



**REQUEST FOR MSP APPROVAL
ONE-STEP PROCEDURE
TYPE OF TRUST FUND: GEF TRUST FUND**

PART I: PROJECT INFORMATION

Project Title: Enhancing Biodiversity Protection through Strengthened Monitoring, Enforcement and Uptake of Environmental Regulations in Guyana's Gold Mining Sector			
Country(ies):	Guyana	GEF Project ID: ¹	5846
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5384
Other Executing Partner(s):	Environmental Protection Agency	Submission Date:	21 May 2014
GEF Focal Area (s):	Biodiversity	Project Duration(Months)	36
Name of Parent Programme (if applicable):		Agency Fee (\$):	76,347
<ul style="list-style-type: none"> ➤ For SFM/REDD+ <input type="checkbox"/> ➤ For SGP <input type="checkbox"/> 			

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
BD2	Outcome 2.1- Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	Output 1: Policies and regulatory frameworks (number) for production sectors.	GEFTF	733,929.68	3,215,000
Sub-total				733,929.68	3,215,000
Project management cost			GEFTF	69,723.32	323,617
Total project costs				803,653	3,538,617

*APPLYING THE STAR FLEXIBILITY MECHANISM OF GEF-5, RESOURCES FOR A TOTAL OF US\$620,000 (\$566,210 MSP GRANT + \$53,790 AGENCY FEES) OF LD STAR ALLOCATION ARE BEING CHANNLED TO THE BD FOCAL AREA, INCLUSIVE OF THE CORRESPONDING CONTRIBUTION TO PROJECT MANAGEMENT COST. THUS, FOR THE MSP A TOTAL AMOUNT OF\$ 803,653 OF BD RESOURCES ARE BEING ALLOCATED. AMOUNTS INCLUDING FEES ARE SHOWN IN TABLE D.

B. PROJECT FRAMEWORK

Project Objective: Strengthen monitoring and implementation of biodiversity-friendly practices in Guyana's gold mining sector to reduce biodiversity loss and maintain ecosystem functionality for the benefit of all Guyanese.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co-financing (\$)
1. Strengthened monitoring and enforcement of environmental regulations and codes of practice	TA	Enabling environment for monitoring and enforcement of mining-related environmental regulations and codes of practice strengthened, as measured by: <ul style="list-style-type: none"> • Increase in number of compliance and enforcement actions taken by EPA (such as 	Output 1.1: Strengthened EPA facilitates oversight of mining operations and increases BD protection through greater capacity of staff to carry out monitoring and enforcement and prioritize actions Output 1.2: Inter-institutional coordination	GEFTF	403,682.68	2,565,000

¹ Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area/LDCF/SCCF Results Framework](#) when completing Table A.

		<p>issuance of enforcement notices, prohibition notices, laying of charges or mediation proceedings) by at least 50% over 2013/2014 baseline (target of at least 7 per year)</p> <ul style="list-style-type: none"> • Improved coordination capacity among institutions and non-state actors for enforcement of mining-related environmental practices as measured by project surveys at project outset and completion (target to be determined during first 6 months of project) • At least 75% of total area identified as high priority for monitoring and enforcement³ is being monitored using satellite tracking 	<p>mechanisms and a multi-stakeholder monitoring network enhance collaboration in monitoring and enforcement</p> <p>Output 1.3: GGMC and GDMA officers support mainstreaming of BD in mining sector through increased enforcement of regulations and codes of practice and strengthened capacity on BD</p> <p>Output 1.4: Satellite tracking of mining activities, and analysis and reporting of findings from satellite images by GGMC and EPA increase oversight of non-compliance with regulations and illegal mining</p>			
2. Capacity building for BD conservation in gold mining	TA	<p>Enhanced capacities for uptake of mining practices that promote biodiversity conservation, as measured by:</p> <ul style="list-style-type: none"> • At least 5 courses implemented through Mining School that adequately incorporate BD considerations. • An increase of at least 50% over the baseline of small and medium scale miners in areas identified as high priority for monitoring and enforcement comply with the environmental regulations and codes of practice (<i>the baseline of high priority areas will be</i> 	<p>Output 2.1: Mining School programmes integrate biodiversity considerations</p> <p>Output 2.2: User- friendly material and capacity building facilitate uptake of BD-friendly practices by miners</p>	GEFTF	330,247	650,000

³ The high priority areas for monitoring and enforcement will be identified as part of Output 1.1.

		<i>established at project outset).</i> <ul style="list-style-type: none"> 75% of small and medium-scale gold miners who participate in project seminars report an increased awareness of mining-related regulations and biodiversity issues as measured by surveys and UNDP Capacity Scorecard. 				
Subtotal					733,929.68	3,215,000
Project management Cost (PMC) ⁴					69,723.32	323,617
Total project costs					803,653	3,538,617

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
National government	Environmental Protection Agency	Cash	599,265
National government	Ministry of Natural Resources and the Environment (Guyana Geology and Mines Commission)	Cash	1,951,352
National Government	Ministry of Natural Resources and the Environment	Cash	600,000
GEF Agency	United Nations Development Programme Country Office	Cash	88,000
National government	Guyana Forestry Commission	In-kind	150,000
CSO (Civil Society Organization)	World Wildlife Fund	Cash	150,000
Total Co-financing			3,538,617

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNDP	GEF TF	BD	Guyana	237,443	22,557	260,000
UNDP	GEF TF	LD	Guyana	566,210	53,790	620,000
Total Grant Resources				803,653	76,347	880,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table.

² Indicate fees related to this project.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

⁴ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	80,000		80,000
National/Local Consultants	116,200	323,617	439,817

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1 Project Description: Briefly describe the project, including: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF and co-financing; 5) global environmental benefits (GEFTF, NPIF) and adaptation benefits (LDCF/SCCF); 6) innovativeness, sustainability and potential for scaling up.

1) The global environmental problems, root causes and barriers that need to be addressed

1. Guyana is a small but extremely biodiverse country with a total area of 215,000 km². It boasts an estimated 8,000 plant species, with about 8,500 of these having been identified, as well as a recorded 1,815 species of fish, amphibians, birds, reptiles and mammals. Many of the large, relatively untouched tracts of forest have yet to be surveyed, which means that the levels of biodiversity (BD) are likely to be significantly higher than known at present. High levels of local and regional endemism are present; for example, it is believed that 5% of the flora species in Guyana are endemic. The Guyana Highlands constitute one of the four largest remaining contiguous and large intact forested ecoregions of the world, with an estimated 50% endemism rate. Many of these species have economic value to the country's inhabitants, as sources of timber, non-timber forest products, and for ecotourism, among others. While approximately 87% of the country is still covered by natural forest, representing an estimated 18.378 million ha, and while deforestation rates remain low, the rates have increased noticeably since the 1990s.

2. The main driver of deforestation and forest degradation and associated biodiversity loss in Guyana is mining. In the October 2010-December 2011 period, mining and mining infrastructure were responsible for 94% of recorded deforestation, as well as 97% of forest degradation. It is estimated that 40,000 ha of forested areas have been disturbed by mining, without taking into consideration downstream impacts on water bodies and impacts on local communities. The root causes of this threat to BD relate to Guyana's dependence on its natural resource base to meet its development needs and its foreign debt burden.

3. At the moment, all gold mining activities are being carried out by small and medium-scale miners, but the impacts are widespread and significant as a result of the large number of uncontrolled operations. Gold mining has increased significantly over the past 15 years. In addition to the increasing number of prospecting and mining licenses being issued, there are believed to be high levels of illegal mining. Some miners are carrying out their operations in previously unmined and in many cases virgin forest areas. Others are re-entering previously mined areas since the methods typically used result in relatively low recovery rates; this undermines natural regeneration and negatively affects BD as well.

4. Within the mining industry, gold mining is having the largest impact on forests because of the large number of operations and the deleterious practices frequently employed in poorly planned and managed operations. Unnecessary digging associated with lack of prospecting, the use of heavy machinery such as excavators, inappropriate handling of mercury, and minimal onsite restoration are some of these practices. Gold mining is leading to a number of serious environmental impacts affecting biodiversity, surface and groundwater, the soil, and carbon emissions, as described below:

- Mercury contamination of water bodies and soil, with mercury entering the environment through the use of mercury in the amalgamation process;
- Negative impacts on biodiversity from mercury and other chemical contamination. For example, carnivorous fish have been shown to have elevated concentrations of mercury as a result of its bioaccumulative nature. Pollution of water bodies from mercury, cyanide and other chemical wastes can lead to loss and reduction of aquatic biodiversity in inland waters. This is a particular concern given the high levels of aquatic biodiversity and endemism believed to be present in mining areas;
- Contamination of local rivers⁵ from other chemicals used or generated through mining activities, such as sulfuric oxide and metal oxides. Cyanide, a very toxic compound, is used in gold mining and can lead to poisoning in the event of spills;
- Turbidity in streams through the untreated discharge of the slurry from the slurry box from hydraulic mining (land dredging) activities, which runs into rivers and creeks. Settling ponds are frequently not used. Turbidity and siltation/sedimentation downstream of mined areas can negatively affect aquatic ecosystems as well as water supply and quality.
- Deforestation leading to destruction of habitat, directly affecting floral and faunal biodiversity. Removal of forest cover, vegetation, and topsoil undermines soil quality and forest regeneration, especially since land reclamation actions are extremely limited. Deforestation can also lead to reduced infiltration of rainwater in the ground and higher risks of flash flooding and erosion.
- Modification of river channels/ water courses from tailing heaps, one of the most significant environmental impacts of mining operations. Large volumes of tailings can alter river channels in terms of quality and river flow, create artificial sandbars and sandbanks, and lead to the accumulation of large piles of mud that can affect the river surface. This can have serious impacts on biodiversity.
- Loss of biodiversity in mining camps due to increased human-animal conflicts and hunting of fauna to supply miners with a source of food.
- Land degradation/ increased erosion- deforestation can contribute to increased erosion of mercury-laden soils into rivers, which can lead to mercury exposure and poisoning as well as river turbidity. Removal of top soil for mining operations can also lead to high levels of erosion and increased stream turbidity.
- Loss or degradation of wetlands, which act as pollution filters and provide key habitat for aquatic BD, through direct habitat elimination, or by altering upstream watersheds and increasing sedimentation.
- Noise pollution from mining activities, which drives away species, such as large carnivores, from mining areas.
- Reduced air quality as a result of dust from mining activities and associated roads.
- Increased carbon emissions: the impacts of uncontrolled mining on carbon stocks are believed to be comparable to the degradation of high forest to scrub/savannah, that is, approximately 200 tonnes of carbon per hectare (Cedergren, 2009).

5. These impacts are having negative effects on the high levels of biodiversity found within Guyana's productive landscapes.

6. The long-term solution is to establish the institutional and individual capacity for implementation of gold mining practices that support conservation of the globally important levels of BD in Guyana. This capacity building would be combined with a strong regulatory and planning framework that takes into consideration BD aspects, and effective monitoring and enforcement of this framework to maximize compliance. The long-term solution also includes sufficient financial resources to support uptake of BD-friendly technologies and practices and monitoring of the impacts

⁵ For example, contamination levels have been found to be high in the Upper Mazaruni River.

of BD on mining. The baseline actions currently being undertaken will contribute to the attainment of this long-term solution but will be insufficient due to several key barriers that persist. These include:

a) Non-compliance with mining-related environmental regulations and illegal mining:

7. Despite the strengthening of the environmental regulations for mining through the adoption of the 2005 Mining Regulations and the codes of practice, non-compliance with the regulatory framework and illegal mining⁶ are significant problems. This is made all the more difficult by the fact that gold mining primarily takes place in isolated, heavily forested areas, which is associated with high costs to monitor these areas and incidence of bribes given to government personnel to avoid reporting of infractions. The influx of temporary miners from Brazil without knowledge of Guyanese regulations is adding to the problem.

b) Insufficient personnel and institutional capacity to monitor and enforce the regulatory framework and reduce the impacts of mining on biodiversity:

8. GGMC has insufficient mines officers to carry out field inspections to monitor activities and enforce the mining regulations, especially given the large number of small- and medium-scale prospecting licenses and mining concessions, the difficulty of access of many of the mining operations due to poor road conditions, and the itinerant nature of the operations. Despite being the only agency with a clear mandate across sectors on environmental issues (as opposed to the sector-specific focus of institutions such as GGMC), the EPA has thus far played a limited role in overseeing small- and medium-scale mining operations and has very little field presence. EPA does not currently have any officers who proactively oversee enforcement of regulations among small- and medium-scale mining operations in the field. It has the authority to issue enforcement and prohibition notices and can request injunction relief, but does not have power to prosecute. When EPA officers do go out in the field it is largely in reaction to contamination reports. It has therefore not been able to fully carry out its function of monitoring and enforcing environmental regulations under the Environmental Protection Act. Greater oversight by EPA would be useful to provide additional checks and balances, as GGMC is responsible both for the promotion of mineral exploration and for monitoring compliance with environmental regulations.

9. Inter-institutional mechanisms to work together on monitoring and enforcement have not been sufficiently developed or maintained. Overall, there is limited systematic communication, coordination and consultation among GGMC and other agencies, such as the EPA, Guyana Forestry Commission and Guyana Lands and Survey Commission, to share relevant information related to enforcement and to carry out integrated planning of activities.

c) Insufficient capacity to implement the environmental regulations and codes of practice among miners:

10. While mining environmental regulations were adopted in 2005 and some dissemination of these regulations has occurred, this has not been sufficient. User-friendly documents to distill the mandatory requirements of the mining regulations and codes of practice have not been produced in English or any other language (such as Portuguese or Amerindian languages) to educate miners on the policies in place and how to abide by them. Miners have also received relatively little training on reclamation. The Mining School has only been recently established with a few short-term courses that have been offered since January 2014 on prospecting, but ongoing training opportunities on environmental or biodiversity issues have not been available to miners.

2) The baseline scenario and any associated baseline project

⁶ This refers to mining being carried out without a license to do so having been granted to the miner for the area being mined. Non-compliance with the regulatory framework includes failure to comply with environmental and other provisions, as well as continuing to mine when a stop-order has been issued.

11. The total value of the expected investments under the baseline is USD 3,065,000. Under the baseline, small and medium-scale gold mining activities will continue to be carried out with relatively high levels of non-compliance with existing environmental regulations and codes of practice, due in part to insufficient oversight capacity and understanding of the regulations in place. EPA will play a limited role in monitoring this scale of mining activities, focused primarily on investigating incidents once complaints have been made. GGMC will continue to carry out monitoring and enforcement actions but with insufficient capacity to keep up with the pace of gold mining expansion among small and medium-scale miners. Satellite imagery will not be used to the extent possible as a tool to monitor illegal mining. Furthermore, inter-institutional coordination and collaboration on monitoring and enforcement will be restricted, and in many cases absent. Miners will have inadequate capacity to enforce the regulations and to minimize impacts on BD, while the Mining School will not provide adequate training to participants on BD aspects. The cumulative impacts of the many small and medium-scale mining operations will lead to negative environmental impacts, including contamination of rivers in the interior, and the clearing of lands without reclamation, eliminating habitat for the high levels of biodiversity present in Guyana's hinterland and undermining the regrowth of forests. Areas with high biodiversity value will be increasingly degraded or destroyed, leading to loss of biodiversity, ecological integrity and functionality. The level of biodiversity loss will not be fully understood as full biological inventories have not been carried out for many of the remote forest areas in which mining activities are taking place.

3) The proposed alternative scenario

12. The government of Guyana, in partnership with UNDP CO, is interested in addressing pressing issues related to the impact of gold mining activities on biodiversity. In order to maximize impact, the MSP will focus on two main elements: strengthening monitoring and enforcement, and targeted capacity building. Consultations carried out in Guyana to develop the MSP as well as background research indicate that substantial work is required in these areas and that they are critical to tackling the issue of mainstreaming BD in the mining sector. The project will put in place key elements to increase enforcement of existing regulations and codes of practice, enhance EPA's role in overseeing activities in the gold mining sector, support greater-institutional collaboration, and build institutional and individual capacity on environmental and specifically biodiversity issues as they relate to mining. Given the limited resources and timeline of the MSP, capacity building efforts will be focused on training trainers, including trainers for the Mining School, mines officers, and local leaders, on the topic of the regulatory framework, BD and mining. Capacity building will also involve increasing the dissemination of user-friendly information on the existing environmental regulations and codes of practice. At this time, various policy strengthening measures are being undertaken independently of the project, including the development of monitoring and enforcement regulations for EPA, and the updating of the mercury code of practice for mining, in line with Guyana's commitment to the Minamata Convention. In addition, the Government of Guyana has received a loan (IDB) to support the development of revised regulations for the mining or forestry sector. The project will complement these regulatory changes with a focus on building capacity for the implementation of the regulatory framework and strengthening capacities to monitor and enforce compliance.

13. The MSP will focus on gold mining by small and medium-scale miners. This is because gold production is the most important mineral in terms of output, contribution to exports and employment in Guyana. Due to the large number of gold mining operations, it also has the most significant impact on biodiversity and ecosystems. At present, all gold mining is undertaken by small and medium-scale miners as there are no large-scale mining companies operating in Guyana. While there are several large companies in the exploration phase that are expected to begin operations in 2014, these are more regulated and monitored than small and medium-scale operations and require the development and approval of Environmental Impacts Assessments (EIAs). There is therefore less concern among national stakeholders about non-compliance with environmental regulations and significant environmental impacts among large-scale operations. It was therefore deemed strategic to focus enforcement and capacity building efforts on small and medium-scale miners.

14. In coordination with the Guyana Women Miners Organisation, the project will promote the participation of women in the multi-stakeholder monitoring network and in the project seminars on mining and BD. The user-friendly material on mining regulations and codes of practice will also be distributed to the organisation. In addition, the project will consult with the Ministry of Labour, Human Services and Social Security to identify any further possible ways of mainstreaming gender issues in the implementation of the project.

Project objective, outcomes and outputs

15. The project objective is to strengthen monitoring and implementation of biodiversity-friendly practices in Guyana's gold mining sector to reduce biodiversity loss and maintain ecosystem functionality for the benefit of all Guyanese. This will be achieved through enhanced monitoring and enforcement of the environmental regulations and codes of practice, as a result of a strengthened EPA, increased inter-institutional collaboration, and greater satellite tracking. In addition, individual and institutional capacity building will contribute to a greater understanding of the regulatory framework in place and of best practices in the gold mining sector to reduce negative impacts on BD.

Outcome 1: Enabling environment for monitoring and enforcement of mining-related environmental regulations and codes of practice strengthened

16. The existing environmental regulations and codes of practice outline specific requirements related to environmental practices in the mining sector. Greater implementation of this regulatory framework would significantly reduce the negative impacts of gold mining on BD, such as the loss of aquatic biodiversity through sedimentation, turbidity or chemical contamination, or loss of terrestrial biodiversity through failure to reclaim areas to enable forests to regenerate and provide habitat for species. However, as highlighted in the barriers section, monitoring and enforcement of the existing regulations are hampered by insufficient field officers on the ground, the difficulty of access of many mining locations, and corruption in the field, among other factors. The lack of additional layers of oversight beyond GGMC as a result of insufficient inter-institutional coordination and limited capacity within EPA is also a significant concern. This Outcome will focus on establishing a framework to enhance monitoring and enforcement. This will include strengthening EPA's ability to oversee adherence by miners to the regulatory framework in place, prioritizing areas on which to concentrate efforts, establishing inter-institutional coordination and collaboration mechanisms for monitoring and enforcement, enhancing capacity within GGMC on environmental issues related to mining, and facilitating the increased use of satellite images to track mining activities. These activities will serve to provide greater checks and balances and accountability in the gold mining sector and increase levels of compliance with appropriate environmental practices. This Outcome will be achieved through the following Outputs:

Output 1.1: Strengthened EPA facilitates oversight of mining operations and increases BD protection through greater capacity of staff to carry out monitoring and enforcement and prioritize actions

Output 1.2: Inter-institutional coordination mechanisms and a multi-stakeholder monitoring network enhance collaboration in monitoring

Output 1.3: GGMC and GDMA officers support mainstreaming of BD in mining sector through increased enforcement of regulations and codes of practice and strengthened capacity on BD

Output 1.4: Satellite tracking of mining activities, and analysis and reporting of findings from satellite images by GGMC and EPA increase oversight of non-compliance with regulations and illegal mining

Outcome 2: Enhanced capacities for uptake of mining practices that promote biodiversity conservation

17. There have been limited training opportunities for small and medium-scale gold miners to learn about operating and management practices that reduce negative environmental impacts and enhance biodiversity protection. This Outcome will therefore focus on strengthening the curriculum of Guyana's Mining School, which is just beginning to be rolled out, by ensuring that BD aspects are integrated, training trainers on these issues and supporting relevant equipment purchases. In addition, to enhance understanding of the mining regulations and codes of practices, the project will fund the development and dissemination of user-friendly summaries for miners, as well as the printing of posters/billboards. This written and visual material will be supported by the delivery of seminars to miners on the mining regulations and codes of practice, including on reclamation⁷, and on the relevance of BD and ecosystem services to local communities. This Outcome will be achieved through the following two Outputs:

⁷ Training on mine reclamation will include rehabilitation to restore ecosystem functioning and species diversity.

Output 2.1: Mining School programmes integrate biodiversity considerations

Output 2.2: User-friendly material and capacity building facilitate uptake of BD-friendly practices by miners

4) Incremental cost reasoning and expected contributions from the baseline, GEFTF and co-financing

18. Without this investment by GEF, the gold mining sector in Guyana would become subject to somewhat increased monitoring and enforcement, but without a focus on the impact of mining on ecosystem services and on the country's globally significant biodiversity. Under the GEF alternative, resources will be channeled toward strengthening oversight, monitoring and enforcement of environmental regulations and codes of practice as well as targeted institutional and individual capacity building for Mining School trainers, mines officers and local leaders on the existing environmental regulations and on appropriate measures to preserve biodiversity. Increased EPA oversight; coordination among EPA, GGMC, GFC and GLSC; and increased use of satellite tracking will strengthen enforcement. The production of user-friendly material and the integration of the topic of BD in the curriculum of the Mining School will build the understanding of miners on the regulations in place, on the value of BD and ecosystem services, and how these can be preserved.

19. The baseline programmes are valued at USD 3,065,000. The total cost of the project, including GEF funds and co-financing, amounts to USD 4,342,270. GEF financing comprises 19% of the total or USD 803,653. Co-financing constitutes 81% or USD 3,538,617.

5) Global environmental benefits

20. The adoption of appropriate gold mining practices will benefit the globally important biodiversity found in the Guiana Shield and will contribute to the maintenance of ecosystem services such as water regulation. At the same time, the project will reduce land degradation and will lead to benefits in terms of climate change mitigation through the promotion of practices that reduce deforestation and forest degradation, most notably reclamation.

Current Practice	Alternatives to be promoted by the project	Expected Global Benefits
Inappropriate handling of mercury	- use of mercury retorts - use of mercury-free equipment	- reduced mercury contamination of high trophic value species - reduced water contamination
Inadequate management of tailings and other mines effluents	- construction and operation of appropriate stable tailings ponds/dams	- reduced water turbidity, siltation, channel alteration and changes to stream bottom characteristics - reduced mercury mobilization - reduced loss of aquatic biodiversity
Inappropriate management of waste rock dumps, overburden, topsoil piles, household wastes, construction wastes and hazardous wastes	-Restoration and stabilization of waste piles - Adoption of waste management practices for other wastes	- reduced water contamination - reduced acid rock drainage
Absence of land reclamation practices	- Adoption of restoration and land reclamation practices	- Increased vegetation cover leading to terrestrial BD benefits - Reduced soil erosion leading to aquatic BD benefits
Uncontrolled expansion of gold mining	Intensification of mining practices by encouraging techniques for greater recovery and reducing re-entry into	Reduced rate of loss / degradation of natural habitat

	already mined areas, through ensuring proper prospecting, and through prosecution of unlicensed mining	
--	--	--

6) Innovativeness, sustainability and potential for scaling up

Innovativeness

21. This project is highly innovative as very little work has been done with GEF funding on integrating biodiversity conservation in extractive sectors in general or specifically in the gold mining sector. The project design includes creative aspects to enhance inter-institutional collaboration in monitoring and enforcement, in the context of restricted agency budgets for such activities. The EPA's ability to provide oversight to small and medium-scale gold mining activities to support GGMC's work will be strengthened through the project. In addition, an inter-institutional cooperation protocol will be developed to include other agencies such as GFC and GLSC. Moreover, to increase monitoring in Guyana's vast hinterland, a multi-stakeholder monitoring network will be created by building the capacity of local leaders, NGOs and CBOs to report potential or actual incidents of concern. Greater use of satellite tracking, inter-agency sharing of this data and its integration in MNRE's GIS system will be promoted. The revision of the country's Mining School's curriculum to integrate BD issues represents another innovative aspect of the project. This strengthening of the formal training programme available to miners will be supported by the production of user-friendly written material, posters, billboards, and seminars tailored to miners to increase understanding of the regulations and codes of practice in place and enhance uptake of practices that protect the country's globally important BD.

Sustainability

22. This project design has been carefully developed to ensure environmental, social, institutional and financial sustainability as explained in the following paragraphs. An exit strategy will be prepared near project completion to outline these in more detail.

23. In terms of environmental sustainability, the project will promote practices that reduce the negative impact of gold mining on biodiversity, such as improved handling of mercury and other poisonous substances, improved management of tailings, reclamation practices, and increased prospecting, in line with the environmental regulations and codes of practice in place. Trainers and mines officers will receive training on these issues to enable replication of best environmental practices. The project will also support training of miners themselves and revision of the Mining School curriculum to integrate BD aspects. In addition, increased monitoring and enforcement of the regulatory environment will contribute to the environmental sustainability of the project.

24. Institutional sustainability will be supported by building the capacity of the EPA so that it is better equipped to take on its role in the monitoring and enforcement of regulations with small- and medium-scale gold miners. This will include training of staff and provision of necessary equipment. Training will be provided to EPA and GGMC personnel in the interpretation of satellite images to increase satellite tracking, supported by the production of training material. GGMC mines officers and GGDMA environmental officers will also receive training on the environmental regulations and codes of practice and on the links between BD and mining. The establishment of greater inter-institutional coordination for monitoring and enforcement through training of staff of other agencies, establishment of protocols for reporting on incidents, and analysis of joint monitoring possibilities will also contribute to the project's institutional sustainability.

25. The project design includes various elements to ensure social sustainability. Capacity building at the local level will focus on training local trainers to enhance uptake of messages. In addition, the project will fund the production and dissemination of user-friendly material on the environmental regulations and codes of practice in place. This will include translation of outputs into Portuguese to reach out to Brazilian migrant miners, who have thus far benefited less from institutional outreach efforts. Capacity building with Amerindian populations will be based on the principle of free, informed and prior consent. The project will integrate the topic of BD in the Mining School curriculum and

provide seminars so that new entrants in the mining sector who enter the full-time programme at the School, and existing miners or members of the public who participate in seminars will have access to this information. The project will strive to schedule training seminars to coincide with other mining-related training events, for example related to increasing gold recovery rates, to increase participation.

26. Financial sustainability is also a key consideration of the project. The project was designed to create an enabling environment for enhanced monitoring and enforcement that is financially sustainable and realistic. As such, the project will facilitate a prioritization exercise to agree upon and apply criteria to focus enforcement efforts on the most critical areas, in the context of limited monetary resources and staffing for enforcement. In addition, the project will explore ways to strengthen inter-institutional cooperation in monitoring and enforcement. This will be achieved through training of GFC and GLSC officers to enable them to identify and report on any infractions they may see in the field that relate to mining. The possibility of joint monitoring and other avenues for collaboration will be assessed for their feasibility. A multi-stakeholder monitoring network will also be established to assist in monitoring efforts in Guyana's hinterland.

Potential for scaling up

27. Various project elements are designed to promote the replication and upscaling of mining practices that reduce impacts on biodiversity. By increasing institutional capacity and inter-institutional cooperation to monitor and enforce environmental regulations and codes of practice, greater implementation of environmental practices is expected. In addition, the project will build the capacity of mines officers, miners, and Mining School students on the links between BD and mining. This will be facilitated by a strengthened Mining School curriculum, seminars and the production and dissemination of user-friendly material to summarize the existing regulations, codes of practice, and available measures to reduce mining impacts on biodiversity. It should be noted that various countries in the Latin America and Caribbean (LAC) region are facing increasing threats on forests and biodiversity as a result of mining activities. The project's approach and lessons learned from its implementation could also promote replication of similar initiatives in other countries. The UNDP CO, UNDP RCU and EPA will participate in relevant fora and identify opportunities to enable this information sharing with other countries to occur, for example through UNDP's Mining Platform.

A.2 Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project and/or its preparation:

28. The development of this proposal has been a fully participatory exercise, involving all key agencies who formed a National Committee for the project's design, including EPA, MNRE, GGMC, GFC, and GLSC. In addition, consultations were carried out with other relevant stakeholders.

Stakeholder	Role in Project
EPA	Will act as the Project Executing Agency (EA)/ Implementing Partner, and as such is responsible for managing the project, including the monitoring and evaluation of project interventions, achieving project outputs, and ensuring the effective use of UNDP/ GEF resources. EPA will benefit from various project elements, such as institutional strengthening in monitoring and enforcement, training in satellite image interpretation, and improved inter-institutional coordination, so that it can more effectively oversee the environmental impact of small- and medium-scale gold mining activities. EPA will be a member of the Project Steering Committee (PSC).
MNRE	The enhanced coordination mechanisms to be established among various agencies under the Ministry as part of this project will facilitate achievement of its overarching role of coordinating environmental and natural resource management. MNRE will Chair the PSC.
GGMC	As the agency responsible for mining in Guyana, GGMC will be a key stakeholder in providing guidance on project outputs and in making use of these outputs, such as the educational material for miners on the environmental regulations and codes of practices and the revised checklist. GGMC will also benefit from project interventions, such as training of mines officers and training of staff in the analysis of satellite images.

	GGMC will sit on the PSC.
UNDP Guyana Country Office	UNDP Guyana will act as the project Implementing Agency (IA) and as such will be responsible for the provision of technical support to the Project Execution Unit (PEU) as required, and for budget revisions, donor reporting, direct project payments on behalf of the EA, and project monitoring and evaluation. The UNDP CO will also be a member of the PSC.
GFC	GFC will participate in the inter-institutional mechanisms to be established under Outcome 1 to facilitate collaboration among those agencies whose activities affect forested lands. The Commission will receive training to help GFC field officers identify mining infractions on the ground and report these to the appropriate authorities. Improved monitoring and enforcement of mining infractions and the exploration of ways to better coordinate activities in the field will positively benefit GFC by reducing the negative impacts of mining activities on forested lands. GFC will be a member of the PSC.
GLSC	GLSC will benefit from improved inter-institutional coordination and training on mining regulations and codes of practice so that it can play a role in reporting mining infractions. GLSC will be a member of the PSC.
GGDMA	Project outputs, such as user-friendly material on the environmental regulatory framework in place, will be shared with GGDMA for further dissemination to miners. The project will also offer to provide training to GGDMA's environmental officers on the mining regulations and codes of practice and on BD and mining.
Small and medium-scale gold miners	Miners will receive easy-to-understand information on the regulations and codes of practice in place and on how to reduce the BD footprint of mining activities (while also reducing negative health impacts). This will be complemented by training on how to improve gold recovery rates through the Mining School so that they can also benefit economically. The project will facilitate integration of BD information in the Mining School curriculum, as well as provide seminars on the environmental regulatory framework, BD and mining.
Amerindian and other hinterland community members	Local leaders, including in Amerindian communities (Community Support Officers), will be trained on mining and BD conservation to permit further dissemination of information on how to reduce the negative health and environmental impacts of mining practices and to enable them to play a role in monitoring infractions to the regulatory environment (through the multi-stakeholder monitoring network).
Guyana Women Miners Organisation	The project will liaise with this organisation to facilitate the distribution of project material to its members (in particular the user-friendly summaries of the mining regulations and codes of practice) and to promote the participation of women miners in the project seminars on mining and BD. In addition, the project will offer training to members of the organisation so that they may be part of the multi-stakeholder monitoring network.

A.3 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

29. The adoption of mining techniques that reduce water body contamination and deforestation will lead to a number of socio-economic benefits. Firstly, improved handling of mercury and other chemicals and reduced sedimentation will enable continued harvesting of fish and a supply of quality drinking water upon which communities in the interior depend. Health benefits will accrue from better environmental management of mining practices, including reduced incidence of mercury-related illnesses and reduced transmission of vector-borne diseases, such as malaria, which is associated with large pools of stagnant water often left over from hydraulic mining. Both Amerindian and non-Amerindian residents of interior areas will therefore benefit from the project.

A.4. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

Risk	Risk level	Mitigation measure
Interest in the environmental requirements associated with mining, in	Low	Training material will be tailored to the target audience, through seminars and through written material that is easy to understand and available in English and Portuguese. Training seminars will be complemented by training being provided by GGMC/the Mining School on how to increase gold recovery rates, which is key to ensuring participation. The project will facilitate

reclamation and in BD is limited among miners, leading to low participation rates in the training courses		understanding among miners of the link between increased revenue in a particular concession by increasing gold recovery, and a lesser need to shift operations to new areas (leading to BD benefits). To encourage participation, the individual training courses will initially be offered free of charge. It should also be noted that regulations to mandate attendance at the Mining School by mine managers are being developed this year.
Personnel changes among staff and decision makers will reduce support for project	Low	Any change in government during project implementation will be accompanied by a sensitization process to ensure that new decision makers and stakeholders understand the project's objectives and benefits and to facilitate ownership of the project.
Insufficient political/institutional buy-in for a project that could be seen as a barrier to the country's socio-economic development	Low/ Medium	Given the importance of mining to the country's GDP, the project is not advocating restricting mining activity, but rather increased adherence to the existing environmental regulations, increased capacity to implement these, and an increased understanding of the value of BD and the need to conserve it. Guyana's adoption of the Low-Carbon Development Strategy, its bilateral agreement with Norway, and various other policy commitments underscore the willingness of government to search for a balance between the country's development and the sustainable management of its natural resources.
Limiting EPA staffing undermines its ability to take on an increased oversight role	Low/ Medium	Given the realities of limited staffing at EPA, particularly field staff, the project will strengthen EPA's capacities to carry out satellite tracking and to enforce the monitoring and enforcement regulations that are currently being developed for EPA. In addition, inter-institutional collaboration will be promoted to facilitate greater coordination of efforts among different agencies in order to maximize efficiencies.
Government funding for Mining School does not come through and the full diploma course is not offered.	Low	The Human Resources Division of GGMC has been funding short-term courses offered through the Mining School, in advance of a committed annual budgetary allocation for the school. Funding from this Division is available on an annual basis to support this type of training, so the project can integrate BD issues in these short-term courses. In terms of the full-time programme, GGMC has reiterated its commitment to the operationalization of the Mining School and a budget has been prepared, with the expectation that some funding from the government budget will be allocated in March 2014. Other sources of funding will also be explored as highlighted in the School's Business Plan, such as participation fees, and contributions from the private sector and donor organizations.
Compliance with environmental regulations remains low due to low penalties and bond amounts and limited court action against miners	Medium	<p>Increased collaboration among institutions, including GGMC, EPA, GFC and GLSC, in the field to enforce compliance will likely increase the reporting of incidents and follow-up action. Project support for greater satellite tracking will also likely lead to a reduction in illegal mining activities and in non-compliance with regulations.</p> <p>It should also be noted that the EPA is developing new monitoring and enforcement regulations, which are expected to propose increased penalties for infractions, and GGMC is assessing the possibility of increasing the amount of the bonds in place.</p> <p>Greater enforcement of regulations and possible increases in penalties and bond amounts will be coupled with the project's capacity building efforts to increase understanding of the environmental regulations and codes of practice. Capacity building of field officers will also include legal training on how to gather evidence that is admissible in court.</p>
Climate change may increase vulnerability of species in mining areas or increase pressures to develop the hinterland	Low/ Medium	Expected climate change impacts for Guyana include sea level rise, increased temperatures, increased flooding and droughts, and changes in rainfall patterns. These impacts could reduce the viability of agricultural activities and other income-generating activities that are primarily practiced in the coastal belt region and push more people to work in the mining sector in the hinterland areas, thus exacerbating pressures on forests and biodiversity. In addition, projected climate change impacts could also render species and ecosystem services more vulnerable to the impacts of mining activities. The project recognizes that mining activities may increase in the

		interior, and it will therefore focus on strengthening the enforcement of regulations and building capacity to reduce the impacts on biodiversity. This will be complemented by ongoing training and promotion of appropriate technologies by GGMC to improve gold recovery rates, which would allow for continued growth of the sector without a concomitant need to increase deforestation.
--	--	---

A.5. Explain how cost-effectiveness is reflected in the project design:

30. The project's capacity building efforts will be cost-effective by focusing on training institutional personnel and trainers (including Mining School trainers, mines officers and community leaders), with the view that they can then promote replication of best practices and further disseminate the knowledge acquired. This will reduce the costs associated with capacity building in the hinterland. The MSP will also provide some seminars for miners in the six Mining Districts. Significant baseline and co-financing for this project will support its objectives and increase the cost-effectiveness of the GEF investment, as other funds will be dedicated to the development of monitoring and enforcement regulations, strengthening of the EPA and of the MNRE in general, and improving coordination among the agencies under the MNRE, among other activities (see baseline section). The project builds on previous projects, such as the CIDA GENCAD project, which developed the mining environmental regulations and carried out capacity building; and WWF's extensive work focused on mercury and mining. Lessons learned from these projects will be incorporated so that GEF resources can be targeted in the most efficient manner.

A.6. Outline the coordination with other relevant GEF financed initiatives [not mentioned in A.1]:

31. A UNDP/GEF cross-cutting capacity development project is currently being designed, which will strengthen the technical capacities of the MNRE and promote integration of Multilateral Environment Agreement obligations into sectoral development policy. More specifically, the project will contribute to the development of technical skills for analyzing policies, programmes and plans for implications on the global environment, as well as clear, manageable, and cost-effective institutional arrangements and processes to mainstream and monitor Rio Convention implementation. The cross-cutting capacity building project will complement this MSP by further strengthening MRNE's ability to fulfill its functions and enhancing coordination among agencies under the MRNE. Information exchange between the two projects will be facilitated by the UNDP Guyana Country Office.

32. Under a global UNEP project, a GEF-financed National Biodiversity Action Plan III is being developed for Guyana, in conjunction with preparation of the Fifth National Report to the Convention on Biological Diversity. The NBPAP III is expected to build on one of the cross-cutting objectives of NPAP II (2007-2011), which was to mainstream biodiversity by liaising with organisations to integrate biodiversity issues and activities into their strategic and operational plans. In addition, Guyana is participating in a UNEP/GEF regional biosafety project, which aims to implement effective, operable, transparent and sustainable National Biosafety Frameworks (NBF) in compliance with the Cartagena Protocol on Biosafety.

33. The GEF Small Grants Programme (SGP) was launched in April of 2013 in Guyana and will include support for projects that promote sustainable development in the expanding natural resources sector. It is being implemented by UNDP. Among the first eight projects funded and under implementation, one is looking at reducing the use of mercury in gold mining. Information sharing between the MSP and the GEF SGP will occur to share experiences and outputs. For example, the user-friendly material on the mining environmental regulations and codes of practice produced by the MSP will be shared with the GEF SGP for dissemination to communities involved in relevant projects. Coordination between the MSP and the SGP Programme will be supported by the UNDP Country Office in Guyana.

A.7 Describe the institutional arrangement for project implementation

34. The project will be executed under the National Implementation Modality (NIM), according to the standards and regulations of the UNDP, with implementation support and direct payments made by UNDP (UNDP will make the disbursements directly to vendors through Requests for Direct Payments). In its role as GEF Implementing Agency (IA)

for this project UNDP shall provide project cycle management services as defined by the GEF Council. The duration of the project will be three years.

35. The Executing Agency (EA) for this project will be the Environmental Protection Agency (EPA), as the National Focal Point of the United Nations Convention on Biological Diversity (UNCBD). As Executing Agency, EPA will be responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outputs, and for the effective use of UNDP/ GEF resources. EPA will ensure coordination with other key agencies and stakeholders, including but not limited to the Guyana Geology and Mines Commission (GGMC), Guyana Forestry Commission (GFC), Guyana Lands and Survey Commission (GLSC), Ministry of Amerindian Affairs, and others, to facilitate achievement of the project's desired objectives. In addition, EPA will maintain coordination with other relevant projects involving biodiversity protection, such as with the UNDP/GEF Small Grants Programme (SGP).

Project Steering Committee (PSC)

36. In order to ensure effective project governance, a Project Steering Committee (PSC) will be established, consisting of the following agencies:

- Environment Protection Agency (EPA)
- Ministry of Natural Resources and Environment (MNRE)
- Guyana Geology and Mines Commission (GGMC)
- Guyana Forestry Commission (GFC)
- Guyana Lands and Survey Commission (GLSC)

37. The PSC members will be responsible for guiding project execution, providing strategic advice to facilitate project success, liaising with their respective agencies to garner political support for the project's objectives, approval of the AOPs and associated budgets, and review of the Project Implementation Reviews (PIRs). The Project Coordinator will attend PSC meetings but will not be a voting member of the PSC. The PSC will meet a minimum of two times per year.

Project Execution Unit

38. Project Execution Unit (PEU) will consist of a Project Director (PD), a Project Coordinator (PC), and an administrative/accounting officer. In addition, technical and administrative staff of the EPA will provide support to the PEU. To achieve specific outputs, the incremental funding from GEF will be used to hire consultants for specific periods of time.

39. The Project Director (PD) will be the Executive Director of the EPA. He/she will work to ensure achievement of the project's results and objectives and adherence to the norms and procedures established in this ProDoc. The PD will be solely responsible for approving Requests for Direct Payments for the UNDP CO in accordance with the Annual Work Plans (AWPs) to be developed for each year, and can delegate to the Project Coordinator the responsibility for hiring and acquisitions, as well as other actions necessary for the administration of the project to be undertaken in the name of the project.

40. The Project Coordinator (PC) will be hired with GEF funds and will be responsible for the day-to-day management of the project, oversight of the implementation of activities and project reporting. He/she will have experience in project management, environment and sustainable use of natural resources and ideally will have experience and knowledge of biodiversity conservation and the mining sector. The PC will be supported by a project administrator/ finance assistant, also paid with GEF funds, who will provide support in terms of project monitoring, reporting and financial management.

41. The PEU will develop Annual Work Plans (AWPs) with the support of the EPA/MNRE, which are annual work plans indicating the outputs and activities that are planned for each year, the implementation periods for each activity, those responsible for carrying them out, the budget and the M&E plan. The draft AWPs will be reviewed and approved by the Project Steering Committee.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

42. The project will contribute to the following Aichi Biodiversity Targets under the Strategic Plan for Biodiversity 2011-2020:

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 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation are significantly reduced.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

43. This project is fully consistent with the GEF Biodiversity Focal Area for GEF 5, Objective 2: Mainstream biodiversity conservation and sustainable use into production landscapes, seascapes and sectors. The project focuses on the productive sector with the largest ecological footprint on the biodiversity-rich forests of Guyana and one which plays a key role in the country's economic development, i.e., gold mining. The project will strengthen the capacity of the public sector to monitor and enforce environmental regulations that reduce the impacts on BD, as well as build capacity to understand and implement the regulations and increase awareness of the links between mining and biodiversity. The project will specifically contribute to GEF Outcome 2.1: "Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation", through increased institutional capacity to monitor mining activities, increased capacity among small- and medium-scale gold miners to adopt appropriate environmental practices, and strengthened enforcement of existing environmental regulations and codes of practice in the mining sector.

B.3 The GEF Agency's Programme (reflected in documents such as UNDAF, CAS etc.) and Agencies comparative advantage for implementing this project:

44. The project will contribute to achievement of the Country Programme Document (CPD) for Guyana 2012-2016, Outcome # 3: "Improved functional capacity of key natural resources and disaster risk management institutions", through the strengthening of EPA's role in monitoring and enforcement of environmental regulations within the mining sector and improved inter-institutional collaboration within MNRE in the management of natural resources. In addition, the project is consistent with UNDAF 2012-2016 Outcome 1: "National policies, strategies, and plans for disaster risk reduction (DRR), management of natural resources, and access to clean energy and services developed, implemented, monitored, and evaluated". Specifically the project will contribute to Output 2: "Strategies developed to manage natural resources, incorporating sustainability objectives as measured by global and national indices", as the project will work toward improved sustainability in the management of natural resources in the mining sector through various strategies such as increased oversight by EPA, enhanced inter-institutional collaboration, increased use of satellite tracking, and overall institutional and individual capacity building in the sector.

45. UNDP is well-positioned to act as Implementing Agency for this project. It has an established national office in Georgetown and has developed good working relationships with the main stakeholders involved in this project. UNDP Guyana Office's Environment and Energy Unit has two professional staff, in addition to senior management, operations and support staff. The Country Office will make direct payments and will facilitate the provision of technical support,

as well as monitoring and evaluation of the project. A UNDP-GEF Regional Technical Adviser in the Regional Service Centre will provide technical backstopping.

46. UNDP has extensive experience in institutional strengthening and capacity building. It has also amassed relevant experience in the biodiversity focal area. UNDP is currently implementing the EU-funded Guiana Shield Facility, which is focused on biodiversity protection across the three countries of the Guiana Shield, including through economic valuation, the development of payment for environmental services schemes, and new technologies.

47. It is also important to highlight that UNDP is ramping up its work in the extractive industries and natural resource management sector. The project will be aligned with its new policy on extractive industries. UNDP is also in the process of establishing a multiple bureau technical task team involving all clusters to guide this work and to facilitate sharing of lessons learned and best practices. UNDP's Strategic Plan indicates that the organization will support the "strengthening of policy, legal and regulatory frameworks for the management of extractive industries", including environmental sustainability measures and partnership with stakeholders to improve adherence to national and international environmental standards. UNDP's portfolio of projects involving extractive industries is growing. In Colombia, UNDP will be implementing a project ("Conservation of biodiversity in landscapes impacted by mining in the Choco Biogeographic Region"), which will strengthen the policy, legal and planning framework in the mining sector (PIF approved in 2012). Sharing of experiences and lessons learned will be undertaken with this project. It is also implementing a land degradation project in Peru ("Promoting Sustainable Land Management in Las Bombas"), which looks at soil conservation and watershed management in landscapes around mining communities. Again information sharing will be carried out as appropriate. In addition, UNDP is implementing projects in countries such as Russia, Nigeria, South Africa and Uzbekistan to support strong environmental management of extractive industries to reduce environmental and social impacts and minimize conflicts.

C. DESCRIBE THE BUDGETED M & E PLAN:

48. Project M&E will be conducted in accordance with the established UNDP and GEF procedures and will be provided by the project team and the UNDP-CO with support from the UNDP/GEF RCU in Panama City. The Project Results Framework in Section 3 provides performance and impact indicators for project implementation along with their corresponding means of verification. The M&E plan includes an inception report, project implementation reviews, quarterly and annual review reports, mid-term and final evaluations, and audits. The following sections outline the principle components of the M&E plan and indicative cost estimates related to M&E activities. The project's M&E plan will be presented and finalized in the Project Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

Project Inception Phase

49. A Project Inception Workshop (IW) will be held within the first three (3) months of project start-up with the full project team, relevant GoC counterparts, co-financing partners, the UNDP-CO, and representation from the UNDP-GEF RCU, as well as UNDP-GEF headquarters as appropriate.

50. A fundamental objective of this IW will be to help the project team to understand and take ownership of the project's goal and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the Project Results Framework and GEF Tracking Tools (BD, LD, and SFM/REDD and UNDP's ESSP. This will include reviewing the results framework (indicators, means of verification, and assumptions), reviewing the appropriate next steps for environmental and social assessment and management, imparting additional detail as needed, and on the basis of this exercise, finalizing the AWP with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

51. Additionally, the purpose and objective of the IW will be to: a) introduce project staff to the UNDP-GEF team that will support the project during its implementation, namely the CO and responsible RCU staff; b) detail the roles, support services, and complementary responsibilities of UNDP-CO and RCU staff in relation to the project team; c) provide a detailed overview of UNDP-GEF reporting and M&E requirements, with particular emphasis on the Annual

Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), as well as Mid-term and Final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project-related budgetary planning, budget reviews including arrangements for annual audit, and mandatory budget re-phrasings.

52. 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, as needed, in order to clarify each party's responsibilities during the project's implementation phase. The IW will also be used to plan and schedule the Tripartite Committee Reviews.

Monitoring Responsibilities and Events

53. 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 Tripartite Committee (TPC) Reviews, Steering Committee (or relevant advisory and/or coordination mechanisms); and b) project-related M&E activities.

54. Day-to-day monitoring of implementation progress will be the responsibility of the PC based on the project's AWP and its indicators. The PC will inform the UNDP-CO 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 PC will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the IW with support from UNDP-CO and assisted by the UNDP-GEF RCU. Specific targets for the first-year implementation progress indicators together with their means of verification will be developed at this workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the AWP. Targets and indicators for subsequent years will be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

55. Measurement of impact indicators related to global benefits will occur according to the schedules defined through specific studies that are to form part of the project's activities and specified in the Project Results Framework.

56. Periodic monitoring of implementation progress will be undertaken by the UNDP CO through quarterly meetings with the project implementation team, or more frequently as deemed necessary. This will allow parties to take stock of and to troubleshoot any problems pertaining to the project in a timely fashion to ensure the timely implementation of project activities. The UNDP CO and UNDP-GEF RCU, as appropriate, will conduct yearly visits to the project's field sites, or more often based on an agreed upon schedule to be detailed in the project's Inception Report and AWPs 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. A Field Visit Report will be prepared by the UNDP CO and circulated no less than one month after the visit to the project team, all Steering Committee members, and UNDP-GEF.

57. Annual monitoring will occur through the Tripartite Committee (TPC) Reviews. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to TPC review 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 proponent will prepare an APR and submit it to UNDP CO and the UNDP-GEF regional office at least two weeks prior to the TPC for review and comments.

58. The APR will be used as one of the basic documents for discussions in the TPC. The PC will present the APR to the TPC, highlighting policy issues and recommendations for the decision of the TPC participants. The PC 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. The TPC has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the IW, based on delivery rates and qualitative assessments of achievements of outputs.

59. The Terminal TPC Review is held in the last month of project operations. The PC is responsible for preparing the Terminal Report and submitting it to UNDP-CO and to UNDP-GEF RCU. It shall be prepared in draft at least two

months in advance of the TPC meeting in order to allow review, and will serve as the basis for discussions in the TPC meeting. The terminal TPC review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learned can be captured to feed into other projects being implemented.

Project Monitoring Reporting

60. The PC, in conjunction with the UNDP-GEF extended team, will be responsible for the preparation and submission of the following reports that form part of the monitoring process and that are mandatory.

61. 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 UNDP CO or the RCU 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 UNDP CO and UNDP-GEF's RCU will review the document.

62. The Annual Project Report (APR) is a UNDP requirement and part of UNDP CO central oversight, monitoring, and project management. It is a self-assessment report by the project management to the CO and provides input to the country office reporting process and the Results-Oriented Annual Report (ROAR), as well as forming a key input to the TPC Review. An APR will be prepared on an annual basis prior to the TPC review, to reflect progress achieved in meeting the project's AWP and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The 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 and best practices.

63. The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for one year, a PIR must be completed by the CO together with the project management. The PIR can be prepared any time during the year and ideally prior to the TPC review. The PIR should then be discussed in the TPC meeting so that the result would be a PIR that has been agreed upon by the project, the Implementing Partner, UNDP CO, and the RCU in Panama. The individual PIRs are collected, reviewed, and analyzed by the RCU prior to sending them to the focal area clusters at the UNDP-GEF headquarters. In light of the similarities of both APR and PIR, UNDP-GEF has prepared a harmonized format for reference.

64. Quarterly Progress Reports outlining main updates in project progress will be provided quarterly to the local UNDP CO and the UNDP-GEF RCU by the project team. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform and the risk log should be regularly updated in ATLAS based on the initial risk analysis included in Annex 8.1.

65. Specific Thematic Reports focusing on specific issues or areas of activity will be prepared by the project team when requested by UNDP, UNDP-GEF, or the Implementing Partner. The request for a Thematic Report will be provided to the project team in written form by UNDP 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. UNDP 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.

66. 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.

67. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List detailing the technical reports that are expected to be prepared on key areas of activity during the course of the project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive and specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national, and international levels. Technical Reports have a broader function and the frequency and nature is project-specific.

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

Independent Evaluation

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

70. An independent Mid-Term Evaluation will be undertaken at exactly the mid-point of the project lifetime. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency, and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation, and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, ToRs, and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The ToRs for this Mid-Term Evaluation will be prepared by the UNDP-CO based on guidance from the UNDP-GEF RCU. The management response of the evaluation will be uploaded to the UNDP corporate systems, in particular the UNDP Evaluation Resource Center (ERC). All GEF Tracking Tools for the project will also be completed during the mid-term evaluation cycle.

71. An independent Final Evaluation will take place three months prior to the terminal Steering Committee meeting, and will focus on the same issues as the Mid-Term Evaluation. The Final Evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP ERC. The ToRs for this evaluation will be prepared by the UNDP-CO based on guidance from the UNDP-GEF RCU. All GEF Tracking Tools for the project will also be completed during the final evaluation.

Audits

72. The project will be audited in accordance with the UNDP Financial Regulations and Rules and applicable audit policies.

Learning and Knowledge Sharing

73. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will participate, as relevant and appropriate, in UNDP-GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP-GEF RCU has established an electronic platform for sharing lessons between the project managers. The project will identify and participate, as relevant and appropriate, in scientific, policy-based, and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an ongoing process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every twelve (12) months. UNDP-GEF shall provide a format and assist the project team in categorizing, documenting, and reporting on lessons learned.

M&E work plan and budget

Type of M&E activity	Responsible Parties	Indicative Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop	<ul style="list-style-type: none"> • Project Coordinator (PC) • EA (Executing Agency- i.e., EPA) • UNDP CO, UNDP Regional Coordinating Unit (RCU) 	8,000	Within first two months of project start up
Inception Report	<ul style="list-style-type: none"> ▪ PC ▪ EA 	0	Immediately after workshop
Field-based impact monitoring including oversight visits to sites	<ul style="list-style-type: none"> ▪ PC and EA ▪ Steering Committee ▪ UNDP CO, UNDP RCU (as appropriate) 	20,000	Ongoing
Quarterly reports on project progress	<ul style="list-style-type: none"> ▪ PC 	0	Quarterly
APR/ PIRs with BD Tracking Tools	<ul style="list-style-type: none"> ▪ PC and EA ▪ UNDP CO, UNDP Regional Technical Adviser (RTA) 	0	Annual
Steering Committee Meetings	<ul style="list-style-type: none"> ▪ PC and EA ▪ UNDP CO ▪ Agency representatives 	2,000	Minimum two times per year
Tripartite Committee Review Meetings	<ul style="list-style-type: none"> ▪ EA ▪ UNDP CO ▪ UNDP GEF 	0	Yearly
Technical Reports	<ul style="list-style-type: none"> ▪ PC and EA 	0	As necessary
Financial audits	<ul style="list-style-type: none"> ▪ UNDP CO ▪ PC and EA ▪ Auditors 	0 (carried out by Audit Office of Guyana free of charge)	Yearly
Mid-term Review	<ul style="list-style-type: none"> ▪ PC and EA ▪ UNDP CO ▪ UNDP RCU ▪ Evaluator(s) 	25,000	At the mid-point of project implementation.
Lessons Learned (with printing of document)	<ul style="list-style-type: none"> ▪ PC and EA ▪ UNDP CO 	0	At least two months before end of project
Final Evaluation	<ul style="list-style-type: none"> ▪ PC and EA 	25,000	At project closure

Type of M&E activity	Responsible Parties	Indicative Budget US\$ <i>Excluding project team staff time</i>	Time frame
	<ul style="list-style-type: none"> ▪ UNDP CO ▪ UNDP RCU ▪ Evaluator(s) 		
Project Terminal Report	<ul style="list-style-type: none"> ▪ PC and EA ▪ UNDP CO 	0	At least one month before the end of the project
TOTAL INDICATIVE COST (*Excluding project team staff time and UNDP staff and travel expenses)		80,000	

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):**
(Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this form. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Dr. Indarjit Ramdass	Executive Director	Environmental Protection Agency	04/07/2014

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Adriana Dinu, UNDP-GEF Executive Coordinator and Director a.i.		May 21, 2014	Lyes Ferroukhi	+507 302- 4576	Lyes.Ferroukhi@undp.org

Annex A: Project Results Framework

Project Strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Project Objective: Strengthen monitoring and implementation of biodiversity-friendly practices in Guyana's gold mining sector to reduce biodiversity loss and maintain ecosystem functionality for the benefit of all Guyanese.	Level of capacity of GGMC and EPA to enforce mining-related environmental regulations and codes of practice for small and medium-scale gold mining (as measured by UNDP Capacity Scorecard-Indicator 10- Existence of an adequate environmental policy and regulatory framework)	Score of 1 on Indicator 10 of UNDP Capacity Development Scorecard	A minimum score of 2 on Indicator 10 of UNDP Capacity Development Scorecard	Application of UNDP Capacity Development Scorecard (Indicator 10)	Political support for the strengthening of EPA's oversight role is demonstrated through the approval of monitoring and enforcement regulations for EPA GGMC remains supportive of working together with EPA on joint oversight of the gold mining sector
	Area in ha monitored for compliance with existing mining-related environmental regulations through satellite tracking and field inspections	Less than 10% of area under small and medium-scale mining regularly monitored using satellite tracking and field inspections (number of ha to be confirmed at project outset)	Area monitored for compliance increased to at least 50% over the baseline (number of ha to be confirmed at project outset).	Satellite image interpretation by agencies, monitoring reports of agencies	Consequences for non-compliance among miners are enforced to facilitate uptake of good mining practices
Outcome 1: Enabling environment for enforcement of mining-related environmental regulations strengthened	Number of actions taken by EPA (such as issuance of enforcement notices, prohibition notices, laying of charges or mediation proceedings) in the areas identified through the project as high priority for monitoring and enforcement in small and medium-scale gold mining	Number of enforcement and prohibition notices has almost nil for small and medium scale mining. Ad-hoc monitoring or compliance checks in response to complaints amount to approximately 4-5 per	Increase in number of compliance and enforcement actions taken by EPA (such as issuance of enforcement notices, prohibition notices, laying of charges or mediation proceedings) by at least 50% over	EPA records	Appropriate organizational structure, staffing and resources are in place within EPA to take on greater monitoring and enforcement role Different agencies under MNRE willing to collaborate on monitoring

		year.	2013/2014 baseline (target of at least 7 per year)		and enforcement in small and medium-scale gold mining sector Satellite images at appropriate scales to monitor small and medium-scale gold mining activities continue to be available
	Level of coordination capacity among institutions and non-state actors for enforcement of mining-related environmental practices	Baseline will be determined through a survey administered in the first 6 months of project	Target will be defined in first 6 months of project	Surveys at project outset and completion to assess inter-institutional coordination capacity and to assess coordination with non-state actors such as NGOs and CBOs through enforcement network	
	% of total area identified as high priority for monitoring and enforcement ⁸ that is being monitored using satellite tracking	Baseline to be determined once high priority areas for monitoring and enforcement are established during first 6 months of project implementation	At least 75% of total high priority area is being monitored using satellite tracking	Reports from GIS Unit of MNRE and from EPA about their monitoring activities	

Outputs:

Output 1.1: Strengthened EPA facilitates oversight of mining operations and increases BD protection through greater capacity of staff to carry out monitoring and

⁸ The high priority areas for monitoring and enforcement will be identified as part of Output 1.1.

enforcement and prioritize actions;
Output 1.2: Inter-institutional coordination mechanisms and an enforcement network enhance collaboration in monitoring and enforcement;
Output 1.3: GGMC and GDMA officers support mainstreaming of BD in mining sector through increased enforcement of regulations and codes of practice and strengthened capacity on BD;
Output 1.4: Satellite tracking of mining activities, and analysis and reporting of findings from satellite images by GGMC and EPA increase oversight of non-compliance with regulations and illegal mining .

Outcome 2: Enhanced capacities for uptake of practices that promote biodiversity conservation	# of courses or seminars implemented through Mining School that integrate BD considerations	1 baseline course adequately incorporates the topic of BD (Codes of practice for small and medium-scale miners)	At least 5 courses or seminars implemented through Mining School that adequately incorporate BD considerations (Codes of practice for small and medium-scale miners; mine reclamation; environmental impact management; health and safety and placer mine sites; and introductory level training of prospectors for the extractive industry).	Mining School annual reports	Funding for Mining School short courses and/or full time programme is secured. Legislation to mandate attendance of mining operating managers at Mining School is passed. Small and medium-scale gold miners are sufficiently motivated to participate in the seminars on environmental regulations and codes of practice and on biodiversity in gold mining and are receptive to the material produced.
	% of miners observed by field officers who are complying with the environmental regulations and codes of practice in areas identified as high priority for monitoring and enforcement (based on checklist)	Baseline to be determined once project identifies high priority areas for monitoring and enforcement	An increase of at least 50% over the baseline of small and medium scale miners in areas identified as high priority for monitoring and enforcement comply with the environmental regulations and codes of practice (<i>the baseline of high priority areas will be established at project outset</i>).	GGMC and EPA monitoring reports	
	% of small and medium-scale gold miners participating in project seminars who report an increased awareness of mining-related regulations and biodiversity issues	Baseline 0	75% of small and medium-scale gold miners who participate in project seminars report an increased awareness of mining-related regulations and biodiversity issues.	Surveys/ evaluations after project seminars and UNDP Capacity Development Scorecard Indicator 4	

Outputs:

Output 2.1: Mining School programmes integrate biodiversity considerations;

Output 2.2: User- friendly material and capacity building facilitate uptake of BD-friendly practices by miners.