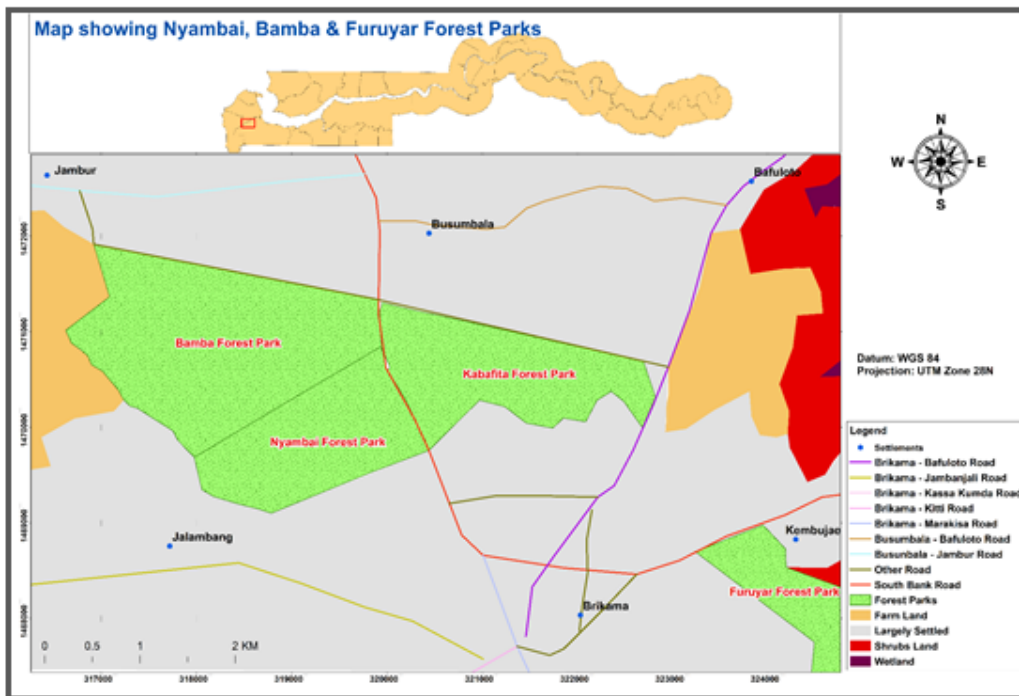
Key products from the PPG include:

- CEO Endorsement document including relevant annexes
- Project document in UNEP format
- Meetings with stakeholders and partners: Minutes are attached as Annex
- Thematic Studies Reports: Attached as annexes

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

The Geo-Coordinates are: 13.2994° N, 16.6703° W



THE NYAMBAI FOREST COMPLEX, CONSTITUTING THE NYAMBAI FOREST PARK, BAMBA FOREST PARK AND THE KABAFITA FOREST PARK.

ANNEX E: Project Budget Table

Please attach a project budget table.

Please see the annexed project budget template.

Project title: Effective Implementation of Access and Benefit Sharing of the Nagoya Protocol and Integration into Planned co-management Arrangements in the Nyambai Forest Park of the Gambia												
Appendix A: Indicative Project Budget Template												
Expenditure Category	Detailed Description	Component (US\$eq.)						Sub- Total	M & E	P M C	Total (US\$eq.)	Responsible Entity (Executing Entity receiving funds from the GEF)
		Component 1		Component 2		Component 3						
		Outcome 1.1	Outcome 1.2	Outcome 2.1	Outcome 2.2	Outcome 3.1	Outcome 3.2					
Works	Programming and institutional alignment established of selected line government agencies on policy application of ABS	93,000						93,000			93,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Policy, legal, and regulatory frameworks governing ABS drafted and approved by the legislature, including the appointment of a National Focal Point and ABS Competent National Authority	70,000						70,000			70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with background support from Consultants and political support of the Ministry of Environment
	Developed and adopted the national guidelines on ABS, reflecting intellectual property rights, traditional knowledge, gender, and benefit-sharing contracts, to complement the ABS framework and facilitate implementation by all relevant actors.	50,000						50,000			50,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Awareness-raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, society, communicators, and the general public.		160,000					160,000			160,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Interactive training modules, including negotiation skills designed and directed for specific target groups to facilitate access to genetic resources, based on the national law and the Nagoya Protocol. Special attention will be put on strengthening of indigenous research and development capabilities		60,000					60,000			60,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Online information system on ABS developed (including information on species) and operational in collaboration with all relevant stakeholders		80,000								80,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Valorisation of biodiversity of native genetic resources and associated traditional knowledge in Nyambai Forest Park, supported by the project to comply with The Gambian ABS national legislation and Nagoya Protocol throughout the value chain.			700,000							700,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Benefits derived from the use of genetic resources and traditional knowledge in the Nyambai Forest Park, are identified, classified, and assessed to strengthen the expertise and capacity of national authorities, including setting the basis for future negotiations			173,463							173,463	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Partnership management mechanisms established and piloted in Nyambai Forest Park to support and regulate commercial and non-commercial bioprospecting opportunities through a national partnership platform					60,000					60,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	National inventory and pre- feasibility for bioprospecting projects established, leading to a new collaboration and ABS contracts (PIC, MAT) in Nyambai Forest Park					118,000					118,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
	Developed a provider-user model agreement mechanism in high biodiversity Nyambai Forest Park to test proposed national ABS co-management regulations of biodiversity resources					70,000					70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution with technical support from consultants
Goods	Computers, printers, data show, maintenance etc							0		20,000	20,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Bioprospecting Equipments			200,000				200,000		5,000	205,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
Vehicles	Vehicle for safe transportation of plants materials to research centres					40,000					40,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
Grants/ Sub- grants								40,000			40,000	
Revolving funds/ Seed funds / Equity								0			0	
Sub-contract to executing partner/ entity								0			0	
Contractual Services – Individual								0			0	
Contractual Services with MRC, DPWM and other partners on bioprospecting	Commercial and non- commercial utilization of native genetic resources and benefit- sharing of selected genetic resources are researched, legislated, and included in the test for The Gambian national ABS monitoring system			300,000				0			0	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
Local Consultants	Institutional and value chains Gender Mainstreaming Specialist	70,000									70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
Salary and benefits / Staff costs								70,000			70,000	
	Project ABS Lead Technical Expert (International)					188,000					188,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Project M/E officer (month 1-48)	50,000		50,000				288,000		70,000	70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Communication and awareness raising consultant	15,000		25,000		4,000					44,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution

	Project Financial Officer (month 1-48)									70,000	70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
									0		0	
Trainings, Workshops, Meetings									0		0	
	Stakeholder gender-responsive training sessions on ABS	50,000		20,000					70,000		70,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Development of communication toolkits and radio programs on ABS	50,000							50,000		50,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Meetings/Conferences	2,000							2,000		2,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
	Steering Committee								50,000		50,000	Department of Parks and Wildlife Management (DPWM) as the National ABS Focal Institution
									0		0	
									0		0	
Travel									0	21,423	21,423	
									0		0	
Office Supplies									0	20,000	20,000	
									0		0	
Other Operating Costs									0		0	
	Terminal Evaluation								0	40,000	40,000	LINEP Evaluation Office
	Mid-term Review/evaluation									30,000	30,000	LINEPEvaluation Office or DPWM depending on the type of the MTR
	Indicators Monitoring									20,000	20,000	DPWM
	Audit									10,000	10,000	DPWM
Grand Total		450,000.00	300,000.00	1,468,463.00	0.00	500,000.00	0.00	1,217,000.00	210,000.00	146,423.00	3,074,886.00	

In exceptional cases where GEF Agency receives funds for execution, Terms of Reference for specific activities are reviewed by GEF Secretariat

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencies is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).