Terminal Evaluation of the UNEP/GEF Project 'Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use' GEF ID 3722 (2011-2020)

Evaluation Office of the United Nations Environment Progamme

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Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use
GEF ID 3722
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The evaluation consultants hope that the findings, conclusions and recommendations will contribute to the sustainability of the SiBBr and to the continuous improvement of similar projects in other countries and regions.

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ABOUT THE EVALUATION

Joint Evaluation: No

Report Language(s): English.

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Brief Description: This report is a Terminal Evaluation of the UNEP/GEF project 'Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use' implemented between 2012 and 2020.The project's overall development goal was to ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes. The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, GEF implementing agencies and project partners.

Key words: Biodiversity, ecosystem, information system, data-driven, data providers, collection, taxonomic capacities, end users, tools, decision-makers, mainstreaming, conservation, sustainable use, sustainability, evaluation, SiBBr, GBIF, GEF, UNEP, Brazil.

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LIST OF ACRONYMS

ABC	Brazilian Cooperation Agency
ALA	Australian Living Atlas
CBD	Convention on Biological Diversity
CNPq	National Council for Scientific and Technological Development
CRIA	The Brazilian NGO that hosts the SpeciesLink platform
EA	Executing Agency
ET	Evaluation Team
FMO	Fund Management Officer
FY	Fiscal Year
GEF	Global Environment Facility
GoB	Government of Brazil
IA	Implementing Agency
IABIN	Building the Inter-American Biodiversity Information Network (GEF project)
IBGE	Brazilian Institute for Geography and Statistics
IBICT	Brazilian Institute of Information on Science and Technology
ICA	Internal Cooperation Agreement
ICMBio	Chico Mendes Institute for Biodiversity Conservation
IDSM	Mamirauá Sustainable Development Institute
INMA	Mata Atlântica National Institute
INPA	National Institute of Amazonian Researches
IPT	Integrated Publishing Toolkit
IS	Intermediate State
JBRJ	Rio de Janeiro's Botanical Garden
LAC	Latin American and Caribbean
LNCC	National Laboratory for Computing Science
M&E	Monitoring and Evaluation
M&R	Monitoring and Reporting
MCTI	Brazilian Ministry of Science, Technology, and Innovation
MMA	Brazilian Ministry of Environment
MPEG	Para's Emílio Goeldi Museum
MTR	Mid Term Review
MTS	UNEP Medium Term Strategy
MZUSP	Zoology Museum of the State University of São Paulo

NBSAP	National Biodiversity Strategy and Action Plan
NFP	National Focal Point of the CBD
NGO	Non-Governmental Organization
NR	National Report to the CBD
OECD/DAC	Organization for Economic Co-operation and Development/ Development Assistance Committee
OFP	Operational Focal Point of the GEF
PELD	Long-Term Ecological Research Program of the GoB
PIR	Project Implementation Review
PM	Project Manager
PMU	Project Management Unit
PoW	Programme of Work
PPBIO	Biodiversity Research Program of the GoB
PROBIO	National Biodiversity Mainstreaming and Institutional Consolidation (GEF Project)
ProDoc	Project Document
PROINFRA	Program to Implement, Update and Improve the Structure of Public Research Institutions
RNP	National Network for Education and Research
S-SC	South-South Cooperation
SC	Steering Committee
SDGs	Sustainable Development Goals
SiBBr	*Sistema de Informação sobre a Biodiversidade Brasileira* / Informatized System on Brazilian Biodiversity
SMART	Specific, Measurable, Assignable, Realistic and Time-specific
TE	Terminal Evaluation
TM	Task Manager
ToC	Theory of Change
ToR	Term of Reference
TSC	Technical Scientific Committee
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme
WCMC	World Conservation and Monitoring Center
WWF	World Wide Fund for Nature

PROJECT IDENTIFICATION TABLE

Table 1 - Project Identification Table

GEF Project ID:	3722		
Implementing Agency:	UNEP	**Executing Agency:**	Ministry of Science, Technology and Innovation with administrative cooperation from UNEP
Relevant SDG(s):	15.9 – 15.9.1	**Expected Accomplishment(s):**	EA 3a
Sub-programme:	Environmental Governance / Healthy and Productive Ecosystems*	**Programme of Work Output(s):**	2018/2019: Subprogram 3 – Healthy & Productive Ecosystems
UNEP approval date:	07 Oct 2009	**Project type:**	FSP
GEF approval date:	03 May 2010	**Focal Area(s):**	Biodiversity
GEF Operational Programme #:	N/A	**GEF Strategic Priority:**	SP4
***Expected* start date:**	27 June 2011	**Actual start date:**	17 January 2012
***Planned* completion date:**	December 2016	**Actual operational completion date:**	December 2019
Planned project budget at approval:	USD 28,172,728	**Actual total expenditures reported as of Dec 2019:**	USD 28,078,463.58
GEF grant allocation:	USD 8,172,728	**GEF grant expenditures reported as of Dec 2019:**	USD 8,078,463.58
Project Preparation Grant - GEF financing:	GEF Grant: USD 100,000 Actual Cost: USD 85,798.65	**Project Preparation Grant - co-financing:**	USD 105,820
***Expected* Full-Size Project co-financing:**	USD 20,000,000	**Secured Full-Size Project co-financing:**	USD 20,000,000
First disbursement:	17 January 2012	**Planned date of financial closure:**	31 December 2019
No. of formal project revisions:	3 (June 2016, December 2017 and November 2018)	**Date of last approved project revision:**	December 2018
No. of Steering Committee meetings:	9	**Date of last/next Steering Committee meeting:**	**Last:** 17 June 2019 / **Next:** not applicable
Mid-term Review/ Evaluation *(planned date):*	October 2013	**Mid-term Review/ Evaluation (actual date):**	March 2014
Terminal Evaluation *(planned date):*	I-II Quarter 2020	**Terminal Evaluation (actual date):**	II-IV Quarter 2020
Coverage - Country:	National - Brazil	**Coverage - Region(s):**	Latin America and the Caribbean
Dates of previous project phases:	not applicable	**Status of future project phases:**	not applicable

* As per Prodoc, the UNEP priority is Environmental Governance. The UNEP ADDIS system however, also mentioned Ecosystems Management.

RESUMO EXECUTIVO (PORTUGUESE)

Antecedentes do Projeto

O projeto “Gerenciamento e uso de informações para ampliar a capacidade brasileira em conservar e utilizar a biodiversidade” (GEF ID 3722), doravante chamado projeto SiBBr, foi uma ambiciosa iniciativa para garantir o uso de dados na elaboração e implementação de políticas, facilitando e integrando a informação sobre biodiversidade na tomada de decisões e nos processos de desenvolvimento de políticas. O projeto foi implementado entre janeiro de 2012 até dezembro de 2019 e incluiu três prorrogações sem custos (em junho 2016, em dezembro 2017 e em novembro 2018). O orçamento total do projeto foi de USD 28.172.728, dos quais USD 8.172.728 (29%) foram na forma de subvenção do GEF (Global Environment Facility).

Esta avaliação

Este relatório apresenta os resultados da Avaliação Final que possuí dois propósitos principais: (i) apresentar evidências de resultados para cumprir os requisitos de accountability, e (ii) promover aprendizado, feedback e compartilhamento de conhecimentos por meio de resultados e lições aprendidas. O trabalho envolveu diversas fases e incluiu: revisão inicial do desenho do projeto e análise dos stakeholders, a reconstrução da Teoria da Mudança na avaliação, leitura de relatórios, diversas entrevistas com uma ampla gama de atores do projeto, triangulação de dados e a análises.

Resultados chave

O projeto SiBBr exerceu um papel relevante na implementação de um sistema de informação de última geração sobre a diversidade brasileira. Pela primeira vez, instituições de pesquisa no Brasil tiveram acesso a um sistema oficial do governo no qual eles podiam armazenar, compartilhar e recuperar informações sobre coleções biológicas. O sistema propiciou grandes avanços na melhora da disponibilidade de dados sobre biodiversidade no país, algo que antes era limitado. Entretanto, com base nos achados dessa avaliação, o projeto demonstrou uma performance em nível “Moderadamente Insatisfatório” (ver resumo na tabela 14). Relevância estratégica; qualidade do desenho do projeto; e monitoramento e relatórios foram classificados dentro de “Satisfatório”, enquanto que o projeto tinha margem para melhores em efetividade; gestão financeira; eficiência; sustentabilidade; e fatores que afetam performance.

A relevância estratégica do projeto se destaca na medida que o Brasil é um país mega diverso e informação sobre sua biodiversidade se encontrava dispersa entre várias organizações. O projeto respondeu às preocupações e interesses ambientais do Brasil. O projeto SiBBr foi relevante, e alinhado, para o mandato e prioridades estratégicas do PNUMA, e as prioridades estratégicas em biodiversidade do GEF. Também estava alinhado às principais prioridades globais, como as metas de Aichi para Biodiversidade e a Agenda 2030 de desenvolvimento sustentável.

O ProDoc (Documento de Projeto) apresentou uma abrangente explicação do problema a ser tratado, especialmente em relação ao seu uso potencial por distintos stakeholders. Suas principais fortalezas se relacionavam com: gestão financeira; relevância estratégica; resultados previstos; e governança. As principais debilidades do desenho do projeto estavam relacionadas com: preparação do projeto e definição do contexto; marco lógico e monitoramento; parcerias; aprendizados, comunicação e divulgação; identificação dos riscos e salvaguardas; e sustentabilidade, replicação e efeitos catalíticos.

Não ocorreu nenhum conflito armado ou grande convulsão política no Brasil. Ademais, devido à natureza do projeto, desastres naturais ou provocados pelo homem não afetaram diretamente as operações do projeto. A Pandemia de Covid-19 aconteceu após o encerramento técnico do projeto e, até certo ponto, estava afetando negativamente a sustentabilidade do SiBBr.

O ProDoc original não incluía uma Teoria da Mudança, uma vez que isso não era um requerimento do PNUMA naquela época. A equipe da Avaliação Final, em consulta com os parceiros do projeto, reconstruiu a Teoria da Mudança na avaliação. O Projeto alcançaria seus objetivos por meio de três resultados e dezoito produtos, organizados em torno de três componentes. Nenhuma modificação/revisão oficial ao ProDoc foi realizada durante a implementação do projeto.

Oito produtos estavam completamente disponíveis (44%); oito estavam parcialmente disponíveis (44%); e dois não estavam disponíveis (12%). Entre os produtos entregues, alguns dos mais importantes a produzir resultados foram considerados de boa qualidade pelos parceiros do projeto. A entrega da maioria dos produtos atrasou, o que afetou sua utilidade para os beneficiários previstos.

Resultados 1 e 2 foram parcialmente atingidos; e o resultado 3, um resultado chave para atingir o estágio intermediário previsto e o impacto do projeto, anda não foi atingido. Os pressupostos de progresso, desde produtos do projeto até os resultados, se cumpriram parcialmente, e os impulsores para apoiar a transição, de produtos até resultados, foram cumpridos parcialmente.

Indubitavelmente, o projeto promoveu mudanças que podem conduzir ao impacto previsto, mas sua magnitude (relacionada com a extensão prevista), amplitude (relacionada com a amplo escopo necessário para a mudança acontecer) e efetividade (relacionada ao grau em que o projeto produziria o efeito desejado) do processo de mudança ainda não foram suficientes para atingir o estágio intermediário desejado e o impacto em um período de tempo razoável.

Esta Avaliação Final constatou que é pouco provável que os impactos esperados se tornem realidade, para isso acontecer os resultados do projeto e o estado intermediário teriam que ser completamente atingidos. Isso demandaria que o Governo do Brasil e os sócios do projeto dediquem esforços adicionais para aumentar a probabilidade de atingir a mudança duradoura prevista pelo projeto.

Evidências indicam que a sustentabilidade do resultado do projeto é moderadamente improvável dadas as circunstâncias atuais. A manutenção e ampliação do

desenvolvimento é altamente dependente de vontade política e apropriação social (social ownership). Em grande medida, o projeto não foi capaz de construir um marco propício para o suporte de longo prazo por parte de atores políticos e sociais chave. Em relação à sustentabilidade financeira, os resultados do projeto apresentam uma grande dependência em financiamento futuro. Atualmente, as necessidades financeiras do SiBBr dependem unicamente de recursos do MCTI, e existe uma incerteza em relação ao financiamento para atividades chave (ex. comunicação e divulgação). Os resultados do projeto também apresentam uma alta dependência de, e sensibilidade ao, apoio institucional. Uma Portaria Ministerial emitida pelo MCTI forneceu um mecanismo de governança para o SiBBr, que é importante, mas não suficiente para construir um marco abrangente para o financiamento de longo prazo para manter/atingir todos os resultados do projeto.

A gestão financeira foi considerada moderadamente satisfatória. A aderência aos procedimentos e às políticas financeiras do PNUMA foi considerada satisfatória, mas existia margem para melhoria da disponibilidade de informações financeiras. Não foi possível qualificar a comunicação entre a equipe de finanças e a de gestão do projeto devido à limitação de evidências.

O projeto implementou algumas iniciativas de economia de custos, tais como parcerias com o GBIF e a RNP, que levaram a resultados positivos. Entretanto, atrasos no início do projeto levaram algumas ações a serem condensadas, afetando qualidade e performance. A gestão do projeto enfrentou muitos desafios e teve que repetidamente adotar soluções administrativas adaptativas/responsivas. O projeto enfrentou uma série de atrasos e levou mais de dez anos para ser implementado (desde sua aprovação pelo GEF em 05/2010 até seu encerramento financeiro em 06/2020). Esses atrasos minaram a eficiência do projeto. Até certo ponto, as três extensões do projeto sem custo foram justificadas e permitiram que o projeto entregasse o sistema - mas elas poderiam ter sido evitadas por meio de uma gestão de projeto mais orientada em resultados.

Monitoramento e relatório (M&R) foram classificados como moderadamente satisfatório. O ProDoc incluía um marco básico, mas sólido de M&R, contudo durante a Fase Inicial do projeto processos nesse sentido deveriam ser detalhados e ferramentas desenvolvidas pelo(a) especialista contratado pelo projeto – algo que não ocorreu. Durante a implementação, nenhum sistema funcional de monitoramento foi estabelecido, além dos PIRs, ou ferramentas para facilitar o seguimento oportuno dos resultados, a gestão adaptativa e progresso em direção aos objetivos do projeto. Até certo ponto, M&R era considerado mais como um requisito do GEF do que um instrumento para aprimorar a execução do projeto, lograr resultados e assegurar a sustentabilidade.

Em relação aos fatores que afetam a performance, o projeto foi classificado como “insatisfatório”. A capacidade de resposta aos direitos humanos, à igualdade de gênero e as salvaguardas ambientais sociais e econômicas foram consideradas moderadamente satisfatórias. A qualidade da gestão e supervisão do projeto, participação e cooperação dos stakeholders, a propriedade e dinamismo do país, e

comunicação e conscientização pública poderiam se beneficiar de uma maior atenção. A preparação e a disponibilidade foram consideradas insatisfatórias.

Conclusões[†]

Conclusão #1: O projeto entregou um sistema de informação de vanguarda sobre a biodiversidade brasileira com mais de 16 milhões de ocorrências de espécies. A plataforma SiBBr é reconhecida pelos provedores de dados envolvidos no projeto como o repositório de referência em informação sobre biodiversidade, porém ainda não é uma referência para a incorporação da biodiversidade no planejamento de ações e na formulação de políticas.

Conclusão #2: Considerando os recursos disponíveis, o projeto foi parcialmente efetivo e entregou menos do que o esperado. Parceiros do projeto consideraram que o projeto entregou o que era possível no contexto existente.

Conclusão #3: O projeto não adotou uma abordagem adequada de monitoramento e relatório e não tirou proveito ao máximo da avaliação de meio termo para aumentar sua efetividade e eficiência.

Conclusão #4: Os mecanismos atuais de governança e sustentabilidade financeira estabelecidos pelo projeto, se adequadamente implementados, poderiam garantir a sustentabilidade de curto prazo da plataforma SiBBr. Entretanto, esses mecanismos não são suficientes para garantir a sustentabilidade de longo prazo ou para levar a cabo o atingimento de todos os resultados.

Conclusão #5: O projeto não levou em conta as perspectivas de direitos humanos, direitos dos povos indígenas e igualdade de gênero.

Conclusão #6: Uma mudança de natureza transformadora proposta pelo projeto GEF SiBBr não é fácil de ser atingida e requer o envolvimento de muitas instituições e indivíduos, muito além da Agência Implementadora e da Agência Executora.

Lições aprendidas:

Lição #1: O apoio permanente de alto-nível é vital para projetos que ambicionam mudanças transformadoras e que requerem envolvimento ativo de diversos stakeholders além da esfera de influência da Agência Executora.

Lição #2: Construção de confiança é um elemento chave para a efetiva configuração de um sistema de informação, como o SiBBr.

[†] Os termos de referência da avaliação apresentavam três perguntas estratégicas (SQ) que eram de interesse do PNUMA e para as quais se acreditava que o projeto poderia fazer uma contribuição substancial. A Conclusão #1 abordou a SQ2 'em que medida a plataforma SiBBr é reconhecida pelas organizações parceiras e pelos usuários chave como uma referência para o fornecimento de informações sobre biodiversidade e para a integração da biodiversidade no planejamento de ações e na formulação de políticas?' A Conclusão #3 abordou a SQ1 'em que medida o projeto implementou as recomendações da revisão de meio período? Como essas recomendações apoiaram a eficácia do projeto?'. A Conclusão #4 abordou a SQ3 'Os mecanismos de governança e sustentabilidade financeira estabelecidos no âmbito do projeto SiBBr asseguraram a manutenção e atualização contínua da plataforma'?

Lição #3: A execução de um projeto GEF não é simples. Requer a melhor estrutura e mecanismos possíveis de gestão de programas para garantir resultados com potencial para promover mudanças transformadoras.

Lição #4: Comunicação e divulgação são fundamentais para o sucesso e necessárias para garantir uma apropriação sólida e apoio contínuo, especialmente para um sistema de informações sobre biodiversidade.

Recomendações:

Recomendação #1: O PNUMA deve aprimorar a orientação para o desenho e implementação de futuros projetos GEF desta natureza.

Recomendação #2: O PNUMA deve melhorar a orientação para compliance dos requisitos das auditorias nacionais para projetos GEF, incluindo os implementados sob a modalidade de Execução Nacional.

Recomendação #3: O PNUMA deve formular diretrizes para o relatório de cofinanciamento dos projetos GEF.

Recomendação #4: O Governo do Brasil deve considerar promover mecanismos para efetivar as sinergias entre o GEF Pró-Espécies e o SiBBr.

Recomendação #5: O Ministério da Ciência e Tecnologia deve considerar desenvolver, de maneira participativa, e implementar os três instrumentos chave estabelecidos pela portaria ministerial além de trazer stakeholders adicionais para o Conselho Diretivo.

Recomendação #6: O Governo do Brasil, com apoio do setor privado e da comunidade internacional, deve considerar reforçar a capacidades taxonômicas e a ciência da biodiversidade.

Recomendação #7: O Governo do Brasil deve considerar promover cooperação Sul-Sul e cooperação triangular com outros países para compartilhar as lições e experiências do desenvolvimento e implementação do SiBBr.

Recomendação #8: Sócios do SiBBr devem considerar fortalecer os direitos humanos e dimensões de gênero do SiBBr e explorar como as informações do SiBBr poderiam beneficiar gêneros e grupos marginalizados.

Recomendação #9: O Governo do Brasil deve considerar estabelecer um mecanismo de coordenação nacional de informação sobre biodiversidade.

RESUMEN EJECUTIVO (SPANISH)

Antecedentes del proyecto

El proyecto 'Mejora de la capacidad brasileña para conservar y utilizar la biodiversidad a través de la gestión y el uso de la información' (ID del Fondo Para el Medio Ambiente Mundial - FMAM 3722), en lo sucesivo denominado proyecto SiBBr, fue una iniciativa ambiciosa para garantizar el diseño y la implementación de políticas basadas en datos facilitando e integrando la información sobre biodiversidad en las decisiones, procesos de elaboración y desarrollo de políticas. El proyecto se implementó entre el 2 de enero del 2012 y el 9 de diciembre del 2019, lo cual incluyó tres prórrogas sin costo (en junio del 2016, en diciembre del 2017 y en noviembre del 2018). El presupuesto total del proyecto fue de USD 28.172.728, de los cuales USD 8.172.728 (29 %) fue en forma de una subvención del Fondo para el Medio Ambiente Mundial (FMAM).

Esta evaluación

Este informe presenta los resultados de la Evaluación Final que tiene dos propósitos principales: (i) proporcionar evidencia de resultados para cumplir con los requisitos de rendición de cuentas, y (ii) promover el aprendizaje, la retroalimentación y el intercambio de conocimientos a través de los resultados y las lecciones aprendidas. La evaluación está compuesta de varias fases tales como: un análisis inicial del diseño del proyecto y el análisis de las partes interesadas, la reconstrucción de la Teoría del Cambio del proyecto para la evaluación, extensas entrevistas con una amplia gama de actores del proyecto, triangulación de datos y un análisis final.

Resultados clave

El proyecto SiBBr ha jugado un papel relevante en la implementación de un sistema de información de última generación sobre la biodiversidad brasileña. Por primera vez, los institutos de investigación de Brasil cuentan con un sistema gubernamental oficial donde pueden almacenar, compartir y recuperar la información sobre colecciones biológicas. El proyecto logró grandes avances en la mejora de la disponibilidad de datos sobre biodiversidad en el país, algo que antes era limitado. Sin embargo, en base a los hallazgos de esta evaluación, el proyecto demuestra un desempeño general en el nivel moderadamente insatisfactorio (ver resumen en la Tabla 14). La relevancia estratégica, la calidad del diseño del proyecto y el seguimiento y la presentación de informes se calificaron en el rango 'Satisfactorio', mientras que el proyecto pudo haber tenido un mejor desempeño en su eficacia y eficiencia, la gestión financiera, la sostenibilidad de los resultados y los factores que afectan el rendimiento.

Destaca la relevancia estratégica del proyecto, ya que Brasil es un país megadiverso y su información sobre biodiversidad estaba dispersa en varias organizaciones. El proyecto respondió a las preocupaciones y necesidades ambientales de Brasil, y fue relevante y estuvo alineado con el mandato del Programa de las Naciones Unidas para el Medio Ambiente y las prioridades estratégicas del FMAM sobre la biodiversidad.

También se alineó con las principales prioridades mundiales, como las Metas de Aichi para la Diversidad Biológica y la Agenda de Desarrollo 2030.

El documento de proyecto presentó una amplia explicación del problema a abordar, especialmente en lo que respecta al potencial uso del SiBBr por diferentes actores. Las principales fortalezas del diseño fueron: planificación financiera; eficiencia; relevancia estratégica; resultados previstos; y gobernanza. Las principales debilidades del diseño del proyecto se relacionaron con: la preparación del proyecto y el contexto; marco lógico y seguimiento; asociaciones; aprendizaje, comunicación y divulgación; identificación de riesgos y salvaguarda; y sostenibilidad, replicación y efectos catalíticos.

Durante la implementación del proyecto, no hubo ningún conflicto armado ni gran agitación política en Brasil. Debido a la naturaleza del proyecto, los desastres naturales y los provocados por el hombre no afectaron directamente sus operaciones. La pandemia de Covid-19 ocurrió después del cierre técnico del proyecto y, hasta cierto punto, estaba afectando negativamente la sostenibilidad de SiBBr.

El documento del proyecto no incluyó una Teoría del Cambio, ya que no era un requisito del PNUMA en ese momento. El equipo de esta evaluación, en consulta con los socios del proyecto, reconstruyó la Teoría del Cambio en la Evaluación. El proyecto alcanzaría sus objetivos a través de tres resultados y dieciocho productos, organizados en torno a tres componentes. No se realizaron modificaciones / revisiones formales al ProDoc durante la implementación del proyecto.

Ocho productos estaban completamente disponibles (44%), ocho estaban parcialmente disponibles (44%) y dos no estaban disponibles (12%). Entre los productos obtenidos, algunos de los más importantes para lograr los resultados fueron considerados como de buena calidad por los socios del proyecto. La entrega de la mayoría de los productos se retrasó, lo que afectó a su utilidad para los beneficiarios previstos.

Los resultados 1 y 2 se lograron parcialmente; y el resultado 3, un resultado clave para alcanzar el estado intermedio esperado y el impacto del proyecto, aún no se logró. Los supuestos para el avance en la cadena causal del proyecto, desde los productos del proyecto hasta los resultados, se cumplieron parcialmente, y los impulsores para apoyar la transición, de los productos a los resultados, se cumplieron parcialmente.

El proyecto indudablemente promovió cambios que pueden conducir al impacto esperado, pero la magnitud (relacionada con la extensión esperada), la amplitud (relacionada con el amplio alcance requerido para que ocurra el cambio) y la efectividad (relacionada con el grado en que el proyecto produciría el efecto deseado) del proceso de cambio aún no eran suficientes para alcanzar el estado intermedio deseado y el impacto en un período de tiempo razonable. Esta evaluación final encontró que es poco probable que los impactos previstos se tornen realidad, y que para que esto suceda, los resultados del proyecto y estado intermedio tendrían que ser alcanzado plenamente. Esto requeriría que el Gobierno de Brasil y los socios del

proyecto dediquen esfuerzos adicionales para aumentar la probabilidad de alcanzar el cambio duradero previsto por el proyecto.

La evidencia indica que la sostenibilidad de los resultados del proyecto es moderadamente improbable dadas las condiciones actuales. El mantenimiento de los resultados del proyecto es altamente dependiente de la voluntad política y la apropiación social. En gran medida, el proyecto no pudo construir un marco propicio para el apoyo a largo plazo de actores políticos y sociales clave. En cuanto a la sostenibilidad financiera, los resultados del proyecto dependen en gran medida de la financiación futura. Actualmente, las necesidades financieras de SiBBr dependen únicamente de los fondos del Ministerio de Ciencia, Tecnología e innovación (MCTI), y existe incertidumbre con respecto a la financiación de acciones clave (por ejemplo, comunicación y divulgación). Los resultados del proyecto también tienen una alta dependencia de, y sensibilidad al, apoyo institucional. Una Orden Ministerial emitida por MCTI presentó un mecanismo de gobernanza para SiBBr, que es importante pero no suficiente para construir un marco integral sostenible a largo plazo para sostener /lograr todos los resultados del proyecto.

La Gestión Financiera se consideró moderadamente satisfactoria. La adherencia a las políticas y procedimientos financieros del PNUMA se consideró satisfactoria, pero había margen para mejorar la disponibilidad de la información financiera. No fue posible calificar la comunicación entre el personal de finanzas y el de gestión del proyecto debido a la falta de evidencia.

El proyecto implementó algunas iniciativas para ahorrar costos, como la asociación con GBIF y RNP, lo que generó resultados positivos. Sin embargo, las demoras en la puesta en marcha del proyecto significaron que algunas acciones debían condensarse, afectando la calidad y el rendimiento. La gestión del proyecto enfrentó muchos desafíos y tuvo que adoptar repetidamente soluciones de gestión adaptativas / reactivas. El proyecto sufrió varias demoras y tardó más de 10 años en ejecutarse (desde su aprobación por el FMAM en mayo de 2010 hasta su cierre financiero en junio de 2020). Estos retrasos afectaron la eficiencia del proyecto. Hasta cierto punto, las tres extensiones de proyectos sin costo estaban justificadas y permitieron al proyecto entregar el sistema, pero podrían haberse evitado mediante una gestión de proyectos más orientada a los resultados.

El seguimiento y la presentación de informes (M&R) se clasificaron como moderadamente satisfactorios. El documento de proyecto incluyó un marco básico, pero sólido, de M&R, sin embargo, se esperaba que el proceso de M&R fuera detallado y que el experto en M&R, a ser contratado por el proyecto, lo desarrollara durante la Fase Inicial, lo cual no se hizo. Durante su implementación, no se estableció ningún sistema de seguimiento funcional, más allá de los informes de avance, ni herramientas para facilitar el seguimiento oportuno de los resultados, la gestión adaptativa y el avance hacia los objetivos del proyecto. Hasta cierto punto, el M&R se consideró más un requisito del FMAM que un instrumento para mejorar la ejecución del proyecto, el logro de resultados y asegurar la sostenibilidad.

En cuanto a los factores que afectan el desempeño del proyecto, el proyecto fue clasificado como Insatisfactorio. La capacidad de respuesta a los derechos humanos y la equidad de género y las salvaguardias ambientales, sociales y económicas se consideró moderadamente satisfactoria. La calidad de la gestión y supervisión del proyecto, la participación y cooperación de las partes interesadas, la apropiación de parte del país, y la comunicación y la conciencia pública se habrían beneficiado de una mayor atención. La preparación y la disponibilidad se consideraron insatisfactorias.

Conclusiones[‡]

Conclusión #1: El proyecto entregó un sistema de información de vanguardia sobre la biodiversidad brasileña con más de 16 millones de ocurrencias de especies. La Plataforma SiBBr es reconocida por los proveedores de datos involucrados en el proyecto como un repositorio de referencia de información sobre biodiversidad, pero aún no es una referencia para incorporar la biodiversidad en la planificación de acciones y diseño de políticas.

Conclusión #2: Considerando los recursos disponibles, el proyecto fue parcialmente efectivo y entregó menos de lo esperado. Sin embargo, los socios del proyecto consideraron que el proyecto entregó lo que era posible en el contexto dado.

Conclusión #3: El proyecto no adoptó un enfoque adecuado de monitoreo y presentación de informes y no aprovechó al máximo la revisión de medio término para aumentar su efectividad y eficiencia.

Conclusión #4: Los mecanismos actuales de gobernanza y sostenibilidad financiera establecidos por el proyecto, si se implementan correctamente, podrían garantizar la sostenibilidad a corto plazo de la plataforma SiBBr. Sin embargo, estos mecanismos no son suficientes para asegurar la sostenibilidad a largo plazo ni para llevar al logro total de todos los resultados.

Conclusión #5: El proyecto no tomó en cuenta las perspectivas de derechos humanos, derechos de los pueblos indígenas y equidad de género.

Conclusión #6: Un cambio transformador de la naturaleza propuesto por el proyecto SiBBr no es fácil de lograr y requiere la participación de varias instituciones e individuos, más allá de la Agencia Implementadora y la Agencia Ejecutora.

Lecciones aprendidas

Lección #1: El apoyo político permanente de alto nivel es clave para los proyectos que apuntan a un cambio transformador y que necesitan la participación activa de varias partes interesadas más allá de la esfera de influencia de la Agencia Ejecutora.

[‡] Los términos de referencia de la evaluación presentaban tres preguntas estratégicas (SQ) que eran de interés para el PNUMA y a las que se creía que el proyecto podía hacer una contribución sustancial. La Conclusión # 1 abordó el SQ2 '¿ *En qué medida la Plataforma SiBBr es reconocida por las organizaciones asociadas y los usuarios clave como una referencia en el suministro de información sobre la biodiversidad y para la integración de la biodiversidad en la planificación de acciones y el diseño de políticas?' / La* Conclusión # 3 abordó el SQ1 ' *¿En qué medida el proyecto implementó las recomendaciones de la Revisión de Medio Término? ¿Cómo apoyaron estas recomendaciones la eficacia del proyecto?* ' / *La* Conclusión # 4 abordó el SQ3' *¿Los mecanismos de gobernanza y sostenibilidad financiera establecidos dentro del Proyecto SiBBr aseguran el mantenimiento y actualización continua de la plataforma?*

Lección #2: La construcción de confianza es un elemento clave para la configuración efectiva de un Sistema de Información, como SiBBr.

Lección #3: La ejecución de un proyecto del FMAM no es simple. Requiere la mejor estructura y mecanismos de gestión de programas posibles para lograr resultados con potencial para promover cambios transformacionales.

Lección #4: La comunicación y el alcance son fundamentales para el éxito y necesarios para garantizar una propiedad sólida y un apoyo continuo, especialmente para un sistema de información sobre biodiversidad.

Recomendaciones

Recomendación #1: El PNUMA debe mejorar la orientación para el diseño e implementación de futuros proyectos del FMAM de esta naturaleza.

Recomendación #2: El PNUMA debe mejorar la orientación para el cumplimiento de los requisitos de auditoría para los proyectos del FMAM, incluidos los implementados en la modalidad de ejecución nacional.

Recomendación #3: El PNUMA debe formular directrices para la presentación de informes de cofinanciamiento de proyectos del FMAM.

Recomendación #4: El Gobierno de Brasil debe considerar la promoción de mecanismos para los efectos sinérgicos entre el GEF-Pro Especies y el SiBBr.

Recomendación #5: El Ministerio de Ciencia Tecnología e Innovación debe considerar la elaboración, de manera participativa, y implementar los 3 instrumentos clave establecidas por la Orden Ministerial, además de traer las partes interesadas adicionales a el Consejo Directivo del SiBBr.

Recomendación #6: El Gobierno de Brasil, con el apoyo del sector privado y la comunidad internacional, debe considerar reforzar las capacidades de taxonomía y ciencia de la biodiversidad.

Recomendación #7: El Gobierno de Brasil debe considerar la promoción de la cooperación triangular y la cooperación Sur-Sur con otros países y compartir las lecciones y experiencias del desarrollo e implementación de SiBBr.

Recomendación #8: Socios de SiBBr deben considerar fortalecer los derechos humanos y las dimensiones de género del SiBBr y explorar cómo la información de SiBBr podría beneficiar a los distintos géneros y grupos marginados.

Recomendación #9: El Gobierno de Brasil debe considerar el establecimiento de un Mecanismo de Coordinación Nacional de Información sobre Biodiversidad.

EXECUTIVE SUMMARY (ENGLISH)

Project background

1. The project 'Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use' (GEF ID 3722), hereafter called SiBBr project, was an ambitious initiative to ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes. The project was implemented from January 2012 to December 2019, which included three no-cost extension (in June 2016, in December 2017 and in November 2018). The total project budget was USD 28,172,728, of which USD 8,172,728 (29%) was in the form of a grant from the Global Environmental Facility (GEF).

This evaluation

2. This report presents results of the Terminal Evaluation which has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned. It involved several phases including an initial review of project design and stakeholder analysis, development of a reconstructed Theory of Change at evaluation, desk review, extensive interviewing with a wide range of project actors, data triangulation and analysis.

Key findings

3. The SiBBr project has played a relevant role in implementing a state-of-the-art information system on Brazilian biodiversity. For the first time research institutes in Brazil had an official government system where they could store, share and retrieve the information on biological collections. The project made great strides in improving the availability of biodiversity data in the country, something which was limited before. However, based on the findings from this evaluation, the project demonstrates overall performance at the 'Moderately Unsatisfactory' level (see summary at Table 14). Strategic Relevance, Quality of Project Design and Monitoring and Reporting were rated in the 'Satisfactory' range, whilst the project had room for improvements in Effectiveness, Financial Management, Efficiency, Sustainability and Factors Affecting Performance.

4. The project's strategic relevance stands out as Brazil is a megadiverse country and its biodiversity information was scattered around several organizations. The project responded to environmental concerns and needs of Brazil. The SiBBr project was relevant, and aligned, to UNEP's mandate and strategic priorities, and GEF's Strategic Priorities on Biodiversity. It was also aligned to major global priorities, such as the Aichi Biodiversity Targets and the 2030 Development Agenda.

5. The ProDoc presented a comprehensive explanation of the problem to be tackled, especially regarding its potential use by different stakeholders. Its major strengths rested on: financial planning; efficiency; strategic relevance; intended results; and governance. The weaknesses in the project design were related to: project preparation and context setting; logical framework and monitoring; partnerships; learning, communication and outreach; risk identification and safeguards; and sustainability, replication and catalytic effects.
6. There was no armed conflict or major political upheaval in Brazil. Moreover, due to the nature of the project, natural and manmade disasters did not directly affect project operations. The Covid-19 pandemic happened after the technical closure of the project and, to some extent, was negatively affecting the sustainability of SiBBr.
7. The original ProDoc did not include a Theory of Change, which was not a UN Environment Programme requirement at the time of approval. The Terminal Evaluation team, in consultation with the project partners, reconstructed the Theory of Change at Evaluation. The project would achieve its goals via three outcomes and eighteen outputs, organized around three components. No formal modifications/revisions were made to the ProDoc during project implementation.
8. Eight outputs were fully available (44%), eight were partially available (44%) and two were not available (12%). Among the delivered outputs, some of the most important ones to achieve outcomes were considered to be of good quality by project partners. The delivery of most outputs was delayed, which affected their utility to intended beneficiaries.
9. Outcomes 1 and 2 were partially achieved; and Outcome 3, a key outcome to reach the expected intermediary state and impact of the project, had yet to be achieved. The assumptions for progress, from project outputs to outcomes, partially held, and the drivers to support transition, from outputs to outcomes, were partially in place.
10. The project unquestionably promoted changes that may lead to the expected impact, but the magnitude (related to the expected extent), broadness (related to the wide scope required for change to happen) and effectiveness (related to the degree to which the project would produce the desired effect) of the change process were not yet sufficient to reach the desired intermediate state and impact in a reasonable timeframe. This Terminal Evaluation found that the intended impacts are unlikely to become a reality, and that for this to happen, the project outcomes and intermediate state would have to be fully achieved. This would require that the Government of Brazil and project partners dedicate additional efforts to increase the likelihood of reaching the long-lasting change envisaged by the project.
11. Evidence indicates that the sustainability of project outcomes is 'Moderately Unlikely' given the current conditions. Their continuation and further development are highly dependent on political will and social ownership. To a large extent, the project was not able to build an enabling framework for long-term support by key

political and social actors. Regarding financial sustainability, project outcomes have a high dependency on future funding. Currently, the financial needs of SiBBr depend solely on MCTI funds, and there is uncertainty regarding funding to key actions (e.g. communication & outreach). The project outcomes also have a high dependency on, and sensitivity to, institutional support. A Ministerial Order issued by MCTI presented a governance mechanism for SiBBr, which is important but not enough to build a comprehensive long-term sustainable framework to sustain/ achieve all project outcomes.

12. Financial Management was rated as 'Moderately Satisfactory'. Adherence to UN Environment's financial policies and procedures was considered 'Satisfactory' but there was room for improvement in the completeness of financial information. It was not possible to rate the communication between finance and project management staff due to lack of evidence.

13. Project implemented some cost saving initiatives, such as teaming up with GBIF and RNP, which led to positive results. However, delays in starting meant that some actions had to be condensed, affecting quality and performance. The project management faced many challenges and had to repeatedly adopt adaptive/responsive management solutions. The project suffered several delays and took more than 10 years to be implemented (since its approval by GEF in May 2010 until its financial closure in June 2020). These delays undermined the efficiency of the project. To some extent, the three no cost project extensions were justified and allowed the project to deliver the system, but they could had been avoided through a more result-oriented project management.

14. Monitoring and reporting (M&R) was assessed as being 'Moderately Satisfactory'. The project document included a basic, but solid, M&R framework, however M&R processes were expected to be elaborated and M&R tools to be developed during the Inception Phase by the M&R expert to be hired by the project; this was not done. During its implementation, no functional monitoring system was set-up, besides the PIRs, or tools to facilitate the timely tracking of results, adaptative management, and progress towards projects objectives. To some extent, M&R was considered more as a GEF requirement than an instrument to improve project execution, achievement of outcomes and to ensure sustainability.

15. The factors affecting project performance, achieved an overall rating of 'Unsatisfactory'. Responsiveness to Human Rights and Gender Equity and Environmental, Social and Economic Safeguards were rated 'Moderately Satisfactory'. Quality of Project Management and Supervision, Stakeholder's Participation and Cooperation, Country Ownership and Driven-ness, and Communication and Public Awareness would have benefited from further attention. Preparation and Readiness was rated 'Unsatisfactory'.

Conclusions[§]

16. Conclusion #1: The project delivered a state-of-the-art information system on Brazilian biodiversity with more than 16 million occurrences of species. The SiBBr Platform is recognized by data providers involved in the project as a reference repository of information on biodiversity, but it is not yet a reference for mainstreaming biodiversity into the planning of actions and design of policies.
17. Conclusion #2: Considering the resources available, the project was partially effective and delivered less than expected. Project partners, however, considered that the project delivered what was possible in the given context.
18. Conclusion #3: The project did not adopt an adequate monitoring and reporting approach and did not take full advantage of the Mid Term Review to increase its effectiveness and efficiency.
19. Conclusion #4: The current governance and financial sustainability mechanisms established by the project, if properly implemented, could guarantee short-term sustainability of the SiBBr platform. However, these mechanisms are not enough to ensure long-term sustainability nor to lead to full achievement of all outcomes.
20. Conclusion #5: The project did not take into account the perspectives of human rights, indigenous peoples' rights and gender equity.
21. Conclusion #6: A transformational change of the nature proposed by the GEF SiBBr project is not easy to achieve and requires the involvement of several institutions and individuals, beyond the Implementing Agency and the Executing Agency.

Lessons Learned

22. Lesson #1: Permanent high-level political support is key to projects that aim for transformational change and that need active engagement of several stakeholders beyond the sphere of influence of the Executive Agency.
23. Lesson #2: Trust building is a key element for the effective set up of an Information System, like SiBBr.
24. Lesson #3: The execution of a GEF project is not simple. It requires the best possible Program Management structure and mechanisms to achieve outcomes with potential to promote transformational changes.

[§] The evaluation ToR presented three strategic questions (SQ)which were of interest to UNEP and to which the project was believed to be able to make a substantive contribution. Conclusion #1 addressed the SQ2 '*To which extent is the SiBBr Platform recognized by partner organizations and key users as a reference in the provision of information on biodiversity and for mainstreaming biodiversity into the planning of actions and design of policies?*' / Conclusion # 3 addressed the SQ1 '*To what extent did the project implement the recommendations from the Mid-Term Review? How did these recommendations support the project's effectiveness?*' / Conclusion #4 addressed the SQ3 '*Do the mechanisms of governance and financial sustainability established within the SiBBr Project ensure the maintenance and continued update of the platform?*'

25. Lesson #4: Communication and outreach are paramount for success and necessary to ensure strong ownership and continued support, especially for a biodiversity information system.

Recommendations

26. Recommendation #1: UNEP to improve guidance for the design and implementation of future GEF projects of this nature.
27. Recommendation #2: UNEP to improve guidance for the compliance with audit requirements for GEF projects, including the ones implemented under National Implementing Modality.
28. Recommendation #3: UNEP to formulate guidelines for the reporting of co-finance for GEF projects.
29. Recommendation #4: The Government of Brazil to consider promoting mechanisms for effective synergies between GEF Pro-Species project and SiBBr.
30. Recommendation #5: The Ministry of Science and Technology to consider developing, in a participatory way, and put in place the 3 key instruments established by the Ministerial Order and to bring additional stakeholders to the Steering Committee.
31. Recommendation #6: The Government of Brazil, with support of the private sector and the international community, to consider strengthening taxonomic capacities and biodiversity science.
32. Recommendation #7: The Government of Brazil to consider promoting South-South and Triangular cooperation with other countries to share the lessons and experiences from the development and implementation of SiBBr.
33. Recommendation #8: SiBBr partners to strengthen the human rights and gender dimensions of SiBBr and explore how the SiBBr information could be of benefit to marginalized and gender groups.
34. Recommendation #9: The Government of Brazil to consider establishing a National Coordination Mechanism for Information on Biodiversity.

I. INTRODUCTION

35. This report presents the results and findings of the Terminal Evaluation (TE) of the full-size project 'Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use' (GEF ID Number 3722). The project approved by UNEP in October 2009 and by Global Environment Facility (GEF) in May 2010, was expected to start in June 2011 and be completed in December 2016 (66 months). It was carried out between January 2012 and December 2019 (95 months), receiving three no-cost extensions over that period (in June 2016, in December 2017 and in November 2018). The approved overall project budget was USD 28,172,728, including a GEF grant allocation of USD 8,172,728.

36. The project, better known for its acronym in Portuguese (SiBBr), had UNEP as the GEF Implementing Agency responsible for the overall project supervision, ensuring consistency with GEF and UNEP policies and procedures; the Brazilian Ministry of Science Technology and Innovation (MCTI) as Executing Agency, responsible for executing all activities described in the workplan, with administrative and financial support provided by UNEP Country Office in Brazil; and the Brazilian Cooperation Agency (ABC) responsible for technical-administrative advice regarding international technical cooperation. The project included a Project Management Unit (PMU), a Project Steering Committee (SC), and a Technical Scientific Committee (TSC).

37. The project's objective was 'to ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes. It was aligned with the GEF IV Strategic Objective II (SO2) through its fostering of 'Mainstreaming biodiversity in production landscapes and sectors' and its Biodiversity Strategic Program 4 (SP4) through 'strengthening the policy and regulatory framework for mainstreaming biodiversity'. The Project document (ProDoc) did not mention explicitly its alignment to the UNEP Medium Term Strategy (MTS) and Programme of Work (PoW) but indicated that the project was under UNEP priority Environmental Governance (one of UNEPs sub-programmes). Based on project reports, during its implementation, the project was under the Ecosystems Division of UNEP. In 2014, the project underwent a Mid Term Review (MTR).

38. In line with UNEP's Evaluation Policy, this TE was undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. This evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among

UNEP and the Government of Brazil, specifically the MCTI (regarding relevant information for future project formulation and implementation).

39. The target audience for this TE, besides UNEP, the GEF and the Brazilian government, are representatives of other countries interested in following the same path, organizations interested in creating similar ventures, stakeholders related with GEF biodiversity area, other UN agencies, and major stakeholders interested in the SiBBr or its subjects.

II. EVALUATION METHODS

40. This TE was conducted based on principles of integrity, honesty, confidentiality, systematic inquiry and cultural sensitivity. The evaluation used a participatory approach whereby the Evaluation Consultants (ECs), in coordination with the Evaluation Manager, maintained close communication with project stakeholders and promoted information exchange throughout the evaluation process aiming to increase collaboration and ownership of the evaluation findings. Since the inception phase, and throughout the evaluation process, there were regular and fluid communication and reporting back on progress and difficulties to the Evaluation Manager. The UNEP Task Manager and Project Coordinator were informed on the evolution of the work and were invited to engage in discussions on emerging findings throughout the process.

41. The TE followed the evaluation criteria presented in the TORs and sought to answer the following strategic questions (see Conclusions section):

    i) To what extent did the project implement the recommendations from the MTR? How did these recommendations support the project's effectiveness?

    ii) To which extent is the SiBBr Platform recognized by partner organizations and key users as a reference in the provision of information on biodiversity and for mainstreaming it into the planning of actions and design of policies?

    iii) Do the mechanisms of governance and financial sustainability established within the SiBBr project ensure the maintenance and continued update of the platform?

42. A series of stages were followed, using primary and secondary data collection methods. The phases of the evaluation process were:

    A. **Inception Phase**: initial desk review, stakeholder analysis, project design quality assessment, introductory interviews, evaluation framework, Theory of Change (ToC) at Evaluation Inception and Inception Report.

    B. **Data Collection and Analysis Phase**:

        i. In-depth desk review and stakeholders' interviews

        ii. ToC at evaluation

        iii. Data analysis-triangulation and presentation of preliminary findings

    C. **Reporting Phase**: Report-writing and review

Phase A – Inception

43. The inception phase included an initial review of the relevant background and project documents, such as ProDoc, project reports, SiBBr webpage, MTR, UNEP and GEF guidelines / background documents. An initiation meeting

was held to launch the process with the participation of the Evaluation Manager, the Task Manager and the Project Manager, and regular messages with the Task Manager (TM) and Project Manager (PM) were exchanged for clarification purposes. The assessment of the quality of project design was conducted based on the Evaluation Office standard template and included the review and formal rating of various aspects of the original approved ProDoc.

44. A ToC at Inception was reconstructed during the initial desk review phase of the evaluation based on the results framework and the ProDoc. The main elements of the evaluation framework were defined, including draft evaluation tools and the evaluation matrix. Considering the interest of GEF to promote innovation (GEF/STAP/C.55/ Inf.03), the evaluation also incorporated an assessment of the extent to which the project adopted and promoted innovative elements in its design and implementation (a question on this topic was added on the evaluation framework matrix). This initial phase established a baseline understanding of the project implementation process, results achieved and management mechanisms.

Phase B – Data Collection & Analysis

i. In-depth desk review and Stakeholders' interviews

45. As part of the fact-finding effort, the ECs sought for evidence of results and impact during the interviews and desk review, i.e. progress towards the articulated outcomes and global environmental benefits of the project. The interviews also contributed to an understanding of how the change process embedded in the project had evolved.

46. After the approval of the inception report, 3 'introductory meetings with stakeholders' took place with the aim of presenting the evaluation objectives, process, timeframe and methods; explain the relevance and utility of the evaluation process for the SiBBr sustainability and impact; increase trust building and willingness for collaboration; and gather initial perceptions/information from the stakeholders.

47. During the data collection phase, an in-depth document review and analysis was performed, including the documents listed in Annex III. Project documents were analyzed in detail, including progress and financial reports, final technical report, Steering Committee meetings minutes, Project Implementation Review reports and Tracking Tools, progress and expense reports. Documentation related to project outputs was also analyzed including the partnership agreements and reports, work plans, communication products, and studies produced by the SiBBr project.

48. The data collection phase took place during the **Covid-19** pandemic declared by the World Health Organization on March 11th, 2020. Due to travel restrictions in Brazil, and the measures taken to reduce social contact, the

field mission did not take place. Therefore, the ECs, the Evaluation Manager, the Task Manager and the Project Coordinator agreed on a strategy to mitigate the impact in the conduct of this TE without field missions.

49. The nature of the SiBBr, the creation of an internet-based information system with no on-the-ground intervention or demonstrative pilot projects, favored the adoption of **remote data collection methods** (without travel missions). The adjustments to the evaluation methods aimed to safeguard the principles of the evaluation, its usefulness for the target audience and the commitment to quality. Thus, it was necessary to increase the emphasis on desk reviews and conduct all stakeholders' meetings virtually.

50. **Individual and/or in-group Interviews** were held with 80 individuals (43 women and 37 men) (see Annex II for a list of People consulted during the Evaluation). The criteria for the selection of the interviewees were based on the role they played in the project and their availability/ willingness to contribute to the evaluation. The evaluation aimed to include, as far as possible, an appropriate representation of genders and social groups.

51. All responses from interviewees were treated **confidentially** with anonymity maintained. Interviews were conducted based on solid ethical standards, and, to a large extent, sought to include divergent views. The communication strategy with stakeholders was adapted according to the platform (i.e. Skype, WhatsApp, Zoom, RNP and phone calls) that was most suitable to each stakeholder. In a complementary approach to the virtual meetings, e-mail exchanges were also used to collect additional evidence.

52. Semi-structured interview protocols and questionnaires were designed, based on the evaluation matrix, and used for each interview as initial guidance. An adaptive approach was applied during the meetings. The interviewer aimed to build a trust relationship and make the interviewee feel as comfortable as possible to provide relevant information/evidence for the evaluation. There was a limit on the number of questions asked, aiming to keep interviews short. A thank-you e-mail was sent after the interviews, confirming that the interviewee will receive a copy of the TE report once it is published.

ii. Development of ToC at Evaluation

53. At the end of the inception phase, the ToC at Inception (which was based on the project design document) was further refined, reviewed and validated with the project team. Then, during data collection, and based on the evidence collected, the **ToC at Evaluation** was developed (which reflects the causal logic of project implementation actions) and used to assess the project's delivery of outputs, achievement of outcomes and likelihood of impact.

iii. Data Analysis-Triangulation and Presentation on preliminary findings

54. Data analysis involved transcribing, translating, coding and organizing the findings according to a thematic analysis approach. Data was **triangulated** from all sources to provide evidence for the evaluation. The evaluation identified not only what happened in the project but, when possible, explained underlying factors influencing why, exploring various complex dynamics related to project performance and presenting diverse perspectives about project challenges and successes.

55. Both quantitative and qualitative **evaluation methods** were adopted to determine project achievements against the expected outputs, outcomes and impact. The evaluation also took into consideration the baseline conditions (where identified) and trends in relation to the intended project outcomes and impacts.

56. Data analysis was conducted in a **systematic manner** ensuring that all the findings, conclusions and recommendations were substantiated by evidence. Appropriate tools, such as a data analysis matrix, were used to ensure proper analysis, including records for each evaluation question/criteria, information and data collected from different sources and with different methodologies.

57. By the end of the data collection and analysis phase, the evaluation team (ET) delivered a **presentation of preliminary findings**. The sharing of preliminary findings with the UNEP project team intended to support the evaluation's participatory approach, acting as a means to ensure all information sources had been accessed, and to provide an opportunity to verify emerging findings. This was also a good opportunity for the project team to engage with the lessons learned, contribute to the articulation of recommendations and take ownership of results.

Phase C –Reporting

58. **Draft TE Report** was written following the guidance and requirements from the UNEP Evaluation Office. As described in the Term of reference (ToR) for this TE evaluation, the reporting phase included a series of **reviews** from the initial Draft TE report to the Final TE Report. The ECs submitted a zero draft TE report to the Evaluation Manager for an internal review and then revised based the report based on the comments and suggestions received.

59. Once a draft met the required quality standards, the Evaluation Manager shared the **cleared draft TE report** with the TM, PM, UNEP Country Office Brazil, and Fund Management Officer (FMO), who were invited to provide comments and suggestions. After its revision by the ECs, the Evaluation Manager circulated a **revised draft TE report** to other project stakeholders, for their review and comments. Stakeholders were invited to provide feedback on any factual errors or misinterpretations, and conclusions as well as to provide feedback on the proposed recommendations and lessons.

Comments to the draft report were sent to the Evaluation Manager for consolidation.

60. The Evaluation Manager provided all comments to the ECs for consideration in preparing the **Final TE Report**, along with guidance on areas of contradiction or issues requiring an institutional response. The Final TE report and its Response to Comments annex, listing those comments not accepted by the Evaluation Consultant and indicating the reason for the rejection, was produced and sent by the ECs to the Evaluation Manager for final clearance. An **Evaluation Brief** (a 2-page overview of the evaluation findings and recommendations) was produced for wider dissemination (i.e. UNEP website, SiBBr partners)[**].

61. Some **limitations** faced by the evaluation included:

- Limited availability of evidence for some evaluation criteria/questions: despite the efforts of the EM and contributions from TM and PC, many documents were not fully available nor properly organized. There were some inconsistences within the financial documents provided, PIRs (e.g., output 3.3), and reporting. The ET had to invest more time and dedication to overcome these limitations.
- Delay in receiving answers: a longer than expected delay in receiving answers to questions and/or requests for interviews sent by e-mail happened occasionally. Some project stakeholders were already involved in other projects / activities and this might explain this delay. Relationship building and an engagement strategy were used to motivate timely answering.
- Hiatus since project design: The PPG phase started in 2008 and project was finalized in 2020. Several key stakeholders involved in project implementation during these 12 years were no longer available (e.g. the FMO or the UNEP Brazil finance manager have left their positions) or did not quite remember events that happened a while ago. A detailed analysis of written documents available from earlier years was adopted to mitigate this limitation.

[**] This reflects the process to be followed by the evaluation for the finalization of the report.

III. THE PROJECT

A. Context

62. Brazil is a mega-diverse country that contains more than a tenth of the Earth's biodiversity and is home to several important ecosystems. However, that biological richness was (and continues to be) threatened not only by elements such as invasive species, over-exploitation, pollution, agricultural and infrastructure expansion, but also by the lack of accurate and updated information about that biological resources.

63. Back in the mid-2000s, Brazil engaged in negotiations to develop a solution to enable improved biodiversity management - including information related to it. The result was the approval by the GEF, in May 2010, of the UNEP implemented project Brazilian Biodiversity Information System (SiBBr). The country would clearly benefit from a unified information system on biodiversity, especially to: (i) support better national decision-making processes; (ii) enhance exchange of information; (iii) improve understanding and better decision-making; and (iv) mainstream biodiversity information.

64. To achieve its objectives, the project would use the Executing Agency (MCTI) leverage to coordinate governmental actions on the three levels (federal, state and cities), finance initiatives and capacity building, foster partnerships between different stakeholders, and develop the required infrastructure to make the system operational, useful and accessible free of charge.

65. Back at that time, Brazil was going through a period of economic growth, currency valuation, increased soft-power, reduction in deforestation rates, political stability and continuity, and poverty reduction – all of which created a favorable atmosphere for the implementation of the SiBBr. That scenario poses a striking contrast to the current situation in Brazil, marked by decreased public participation in decision making, lack of faith in science-based approaches and disregard to environmental issues.[††]

66. The project design did not foresee any specific external challenges, such as conflicts, natural disasters or political upheaval, but it did list technical, financial and institutional barriers that have proved to have created difficulties to a timely delivery of the SiBBr: (i) barriers to the organization, qualification and integration of information contained in Brazilian biological centers and networks; (ii) barriers to strengthening institutional and taxonomic capacities; and (iii) barriers to effective information management and use.

[††] In 2009, when the project document was developed, Brazil was undergoing a period of success marked by economic growth. In 2013, during the public administration of President Dilma Rousseff, Brazil's political situation deteriorated, and demonstrations impacted public administration. Between 2015-2018, Brazil had a relatively stable political environment, and then in 2019, with the election of President Jair Bolsonaro, Brazil's strategic priorities moved away from biodiversity conservation.

B. Objectives and components

67. Since biodiversity information in Brazil was scattered among several sources and not systematized, the project's main objective was 'to ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes' which 'was to be achieved by:

    (i) consolidating the infrastructure, instruments, tools, and technology required to qualify, gather and make the biodiversity information contained in the resources of the country's biological collections freely available online through the SiBBr;

    (ii) strengthening institutional and taxonomic capacities to ensure continuous uploading and updating of information into SiBBr; and

    (iii) developing products and services that would allow key decision-makers to establish policies that integrate biodiversity conservation and sustainable use objectives into the operations of the productive sectors.'

68. According to the ProDoc, project goals would be achieved via three outcomes and eighteen outputs (Table 2). These outputs and outcomes were organized around three components. First, existing biodiversity data would need to be consolidated and integrated into an information system that could act as the single, authoritative interface on Brazilian biodiversity data, allowing extraction and visualization of information most relevant to one's interest (Component 1).

69. Second, institutional and taxonomic capacities would need to be strengthened to ensure an increasing supply of good quality data and to rapidly fill some of the critical gaps in taxonomic, biogeographic and conservation knowledge (Component 2).

70. Finally, decision makers and diverse end-users would need to be made aware, and trained in the use, of the information system that would be specifically tailored to deliver the information that they need in a form that they could use (Component 3).

Table 2 – Project outcomes and outputs (Source: Project Document, 2011)

Outcomes	Outputs
Outcome 1: The information contained in Brazilian biological centers and networks has been organized, qualified and integrated into the Brazilian	1.1 Stakeholder and political articulation 1.2 Communication infrastructure expanded and consolidated 1.3 Increased content and usability of primary species occurrence data 1.4 Biodiversity data digitized 1.5 National repository for observational data developed

Outcomes	Outputs
Biodiversity Information System (SiBBr)	1.6 Dynamic catalogue for species found in Brazil implemented 1.7 Quality added to biodiversity data
Outcome 2: Institutional and taxonomic capacities have been strengthened to ensure continuous uploading and updating of information into the SiBBr	2.1 Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections reviewed and updated 2.2 Training of staff working in taxonomy and related fields 2.3 Biological collection infrastructure and research support improved 2.4 Targeted incentives to increase taxonomic and bio-geographic knowledge
Outcome 3: Enabling framework to manage, distribute and use qualified information at federal, state, and local level decision making for conservation of globally significant biodiversity	3.1 End-user demands identified and weaknesses regarding products (institutional, software, etc.) assessed 3.2 Core database and framework for application development implemented. 3.3 Service environments and applications to map and model biodiversity developed 3.4 Products and services that meet the identified requirements for decision-makers developed 3.5 A dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels 3.6 Capacities of end-users strengthened to use the information system 3.7 A system of governance for the information system developed

C. Stakeholders

71. The ProDoc presented an analysis of the major stakeholders related to biodiversity information management and use in Brazil, a brief section on expected stakeholders' participation in SiBBr project, and an appendix with a stakeholder matrix. The stakeholder matrix listed several actors, indicating main interest in biodiversity and specific interest in SiBBr.

72. The ProDoc matrix contained more than 50 organizations, grouped around the 23 stakeholders' categories, and mentioned, for some stakeholders (but not for all of them), their expected roles in terms of data providers and users. The ProDoc narrative points out three major roles for stakeholders: data providers, end users, and information managers. The stakeholders that were to be involved in the project were also from diverse backgrounds: ranging from key ministries to Non-Governmental Organizations (NGOs), and from Universities to private sector representatives.

73. This TE proposes a matrix to better visualize and assess the key stakeholders of the project, based on their roles (data providers, information managers, and

end users) and on the stakeholder type (ministries, universities, research institutions, NGOs, private sector, etc.) – see Annex VII. The TE stakeholder matrix for the SiBBr was built based on the information available in the ProDoc and refined during data collection phase.

74. The stakeholder matrix on Annex VII lists 62 actors with a double role of data providers and information users (data providers/users), five institutions with expertise on information systems and communication networks (information managers), and more than 100 stakeholders who were considered as end users with limited or no role as data provider. This TE also considered a fourth group of stakeholders: the enablers of the SiBBr change process. These stakeholders might have some role as data providers or end users, but their major role in the SiBBr project would be to contribute to the change process aimed by the project. This category includes various institutions including international organizations and governmental institutions.

75. The role of women as end-users and the need to improve gender equality in science were acknowledged in the ProDoc, but no concrete strategy or action for gender mainstreaming in the project was proposed. Under-represented / marginalized groups, such as local communities and indigenous peoples, were not considered as relevant stakeholders for SiBBr.

D. Project implementation structure and partners

76. UNEP was the GEF Implementing agency (IA) with MCTI[‡‡], as the executing agency (EA) of the project. The IA was responsible for coordination and project supervision in order to ensure that the project would respect GEF and UNEP policies and procedures. MCTI was responsible for executing the project, following the approved workplan, in line with the ProDoc, working closely with the IA. The MCTI was also responsible for designating the Project National Director and Coordinator.

77. Upon a request for administrative support from the Government of Brazil (GoB), the UNEP Division for Regional Coordination, through UNEP Country Office (CO) in Brazil, took on the co-executing role (in GEF terms) of the project through an Internal Cooperation Agreement (ICA), signed in July 2011, between UNEP's Division of GEF Coordination (responsible for the role of GEF IA) and UNEP's Division for Regional Coordination[§§]. An Executive Programme between GoB and UNEP, also signed in 2011, designated UNEP

[‡‡] MCTI changed names four times during the project's life cycle: MCT (Minister of Science and Technology) until 2011, MCTI (added innovation to the name) 2011 - 2016, MCTIC (added communication to the name) 2016 – 2019, and again MCTI (communication became a separate minister) 2019 – present. This evaluation will adopt the acronym MCTI regardless of the period analyzed.

[§§] During project implementation, DGEF was dissolved and DEPI (subsequently UNEP's Ecosystem Division) took over the GEF biodiversity portfolio including the SiBBr Project. Later on, DRC was also dissolved and UNEP's Regional Office for Latin America and the Caribbean (ROLAC), together with UNEP's Brazil Office, took over DRC's previous commitments under the ICA.

CO in Brazil as responsible for executing, monitoring and supporting the EA, via operational and financial services.

78. According to the Executive Programme, the Ministry of Foreign Affairs, via its Brazilian Cooperation Agency (ABC), was the institution responsible for monitoring the actions derived from the Executive Programme at the government level; monitoring technical and administrative aspects; and providing technical and administrative advice on international technical cooperation. ABC also participated in the Steering Committee meetings.

79. The Project Steering Committee (PSC) was composed of the National Director, one representative of ABC/MRE and UNEP TM, provided political and strategic guidance to the project, and oversaw and approved annual work plans, budgets, and other strategic decisions.

80. The Technical Scientific Committee (TSC), not envisaged in the ProDoc, was created in 2011 by the Project Director to provide technical guidance to the project. It was organized in an *ad-hoc* manner and it was originally composed by personnel of seven key institutions, namely: USP Zoology Museum (MZUSP), Rio de Janeiro's Botanical Garden (JBRJ), the National Network for Education and Research (RNP), the National Institute for Amazonian Research (INPA), Embrapa, the Ministry of Environment (MMA) and the Brazilian Institute for Geography and Statistics (IBGE).

81. The 2018 ministerial ordinance created a new governance for the sustainability of the SiBBr after project closure, involving a new steering committee and an executive coordination. This new steering committee was composed of MCTI; RNP; INPA; Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq); Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT); Museu Paraense Emílio Goeldi (MPEG); Instituto de Desenvolvimento Sustentável Mamirauá (IDSM) and, Instituto Nacional da Mata Atlântica (INMA). The MMA was considered a permanent guest to the SC meetings. In this new organization, the Steering Committee would be responsible for the coordination and harmonization of concepts and procedures; to identify new institutional partnerships, approve measures related to the implementation and sustainability of the system. By November 2020, this SC had convened only once: in August 2019.

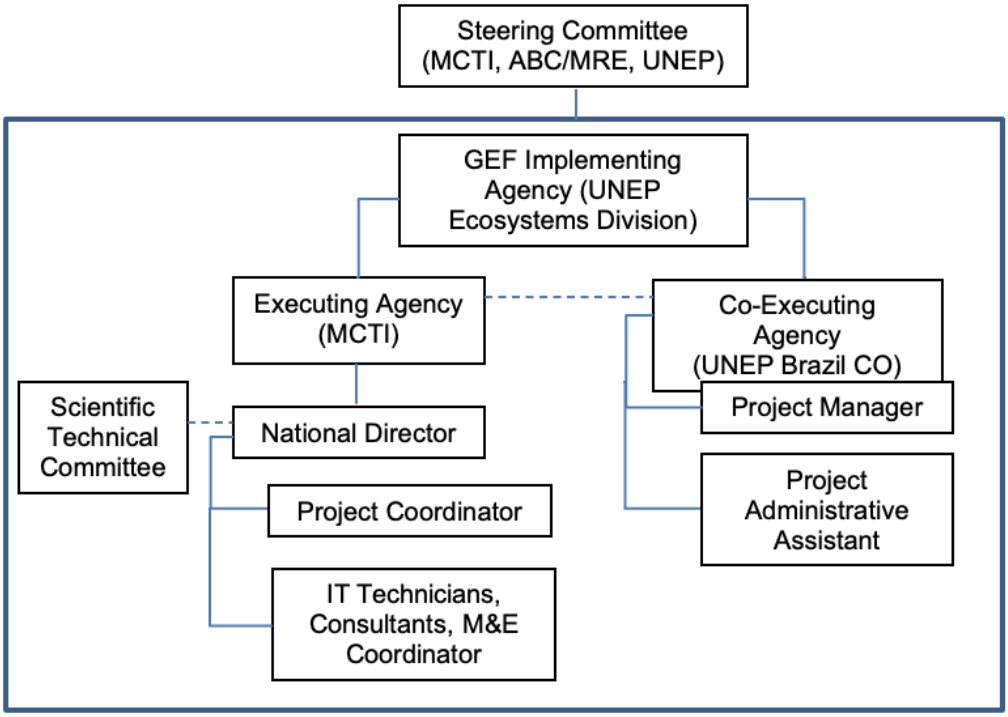

Figure 1: Organigram of the Project with key project key stakeholders (Source: prepared by the ET, in consultation with project TM and PM)

E. Changes in design during implementation

82. Below are some key events that affected the project, or its parameters, presented briefly in chronological order. Note that no amendment to the ProDoc or formal revisions to the project's results were made.

- 2010: project was approved in May with an expected start date in June 2010.
- 2011: implementation started one year later than planned, in June 2011, using co-finance funds; the first TSC meeting was held in September; this delay forced the project to condense planned actions to fit in the remainder of the 5 years plan.
- 2012: first disbursement was made in January 2012; the inception workshop was held in April; the first SC meeting convened in November and approved a strategy to resume the project in the time remaining.
- 2013: in May the 'Carta do Rio' was released, when the Big 5 (INPA, JBRJ, MPEG, MZUSP, and Museu Nacional) criticized the modus operandi (centralized) adopted by the EA and demanded changes and more participation for stakeholders. Co-financing was resumed in that year. The MTR was carried out between December and February 2014.
- Mid 2016: First no cost extension, extending the project up to December 2017. In October 2016 the GBIF meeting was held in Brazil, which was pointed out by the majority of interviewees as the catalyst moment of the SiBBr, enabling the final push to deliver the system.

- 2017: in December, second no cost extension extending the project up to December 2018.
- 2018: in November, last and final no cost extension extending the project up to December 2019.

F. Project financing

83. The total project budget was USD 28,172,728; 29% of the project was funded by the GEF and the remaining 71% co-financed by the Government of Brazil (GoB). The funds supplied by the GoB were used to fund outcome 2. The half-year progress report of December 2012 registers that, by then, USD 18 millions of co-finance were already mobilized and invested in the project (i.e. more than 60% of the project total). The first transfer from GEF only arrived on January 17th that same year. By mid-2014, the GoB had already disbursed its full share.

84. The financial statement from 2012 to December 2019 (including 2020) presented reflects a total expenditure of USD 8,164,807.01, which leaves a positive balance of USD 7,920.99 (it was reported that the remaining funds were transferred to UNEP CO of Brazil). It was not possible to compare the expenditure by outcome in relation to cost at design and the actual expenditure because the ProDoc was conceived using 4 outcomes (the 3 outcomes + a project management outcome) whereas the final expenditure report used 3 outcomes only.

Table 3 – Budget at design and expenditure by outcome*

Component/sub-component/output *All figures as USD*	Estimated cost at design**	Actual Cost/ expenditure***	Expenditure ratio % (actual/planned)
Outcome 1	3,733,900	5,280,908	141
Outcome 2	20,000,000	20,000,000	100
Outcome 3	3,706,828	2,883,899	78

** It was not possible to compare the expenditure by outcome in relation to cost at design and the actual expenditure because the ProDoc was conceived using 4 outcomes (the 3 outcomes + a project management outcome) whereas the final budget report used 3 outcomes only.*

*** Estimated cost at design extracted from: SIBBr PRODOC eng_signed.pdf item 7.1 with budget listed on it.*

**** Actual cost expenditure from SiBBr-financial statement from 2012 to 2019 December.pdf*

Table 4 – Planned vs actual sources of funding/co-financing

Co-financing (Type/Source)	UNEP (US$1,000)		Government (US$1,000)		Other* (US$1,000)		Total (US$1,000)		Total Disbursed (US$1,000)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
Grants									
Loans									
Credits									
Equity									
In-kind									
Other: Cash			20,000	22,162			20,000	22,162	22,162
Totals			20,000	22,162			20,000	22,162	22,162

Source: Co finance Report Jun 2016.pdf

IV. THEORY OF CHANGE AT EVALUATION

85. The GEF SiBBr project was approved in 2011 using a result-oriented focus. The original ProDoc did not include a **Theory of Change** (ToC), as it was not a UNEP requirement at the time[***]. During project implementation, there were no documented changes in the project's intended results nor intervention logic. During the inception phase of the terminal evaluation a 'ToC at Evaluation Inception' was reconstructed based on the information given in the project documents (Table 5).

86. At the end of the inception phase, the ToC at Evaluation Inception was further refined, reviewed and validated with the project team. Then, during data collection, and based on the evidence collected, the ToC at Evaluation was developed and used to assess the project's delivery of outputs, achievement of outcomes and likelihood of impact. To the extent possible, the reconstructed ToC at Evaluation is in line with Organization for Economic Co-operation and Development/ Development Assistance Committee (OECD/DAC) and GEF - UNEP guidelines, including the UNEP Results Glossary (2019).

87. Figure 2 presents the reconstructed **ToC at Evaluation diagram** with a sequence from outputs to outcomes, and then through to intermediate states to the desired impact. It explains the process of change by outlining major causal pathways along the intervention. The changes are mapped as a set of interrelated pathways, showing the required outcomes in a logical relationship to the others.

88. It was expected that the delivery of the **18 outputs** (availability for intended beneficiaries/users of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions) would lead, during the life of the project, to the achievement of **3 outcomes** (change resulting from the use of outputs by intended beneficiaries, observed as a change in institutions or behaviors, attitudes or conditions), which in turn would place the process of change in **an intermediate state** (change required in between project outcomes and impact) towards the desired impact (long-lasting, intended and positive changes related to UNEP's mandate arising, directly or indirectly, from a project).

89. These expected changes would be effectively achieved if **five assumptions**[†††] and **six drivers**[‡‡‡] were met (Table 6). All four stakeholders' groups were

[***] The development of a Theory of Change for projects became a requirement in UNEP in 2011, just after the project document was developed.

[†††] An assumption is a significant external factor or condition that needs to be present for the realization of the intended results but is beyond the influence of the project and its partners. Assumptions are often positively formulated risks.

[‡‡‡] A driver is a significant external factor that, if present, is expected to contribute to the realization of the intended results of a project. Drivers can be influenced by the project and its partners.

expected to be involved in the change process: data providers, information managers, end users, and enablers of change – see section III.C.

90. **Outcome 1** 'SiBBr becomes the reference Information System about Brazilian biodiversity for data providers' would be the change on the conditions and institutional framework related to knowledge management of biodiversity information resulting from the delivery of seven outputs: increased stakeholder and political articulation (Output 1.1); communication infrastructure expanded and consolidated (Output 1.2); increased content and usability of primary species occurrence data (Output 1.3); biodiversity data digitized and made available (Output 1.4); national repository for observational data developed (Output 1.5); dynamic catalogue for species found in Brazil implemented (Output 1.6); and mechanisms are in place to ensure the quality (i.e. reliability and validity) of biodiversity data/ registers (Output 1.7). Output 1.1 (stakeholder and political articulation) was expected to contribute to the development of the governance structure and framework for long-term support to the SiBBr (output 3.7).

91. The purpose of these outputs was to consolidate the infrastructure, instruments, tools, and technology required to qualify, gather and make the biodiversity information contained in the country's biological collections freely available online. The need for a communications infrastructure and technical capacity to develop an appropriately sophisticated information system was identified as the major assumption for this change process from outputs to outcome (**Assumption 1**). It was expected that a very high proportion of data providers would fully contribute to the SiBBr and would be willing to share data and technical information (**Driver 1**).

92. **Outcome 2** 'Strengthened institutional and taxonomic capacities enable continuous upload and update of information into SiBBr' would contribute to the achievement of outcome 1. Outcome 2 would be the change resulting from the delivery of four outputs: a strategic plan to strengthen taxonomic capacity and consolidate Brazilian biological collections is continuously reviewed, updated and made available to all users (Output 2.1), capacities of staff working in taxonomy and related fields enhanced through training and technical/ financial support (Output 2.2), biological collection infrastructure and research support improved (Output 2.3), and taxonomic and bio-geographic knowledge increased through targeted incentives (Output 2.4).

93. The review of the Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections (output 2.1) **was expected to contribute to** the delivery of outputs 2.2 (enhancing capacities), output 2.3 (improving infrastructure and research support) and 2.4 (filling gaps in knowledge).

94. In order to achieve outcome 2, it was expected that strengthened inter-institutional collaboration would increase taxonomic capacities (**Driver 3**) of

data providers that, in turn, would contribute to achieve this outcome. This would result in an expanded national biodiversity knowledge base, and a strengthened long-term capacity for data acquisition and management through well-managed biological collections with increased expertise.

95. For the change process from Outcome 2 to Outcome 1 to take place, it would be relevant to have sufficient human resources available in specific regions or taxonomic domains that required strengthening (**Assumption 2**); and to have a better infrastructure in place, increased visibility and greater data quality that would allow and incentivize data providers to participate and share information (**Driver 4**).

96. **Outcome 3 '**Decision-makers at country, state, and local level use SiBBr as a support tool for improved biodiversity conservation' would be the change resulting from the delivery of seven outputs: greater awareness by MCTI on end-user demands and weaknesses regarding products - institutional, software, etc. (Output 3.1); core database and framework for application development implemented (Output 3.2); service environments and applications to mapping and modelling biodiversity developed (Output 3.3); products and services, tailored to decision-makers' requirements and needs, are available and accessible to end-users (Output 3.4); a dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at country, state and local levels implemented (Output 3.5); capacity of end-users to use the information system strengthened (Output 3.6), and; a system of governance for the information system developed (Output 3.7).

97. There was a **causal relation between outputs 3.1 and 3.4**: Output 3.1 was expected to assess the demands of end-users and to generate a list of desirable software applications to help decision-makers, from which at least four software applications would be selected for implementation under output 3.4. There was also a **casual relation between outputs 3.2 and 3.4**, where the SiBBr core (output 3.4) would provide the basic framework for developing the software applications for decision making (output 3.4).

98. The major assumption related to this component is that the SiBBr would be widely adopted throughout federal, state and local government institutions and the private sector as an essential tool for environmental decision-making (**Assumption 3**). The purpose of this component was to offer products and services that would meet the requirements of end users to effectively take into account biodiversity conservation and sustainable use issues into the productive sectors' operations.

99. The achievement of Outcome 1 was a prerequisite to the causal pathway leading to Outcome 3. One driver and one assumption played a relevant role on this change process: Brazil would have sufficient communications infrastructure and technical capacity to develop an appropriately

sophisticated information systems (**Assumption 1**), and existing institutions and initiatives handling biodiversity information systems would subscribe to the SiBBr (**Driver 2**).

100. The achievement of Outcome 3 was expected to lead to the **intermediate state** 'Data-driven policy design and implementation generated by the mainstreaming of biodiversity into decision-making and policy development processes. One driver would contribute to this change process 'strong governance structure and long-term financing would ensure sustainability of the system and continuous and increased use in decision-making' (**Driver 5**).

101. In order to achieve this intermediate state, a contributing condition that is largely outside the sphere of influence of the project was expected to be held 'decision makers, from several development sectors (i.e. agriculture, industry, infrastructure, energy, etc.), would be actually willing to access authoritative, strategic and timely information on biodiversity to support the development and implementation of policies and strategic planning' **(Assumption 4**).

102. The overall **impact** of the project 'Improved conservation and sustainable use of Brazil's biodiversity thought public access to systematized information' would be reached, from the intermediate state, if two contributing conditions were in place.

103. In first place, an external condition largely outside the sphere of influence of the project needs to be present 'improved access to biodiversity information actually results in enhanced sectorial policies and regulations, better business practices, and to make better choices regarding development project alternatives' (**Assumption 5**). In second place, it was expected that one contributing condition that can, to a large extent, be influenced by the project would help to achieve the expected impact 'organizations and individuals involved in biodiversity management would access SiBBr to make better decisions about the conservation and use of biodiversity in Brazil' (**Driver 6**).

Table 5 - Justification for Reformulation of Results Statements

Formulation in original project document	Formulation for Reconstructed ToC at Evaluation (RTOC)	Justification for Reformulation
PROJECT GOAL To contribute to the conservation of Brazil's globally significant biodiversity	IMPACT Improved conservation and sustainable use of Brazil's biodiversity thought public access to systematized information	Text based on ProDoc narrative on project goal and objectives, and framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines

Formulation in original project document	Formulation for Reconstructed ToC at Evaluation (RTOC)	Justification for Reformulation
PROJECT OBJECTIVE To ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes	INTERMEDIATE STATE Data-driven policy design and implementation generated by the mainstreaming of biodiversity into decision-making and policy development processes	Framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines
OUTCOME 1: The information contained in Brazilian biological centers and networks has been organized, qualified and integrated into the SiBBr	OUTCOME 1: SiBBr becomes the reference Information system on Brazilian biodiversity for data providers	Reformulated to align the outcome statement to UNEP Results Glossary and reflect the aspect of the change of condition related to the project. The term 'becomes the reference' captures the action of data providers increasing data content of SiBBr.
OUTPUTS – COMPONENT 1		
1.1 Stakeholder and political integration	1.1 Increased stakeholder and political integration	Framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines
1.2 Communication infrastructure expanded and consolidated	No change	-
1.3 Increased content and usability of primary species occurrence data	No change	-
1.4 Biodiversity data digitized	1.4 Biodiversity data digitized and made available	Framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines
1.5 National repository for observational data developed	No change	-
1.6 Dynamic catalogue for species found in Brazil implemented	No change	-
1.7 Quality added to biodiversity data	1.7 Mechanisms are in place to ensure the quality (i.e. reliability and validity) of biodiversity data/ registers	Reformulated to align it with the UNEP's output definition, and better reflect the intentionality behind the output (capacities enhanced to ensure the quality of biodiversity data)
OUTCOME 2: Institutional and taxonomic capacities have been strengthened to ensure continuous uploading and updating of information into the SIBBr	OUTCOME 2: Strengthened institutional and taxonomic capacities enable continuous upload and update of information into SiBBr.	Framed in line with the UNEP glossary definition of an outcome, and ToC and OECD/DAC guidelines
OUTPUTS – COMPONENT 2		

Formulation in original project document	Formulation for Reconstructed ToC at Evaluation (RTOC)	Justification for Reformulation
2.1 Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections reviewed and updated	2.1 A Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections is continuously reviewed, updated and made available to all users	Reformulated to align the outcome statement to UNEP Results Glossary and reflect the aspect of use, adoption or uptake.
2.2 Training of staff working in taxonomy and related fields	2.2 Capacities of staff working in taxonomy and related fields enhanced through training and technical / financial support	Reformulated to align it with the UNEP's output definition, and better reflect the intentionality behind the output (enhanced taxonomic capacity)
2.3 Biological collection infrastructure and research support improved	No change	-
2.4 Targeted incentives to increase taxonomic and bio-geographic knowledge	2.4 Taxonomic and bio-geographic knowledge increased through targeted incentives	Framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines
OUTCOME 3: Enabling framework to manage, distribute and use qualified information at federal, state, and local level decision making for conservation of globally significant biodiversity	OUTCOME 3: Decision-makers at country, state, and local level use SiBBr as a support tool for improved biodiversity conservation	Framed in line with the UNEP glossary definition of an outcome, and ToC and OECD/DAC guidelines
OUTPUTS – COMPONENT 3		
3.1 End-user demands identified and weaknesses regarding products (institutional, software, etc.) assessed	3.1 Greater awareness by MCTI on end-user demands and weaknesses regarding products (institutional, software, etc.)	Reformulated to align the outcome statement to UNEP Results Glossary and reflect the aspect of use, adoption or uptake.
3.2 Core database and framework for application development implemented.	3.2 Core database and framework for application development implemented and made available to SiBBr users[§§§]	Reformulated to align the outcome statement to UNEP Results Glossary and reflect the aspect of use, adoption or uptake.
3.3 Service environments and applications to map and model biodiversity developed	3.3 Service environments and applications to mapping and modelling biodiversity developed and accessible to SiBBr users[6]	Reformulated to align the outcome statement to UNEP Results Glossary and reflect the aspect of use, adoption or uptake.
3.4 Products and services that meet the identified	3.4 Products and services, tailored to decision-	Reformulate to better align it with the UNEP definition of an output,

[§§§] Outputs 3.2 and 3.3 might be interconnected, to some extent, as delivering services and apps to increase the usability experience of end users. At the data collection phase, their causal relationship will be analyzed.

Formulation in original project document	Formulation for Reconstructed ToC at Evaluation (RTOC)	Justification for Reformulation
requirements for decision-makers developed	makers' requirements and needs, are available and accessible to end-users	focusing on the availability (for intended users) of new products and services (rather than only on their development)
3.5 A dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels	3.5 A dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels implemented	Framed in line with ToC, the revised UNEP Results Glossary, and OECD/DAC guidelines
3.6 Capacities of end-users strengthened to use the information system	No change	-
3.7 A system of governance for the information system developed	No change	-

Note: For the ToC diagram some outputs (1.7, 2.1, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 and 3.7) had their names 'shortened' to reduce the number of words in the diagram. This reduction of words does not change the output description and was adopted only for design proposes, aiming to facilitate visualization/understanding of the ToC diagram.

Table 6 - Drivers and Assumptions of SiBBr project

DRIVERS	
Driver 1 (D1)	**Full contribution**: a very high proportion of data providers contribute to the information system and are willing to share data and technical information
Driver 2 (D2)	**SiBBr subscription:** existing institutions and initiatives handling biodiversity information systems subscribe to the new system
Driver 3 (D3)	**Inter-institutional collaboration**: strengthened inter-institutional collaboration helps increasing taxonomic capacities
Driver 4 (D4)	**Participation and sharing incentives**: better infrastructure, increased visibility and greater data quality incentivize data providers to participate and share information
Driver 5 (D5)	**Governance & financing**: strong governance structure and long-term financing ensure sustainability of the system and continuous and increased use in decision-making
Driver 6 (D6)	**Better decisions are made:** organizations and individuals involved in biodiversity management access SiBBr to make better decisions about the conservation and use of biodiversity in Brazil
ASSUMPTIONS	
Assumption 1 (A1)	**ICT infrastructure & technical capacity**: Brazil has sufficient communications infrastructure and technical capacity to develop an appropriately sophisticated information system
Assumption 2 (A2)	**Human resources available**: sufficient human resources are available in specific regions or taxonomic domains that require strengthening
Assumption 3 (A3)	**SiBBr widely adopted**: the SiBBr will be widely adopted throughout federal, state and local government institutions and the private sector as an essential tool for environmental decision-making

Assumption 4 (A4)	**Decision makers wiling to access**: decision makers, from several development sectors (i.e. agriculture, industry, infrastructure, energy, etc.), are actually wiling to access authoritative, strategic and timely information on biodiversity to support the development and implementation of policies and strategic planning
Assumption 5 (A5)	**Improved information enabling better choices**: improved access to biodiversity information results in enhanced sectorial policies and regulations, better business practices, and help make better choices regarding development project alternatives

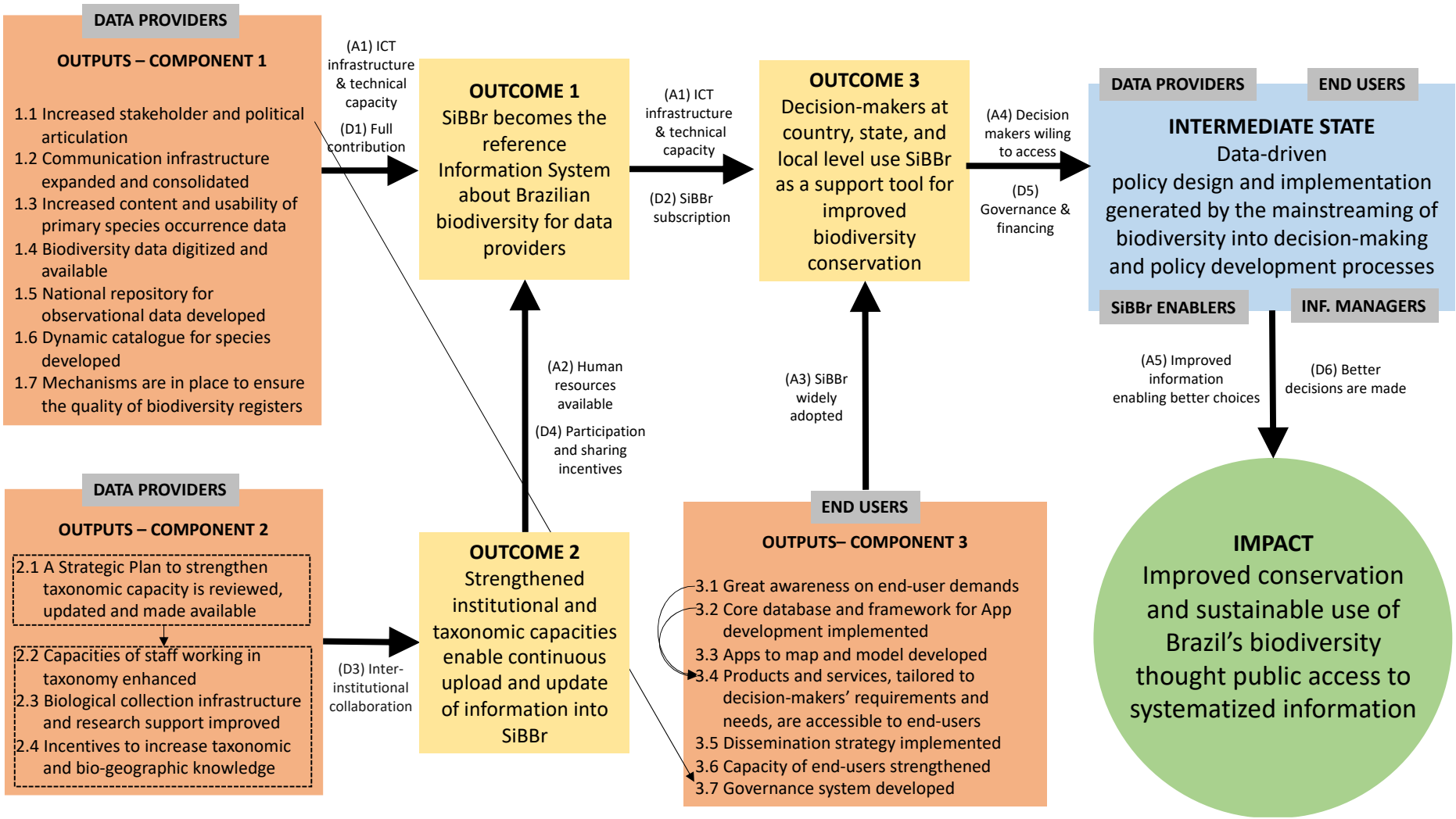

Figure 2 - Reconstructed Theory of Change at Evaluation SiBBr project

V. EVALUATION FINDINGS

A. Strategic Relevance

i. Alignment to the UNEP Medium Term Strategy[13] (MTS), Programme of Work (POW) and Strategic Priorities

104. The Project was implemented **under 3 different MTS** (MTS 2010-2013, MTS 2014-2017, and MTS 2018-2021). Project document did not mention explicitly its alignment to UNEP's MTS and POW for the 2010-2013, but indicated that the project was under UNEP priority Environmental Governance (now one of UNEPs sub-programme).

105. No mention was found on the Project Implementation Reviews (PIR) for Fiscal Year (FY) 2012 to 2018. The PIR FY2019 and Final Report indicated that the project was expected to contribute to **UNEP 2018/2019 POW** 3 - Healthy and productive ecosystems, under Expected Accomplishment (EA) (a) *'The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international level'*. Nevertheless, there was no mention to which indicators under this PoW the project was expected to contribute.

106. Despite the clear relevance of the project and its alignment to UNEP mandate[14], the 'placement' the SiBBr project under EA 3a was somehow forced. Even with the relevant achievements reached by the project (see section D. Effectiveness) the project did not contribute to any of the four indicators of EA 3a[15].

107. However, the ET found that the SiBBr project could have contributed, to some extent, to **EA 3b** 'Policymakers in the public and private sectors test the inclusion of the health and productivity of ecosystems in economic decision-making'. The outcomes envisaged by the GEF SiBBr project could have contributed to increase the number of public sector institutions that incorporate information of the health and productivity of marine and terrestrial ecosystems in economic decision-making (related to indicator 3b.i).

108. UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building and South-South Cooperation (**S-SC**)[16].

[13] UNEP's Medium-Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

[14] The mandate for UNEP derives from General Assembly resolution 2997 (XXVII). The governing body of UNEP further clarified the mandate of UNEP in its decision 19/1, setting out the Nairobi Declaration on the Role and Mandate of the United Nations Environment Programme, which was subsequently endorsed by the General Assembly in the annex to its resolution S/19-2 in 1997, and further reaffirmed by resolutions 53/242 in 1999 and 66/288 and 67/213 in 2012.

[15] Indicators of achievement of EA 3(a) of UNEP PoW 2018-2019 can be found on https://wedocs.unep.org/handle/20.500.11822/7707

[16] The Bali Strategic Plan relates to the capacity of governments to comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. South-South Cooperation is regarded as the exchange of resources, technology and knowledge between developing countries.

Although project documents did not mention explicitly its alignment to these strategic priorities, technology support, capacity building and S-SC were addressed as key elements of the project (i.e. technological development of SiBBr, partnership with GBIF, and adoption of the Atlas of Living Australia, aka ALA, platform).

Rating for Alignment to the UNEP MTS, POW and SP: Satisfactory

ii. Alignment to Donor/GEF Strategic Priorities

109. The Project was approved under GEF 4 Strategic Objective 2 '*to mainstream biodiversity in production landscapes/seascapes and sectors*', and it was expected to contribute to Strategic Program (SP) 4: '*Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity*'. GEF SP4 aimed to remove critical knowledge barriers, develop institutional capacities, and establish the policies, legislative, and regulatory frameworks required to integrate biodiversity conservation and sustainable use objectives into the actions of the production sectors (e.g., agriculture, fisheries, forestry etc.).

110. The SiBBr project design demonstrated full alignment to this GEF Strategic Priority. Nevertheless, as described on section D. Effectiveness, the integration of biodiversity information into the actions of the production sectors e.g., agriculture, fisheries, forestry etc. is yet a goal to be achieved by the SiBBr initiative[17].

Rating for Alignment to Donor/GEF Strategic Priorities: Satisfactory

iii. Relevance to Global, Regional, Sub-regional and National Priorities

111. The project expected results and implementation strategies were aligned and responded to the stated environmental concerns and needs of Brazil, including its United Nations Development Assistance Framework (UNDAF) and National Biodiversity Strategy and Action Plan (NBSAP). The last Brazilian **NBSAP**, from 2017, established the SiBBr as focal point for the Target 19 of Aichi: '*With SiBBr, the Brazilian government achieves Target 19 of the National Biodiversity Targets for 2020 in relation to the integration and availability of information on biodiversity*'.

112. At the project design, SiBBr was expected to contribute to Brazil´s 2007-2011 **UNDAF** Outcome 5 '*More efficient use of available resources is ensured to promote an equitable and environmentally sustainable economic development*'. The project, during its implementation, went through two UNDAF cycles: 2012-2016 and 2017-2020. The project documents and reports did not

[17] In this document, the **SiBBr initiative** refers to the ongoing processes happening under the SiBBr after the closure of the GEF project (December 2019) guided by the Ministerial Ordinance, but not restricted to it, as it involved several partners that have interest and roles on SiBBr (both data providers and end users). The **SiBBr project** refers to the UNEP/GEF SiBBr project designed and implemented between 2009 and 2019. When mentioned only as the **SiBBr**, it refers to the system itself, available at www.sibbr.org.br.

mention explicitly its alignment with, and contribution to, UNDAF 2012-2016. UNDAF 2017-2020, however, acknowledged SiBBr considering the need '*to structure an information system on Brazilian biodiversity'* under its Outcome 3 *'Strengthened institutional capacity to promote public policies for the sustainable management of natural resources and ecosystem services, and combating climate change and its adverse effects, and ensure the coherence and implementation of these policies*'.

113. The SiBBr project facilitated meeting Brazil's reporting requirements to the Convention on Biological Diversity (CBD). The **fifth National Report (NR) for the CBD**, published in 2015, indicated the SiBBr as a reference web portal that once implemented would integrate information on the Brazilian biodiversity. The sixth NR for the CBD, published in 2020, recognized that the SiBBr was '*an important step taken by Brazil to consolidate a national infrastructure for biodiversity data*'. This report also recognized SiBBr's contribution in increasing the level of confidence of Indicator E19.2: '*Total number of occurrence records for Brazilian biodiversity species*' of National Target 19[18].

114. SiBBr was also acknowledge by the **6th NR** for CBD as one of the national contributions to the achievement of global Aichi Biodiversity Targets, especially Aichi Target 19[19]. Stakeholders interviewed during this TE had the perception that the SiBBr will continue to play a relevant role on the Post-2020 Global Biodiversity Framework currently being defined under the CBD.

115. The project delivered contributions were relevant to and in line with the **Sustainable Development Goals** (SDGs) of the 2030 Agenda for Sustainable Development adopted in 2015 by the UN General Assembly by its 193 member states, including Brazil. Nevertheless, only the last PIR, in 2019, mentioned broadly the relation of SiBBr with SDG 15 *'Life on Land'*, but there was no reference to its relationship with SDG 14 *'Life below water*.

116. If SiBBr would have become, as envisaged in the ProDoc, a relevant tool for the GoB to mainstream information on biodiversity into the planning processes and public policies design and implementation, then it would have been in a position to contribute to the **SDG target 15.9** '*By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts Indicator*'. But so far, the SiBBr has not been used to its full potential and has not yet integrated ecosystem and biodiversity values into national and local planning, development processes, and poverty reduction goals/ initiatives (see details on para. 175). It should be noted that the relevance of an information system

[18] National Target 19: By 2020, the science base and technologies necessary for enhancing knowledge on biodiversity, its values, functioning and trends, and the consequences of its loss, are improved and shared, and the sustainable use of biodiversity, as well as the generation of biodiversity-based technology and innovation are supported, duly transferred and applied. By 2017, the complete compilation of existing records on aquatic and terrestrial fauna, flora and microbiota is finalized and made available through permanent and open access databases, with specificities safeguarded, with a view to identify knowledge gaps related to biomes and taxonomic group.

[19] Aichi Target 19: In 2020, the knowledge, the scientific basis and technologies related to biodiversity, its values, operation, status and trends, and the consequences of its losses, must be improved, widely shared, transferred and applied.

on biodiversity, such as SiBBr, goes beyond SDG target 15.9[20] and so far, it was not yet fully recognized by the SiBBr initiative.

117. The SiBBr project demonstrated to be highly relevant to both global and national priorities. However, there was very limited evidence provided by the project regarding its relevance to biodiversity priorities at **regional** - Latin American and Caribbean (LAC) and **sub-regional** (South Cone) levels. Since project design, regional and sub-regional priorities were just superficially mentioned. During its implementation, the project contributed to South-South and triangular cooperation with some LAC countries (i.e. Ecuador, Uruguay, etc.).

118. The engagement with GBIF also contributed to integration with other countries of LAC (Mexico, Costa Rica, etc.), but the regional and sub-regional priorities were not properly identified and addressed. There was also no evidence of how the project reflected the current UN policy priority to **leave no one behind**.

Rating for Relevance to Global, Regional, Sub-regional and National Priorities: Satisfactory

iv. Complementarity with Existing Interventions

119. This section assesses the complementarity of the project with existing interventions, **either at design stage or during the project inception/ mobilization**[21]. Complementarity during project implementation is addressed under section V.F Efficiency.

120. The SiBBr project at design took into account ongoing and planned initiatives that addressed similar needs of the same target groups, including GBIF, Species Link - CRIA, RNP and the Biodiversity Research Program of the GoB (PPBio). The project design also **envisaged complementarity** with several state-level biodiversity initiatives in Brazil that would both benefit from and/or participation in the project. A list of 5 state-level initiatives involving 13 states was presented in ProDoc.

121. The ProDoc also explored complementarity with interventions from **other areas beyond biodiversity**, i.e. close dialogue and engagement with several areas such as agriculture and health were envisaged. Project design also identified links with two GEF projects: the GEF WB IABIN[22] and the GEF WB PROBIO II[23] projects. It was expected that coordination among them would

[20] Additional information on the relation of biodiversity with SDGs ca be found in the technical note 'BIODIVERSITY AND THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT' available at https://www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf

[21] A project's inception or mobilization period is understood as the time between project approval and first disbursement.

[22] The WB GEF Project IABIN 'Building the Inter-American Biodiversity Information Network' was a regional project for LAC region, including Brazil, executed by Organization of American States between 2004 and 2011 (6M USD GEF grants)

[23] The WB GEF PROBIOII project 'National Biodiversity Mainstreaming and Institutional Consolidation Project' was a national project (Brazil) executed by MMA and FUNBIO from 2007 to 2015 (22M USD GEF grants)

take place through meetings, joint agreements, complementary workplans and collaboration between project teams.

122. It should be noted that, to a large extent, the SiBBr project '*was born*' as a result of **GEF PROBIO** projects. As a matter of a fact, component 3 of PROBIO II includes the production and exchange of biodiversity information to aid in policymaking. The SiBBr ProDoc indicated that both projects would be mutually complementary and would help each other in the achievement of their objectives.

123. The TE of **GEF WB IABIN** project took place during SiBBr inception phase. TE report presented several lessons learned that were relevant for the SiBBr project. IABIN's TE report was published in March 2012, one month before the Inception Workshop of the SiBBr project and seven months before its first SC meeting (November 2012). Unfortunately, there is no evidence that the SiBBr in the inception phase took into consideration these lessons.

124. The **most relevant lessons** of the GEF IABIN project included: *i) a flexible design helps project adapt to technological change ii) technical expertise and support plays critical role in guiding technical aspects of project and partners have an important role to play in this process; iii) order to establish project priorities it is important to work with other agencies to identify what their information needs are; iv) an effective public education and outreach strategy should be part of the project design*.

125. The ProDoc broadly mentions that '*the project will participate whenever appropriate in **UNEP** sponsored networks and events, and any other network that may be of benefit for the project's objective*'. However, there was not enough evidence to demonstrate alignment and/or complementarity with other projects or initiatives being implemented by UNEP or other agencies within the same region, sector or institution. Furthermore, insufficient evidence was found to sustain that the project team, in collaboration with Regional Office and Sub-Programme Coordinators, made efforts to ensure their own intervention design was complementary to other interventions, optimized synergies and avoided duplication of efforts.

Rating for Complementarity with Existing Interventions: Moderately Satisfactory

Overall Rating for Strategic Relevance: Satisfactory

B. Quality of Project Design

126. The project document presents a clear and straightforward description of the intervention. Some issues, such as the communication strategy and replication approach of the project, were not sufficiently explored in the project design. More emphasis was given to describing the project components and results than to operational details, implications and impacts

(e.g. the implication of increasing decision makers' access to information; or the quality of the project impact, since the indicators are mostly quantitative).

127. The budget/financial planning was a strength of the project design and is considered as 'Satisfactory' by the evaluation. Budget was presented in a clear and simple manner. The cost allocation was split 71% for the Brazilian government and 29% for the GEF over a five-years period. The Brazilian government contributions were expected to decrease, while the GEF inputs would be steady over the project period.

128. Project efficiency at design was considered 'Satisfactory' as well. The ProDoc pointed out the existing synergies and institutions that would help 'strengthen institutional capacities and create an infrastructure based on existing initiatives'.

129. The project explained well, the problem to be tackled and its strategic relevance for Brazil, especially regarding its potential use by the Federal Government and the stakeholders. The project also emphasizes domestic cooperation, but a more explicit reference to South-South cooperation was missing.

130. Another strength of the project design was the intended results. The proposed outcomes were realistic but requiring coordination to be achieved in the proposed timeframe. The ProDoc also presented an analysis of the major stakeholders and actors. But gender/minority groups were not considered as relevant stakeholders in the document.

131. The governance and supervision arrangements proposed were rated as 'Moderately Satisfactory'. The ProDoc presented a detailed description of the roles and responsibilities of the executing agency. The design would have benefited from the same level of detail in terms of roles and responsibilities for the other stakeholders; for instance, in terms of monitoring.

132. Learning, communications and outreach were not sufficiently considered in the ProDoc. The only knowledge management strategy mentioned refers to taxonomic content, but not to project learnings, let alone after the project. The ProDoc explains that information will follow a strategy to be developed under output 3.5 (i.e. there was no proper Communication Strategy or a Stakeholder Engagement Plan in the design phase).

133. The intervention logic does not capture properly the key elements necessary for the change process. Regarding partnerships, a list of possible partners in Brazil and abroad was listed in the ProDoc, however there was not a clear, defined, capacity assessment. Replication is broadly addressed in one section of the ProDoc. Nevertheless, activities and resources for scaling up, replication and/or catalytic action were not considered.

134. Overall, the project design quality was rated as 'Moderately Satisfactory'. Its major strengths rested on: financial planning, efficiency, strategic relevance, intended results, and governance. The project design major weaknesses were

related to: project preparation and context setting; logical framework and monitoring; partnerships; learning, communication and outreach; risk identification and safeguards; and sustainability, replication and catalytic effects.

Rating for Project Design: Moderately Satisfactory

C. Nature of the External Context

135. There were no **armed conflicts** or **major political upheavals** in Brazil during project implementation. However, the impeachment process of the president Dilma Roussef in 2016, and the increased polarized political atmosphere that led to the presidential elections in 2018, won by President Jair Bolsonaro, brought additional pressures and uncertainty on the project execution. This affected the high-level political support still necessary to achieve some outcomes, especially the ones related to outcome 3. It should be noted that according to UNEP/GEF guidelines, changes in political support associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

136. Due to the nature of the project, **natural and manmade disasters**, such as flood and droughts, happened throughout Brazil between 2011-2020, but did not directly affect project operations. But these events generated significant loss of biodiversity, and negative impacts on lives, ecosystem, society and economy. It should be noted that some disasters, such as the fire incidents in the biological collections of Butantan Institute in 2010, in the National Museum in 2018, and in the Pantanal biome in 2020, generated national commotion and, to some extent, increased the perception of the relevance of the SiBBr.

137. Beyond the usual problems of urban insecurity in major cities of Brazil, the **security situation** had no significant effect in project operations, staff and partners. **Economic conditions** were, to a large extent, favorable allowing efficient project operations. Two situations deserve to be mentioned: i) by mid-2014 Brazil experienced an economic crisis and for the next two years its Gross Domestic Product fell by 3.4% each year, leading to a reduction of public budget for many sectors, including science[24] and biodiversity; ii) from project approval (May 2010) to project closure (June 2020) there was a very favorable exchange fluctuation from R$ 1.65 to R$ 5.39 Brazilian Reals for one US dollars, allowing 3 no-cost extensions.

138. The declaration of the **Covid-19 pandemic** by the World Health Organization on March 11, 2020 happened after technical closure of the project and did

[24] In 2017, the MCTI had its lowest budget in at least 12 years (source OLIVEIRA, EDUARDO A. et al. Science funding crisis in Brazil and COVID-19: deleterious impact on scientific output. An. Acad. Bras. Ciênc. [online]. 2020, vol.92, n.4 (https://doi.org/10.1590/0001-3765202020200700.)

not affect much of the project operations. However, the COVID crises impacted some activities planned for 2020 by current SiBBr partners (i.e. outreach events, meetings). The social-economic impacts of the crises are likely to affect negatively the sustainability of SiBBr (see details on section V.H Sustainability).

Rating for Nature of the external context: Moderately Favourable

D. Effectiveness

i. Availability of Outputs

139. The evaluation of the availability of outputs is assessed as the project's success in producing the programmed outputs and **achieving milestones as per the ProDoc**. No formal modifications/revisions were made to the ProDoc during project implementation. The availability of outputs was assessed in terms of both quantity and quality, and the assessment also considered their ownership by, and usefulness to, intended beneficiaries and the timeliness of their delivery. A brief explanation of the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards is also presented.

140. **Eight** outputs were fully available, **eight** were partially available and **two** were not available. Table 7, Table 8 and Table 9 (below) present the assessment of the delivery of the outputs as per reconstructed ToC, respectively for Components I, II, and III with a summary of the evidence justifying this assessment and the indication if it was available, partially available or not available.

141. On component I, output 1.1 was partially available and outputs 1.2, 1.3, 1.4, 1.5, 1.6 and 1.7 were fully available. Communication infrastructure was expanded and consolidated (**output 1.2**). Usability and integration of primary species occurrence data increased with the adoption of Darwin Core and other internationally accepted protocols, such as the ones adopted by GBIF community (**output 1.3**).

142. More than a hundred zoological and botanical collections have been digitized and made available on SiBBr (**output 1.4**). A web-based repository that stores, searches and visualize species observation data, is operational and available publicly (**output 1.5**). A dynamic taxonomic catalogue with more than 160,000 flora and fauna species of Brazilian biodiversity, standardized in Darwin Core and customized to ALA platform was developed and acts as the backbone of SiBBr (**output 1.6**). Mechanisms to increase the quality of biodiversity data/register were in place and available to data providers (**output 1.7**).

143. Regarding **output 1.1**, despite efforts made by project team, stakeholder and political integration proved to be a challenge for the project. On one hand, the

SiBBr project involved more than 100 key stakeholders, mostly data providers. On the other hand, partnerships with two key players – CRIA, a Brazilian NGO that hosts the SpeciesLink platform, and MMA - were only relatively successful. Meetings between MCTI (SiBBr), MMA and ICMBIO resulted in a better understanding of the tools and services needed to improve the access and use of open biodiversity data to support public policies. Some tools have been defined and contemplated in the contracts signed with WCMC and WWF and, even considering that these contracts were not fully successful, some tools envisioned to be used by MMA and ICMBio were supplied by SiBBr (e.g. Biodiversity and Nutrition tool)[25]. With CRIA, several meetings were held in order to share data and tools, and to strengthen cooperation in the mobilization of data from new collections. However, this partnership didn't materialize and the project did not work as closely as expected with all key stakeholders, including line ministries, federal agencies, state and local governments, and private sector representatives to ensure political endorsement and institutional support for the SiBBr.

Table 7 - Delivery of Outputs (summary of findings and evidences) – Component I

Output as per reconstructed ToC	Summary of Findings / Evidence
1.1 Increased stakeholder and political integration	**Partially Available** – The project involved, with different levels of success, more than 100 key stakeholders, mostly data providers. Political integration was achieved to some extent, but key partnerships such as the one with CRIA-SpeciesLink and MMA were not fully successful. The lack of high-level political support was perceived by project partners as one of the main reasons for these shortcomings.
1.2 Communication infrastructure expanded and consolidated	**Available** – SiBBr was hosted at RNP, through a cooperation agreement with MCTI, providing a consolidated communication infrastructure for the system. Basic communication network had increased in Brazil during project implementation, bringing improvements in the existing infrastructure as well as extension of the network in order to reach more institutions and cities.
1.3 Increased content and usability of primary species occurrence data	**Available** – More than 100 data providing institutions accessed technical solutions and support provided by the SiBBr to facilitate the integration of data from diverse primary species occurrence (i.e. the adoption of Darwin Core and the use of internationally accepted communication protocols).
1.4 Biodiversity data digitized and made available	**Available** - More than a hundred zoological and botanical collections have been supported on data digitization by SiBBr. They continue to feed the platform by publishing data on IPT (Integrated Publishing Toolkit). Most targets set on the projects' result framework for data made available on SiBBr portal were met for the majority of categories (i.e. repatriation, botanic, fish, birds, amphibian and reptile, and invertebrates).

[25] To support the development and uses of these tools, a Technical Cooperation Agreement (ACT) was signed between MCTI, MMA and ICMBio aiming to consolidate this partnership. Despite that ACT, after the approval of the GEF Pro Species Project, and the promotion of policies for endangered species, including the integration and development of biodiversity information systems, ICMBIO and MMA were not interested in the continuity of the partnership.

Output as per reconstructed ToC	Summary of Findings / Evidence
1.5 National repository for observational data developed	**Available** – Despite a significant delay from initial schedule (June 2013), the repository, a web-based system that stores, searches and visualize species observation data, is operational and available publicly (www.sibbr.gov.br). A first version was launched in November 2014 using Canadensys platform, but presented several limitations. A later version was launched in August 2019 using state-of-the-art art ALA platform. The open data policy adopted by the SiBBr is the same used by the GBIF. The reference lists of flora and fauna are integrated within the SiBBr and are available to data providers.
1.6 Dynamic catalogue for species found in Brazil implemented	**Available** – SiBBr has as its backbone a dynamic taxonomic catalogue with more than 160,000 flora and fauna species of Brazilian biodiversity, standarized in Darwin Core and customized to ALA platform. It was created from the 'Brazilian Fauna Taxonomic Catalog' and the 'Brazilian Flora 2020'.
1.7 Mechanisms are in place to ensure the quality of biodiversity data/ registers	**Available** – Mechanisms to increase the quality of biodiversity data/register are in place and available to users, such as ALA's built-in tools for data quality verification providing automatic feedback for data providers, mechanisms tracking data to publisher and providing publisher contact, metadata display, etc.

144. On component II, outputs 2.1 and 2.4 were not available, output 2.2 was available and 2.3 was partially available. The Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections was not reviewed (**output 2.1**). This process was expected to be led by MCTI and MMA, with the engagement of other ministries and institutions, but until 2015 little progress had been made. The 2016 PIR reported that the project decided, 'given to the not so favorable political scenario in Brazil'[26], to put this output on hold.

145. As described in para. 93, output 2.1 was expected to address existing and future needs for capacity enhancement (output 2.2), infrastructure improvement (output 2.3), and bio-geographic and taxonomic knowledge (output 2.4). Despite efforts to deliver outputs 2.2 and 2.3, and the support provided by SiBBr to several collections and publishers, their effectiveness was limited as **there were no actual plans** to guide the delivery of these outputs that were expected to come from the delivery of output 2.1. An updated Strategic Plan (output 2.1) would have led to a more systematic and efficient process of strengthening institutional and taxonomic capacities considering the size and diversity of Brazil.

146. During the project life, the capacities of staff working in taxonomy and related fields were strengthened through training and technical / financial support

[26] PIR 2026 regarding Output 2.1 'Given the not so favorable current political scenario in Brazil which affects the development of policies related biological collections, the Project's efforts were directed for the revision of not so controversial sections…'

provided by several programs funded by the Government of Brazil (**output 2.2**).

147. Programs and actions funded by the Government of Brazil, such as the Program to Implement, Modernize and Recuperate the Structure of Public Research Institutions (PROINFRA), aimed to improve the infrastructure and provided research support to biological collections (**output 2.3**). Between 2014 to 2017, more than BR$ 5 million were transferred via CNPq for more than 50 collections. Partnerships were established enabling infrastructure improvement and training, therefore allowing to digitize and publish in SiBBr more than 4 million data. A data publishing infrastructure was also implemented, allowing automatic updates in SiBBr whenever data was updated in collections. Moreover, a partnership with the JBRJ enabled supporting several herbaria across the country. The SiBBr also focused on improving research support via endorsement to PELD and PPBio, which helped to systematize biodiversity information.

148. Regarding **output 2.4**, the ET did not find enough evidence that target incentives were made available, both in terms of quantity and coverage, to properly identify and fill gaps in taxonomic knowledge about the less studied geographic areas (e.g. some areas of marine biodiversity) and taxonomic groups (e.g. fungi and microorganisms). However, the PPBIO Program promoted, to some extent, an increase in incentives to taxonomic and geographic knowledge. Through a partnership with the JBRJ, the project carried out a gap analysis of Brazilian flora in which several species were evaluated. However, this gap analysis had limitations on scope and broadness - n.b. a gap analysis on Brazilian fauna was not developed.

Table 8 - Delivery of Outputs (summary of findings and evidences) – Component II

Outputs as per reconstructed ToC	Summary of Findings / Evidence
2.1 A Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections is continuously reviewed, updated and made available to all users	**Not Available** – The Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections, originally published in 2006, was not reviewed. This initiative was expected to be led by MCTI and MMA, with the engagement of other ministries and institutions. This output was expected to be reached by the end of project year 1 (2012), but until 2015 little progress had been reported. In 2016, the project decided to put the review and update the Strategic Plan on hold, due to the not so favorable political scenario in Brazil. The project, since them, redirected effort to other means to strengthen taxonomic capacity and support Brazilian biological collections, such as described in Outputs 2.2 and 2.3 below.
2.2 Capacities of staff working in taxonomy and related fields enhanced through training and technical / financial support	**Available** - Several programs funded and implemented by the Government of Brazil, between 2011 and 2020, strengthened the capacities of staff working in taxonomy and related fields through training and technical / financial support. Among these programs were: - Grants administered by MCTI in support of existing taxonomic collections, consisting of funds mostly channeled through the National Council of Scientific Development and Technology (CNPq) that include

Outputs as per reconstructed ToC	Summary of Findings / Evidence
	support for digitization, scholarships and capital investment. For example, Fiocruz, MPEG, MZUSP, JBRJ, INPA and the National Museum received training on structuring and publishing biodiversity occurrence records. - Under the coordination of the JBRJ, more than 60 herbaria received equipment or training to digitize the information on specimens from their collections. Similarly, under the coordination of MZUSP, more than 30 zoological collections also received support through training and equipment (camera, scanners, etc) to digitalize their collections. Under this output, the project also reported ten training workshops and short courses delivered by the project team and partners to data providers on how to use SiBBr tools to publish data (i.e. the course 'Structuring of data paper' for curators of Brazilian herbariums delivered during the 68th National Congress of Botany - August 2017). Punctual training initiatives of this nature, likewise, contributed to enhancing capacities of taxonomists to use SiBBr tools.
2.3 Biological collection infrastructure and research support improved	**Partially available** – This output, as per the ProDoc, was expected to improve the physical structure (remodeling, constructions, equipment, permanent materials, laboratory materials, etc.), maintenance and management of Brazilians' most important biological collections in terms of geographic and/or taxonomic representation and coverage. Between 2011 and 2020, several programs funded and implemented by the Government of Brazil had improved the infrastructure and provided research support to biological collections. Among these programs were: PROINFRA program to implement, modernize and recuperate the structure of public research institutions; REFLORA program 'Brazil Plants: Historical Rescue and Virtual Herbarium for the Knowledge and Conservation of the Brazilian Flora'; Refauna Program 'Repatriation program of information on the Brazilian fauna'; PELD - Long-Term Ecological Research, and PPBIO - Biodiversity Research Program. Nevertheless, the project did not provide to the ET evidence on how these programs actually contributed to improve the infrastructure of biological collections. Furthermore, there was insufficient evidence to fully understand the additional value of the SiBBr project: to what extent SiBBr itself fostered increasing investments beyond what was already planned by the GoB to improve the infra-structure of biological collections? It should be noted that most of the programs listed here already existed or were planned before SiBBr.
2.4 Taxonomic and bio-geographic knowledge increased through targeted incentives	**Partially Available** – No explicit evidence was found that target incentives were made available - both in terms of quantity and coverage to properly identify and fill gaps in taxonomic knowledge about the less studied geographic areas (e.g. some areas of marine biodiversity) and taxonomic groups (e.g. fungi and microorganisms). Through a partnership with the JBRJ, the project carried out a gap analysis in which several species of Brazilian flora were evaluated. However, this gap analysis of Brazilian flora had limitations on scope and broadness - n.b. a gap analysis on Brazilian fauna was not developed. According to the ProDoc, the project was expected to also develop studies and new initiatives in geographic areas that were considered priority or strategic, and to develop studies and new initiatives of taxonomic groups that were considered priority, or which were functionally, culturally or economically important.

149. On Component III, outputs 3.1, 3.3, 3.4, 3.5 and 3.7 were partially available, output 3.2 was available and output 3.6 was not available. To some extent, MCTI increased its awareness on end-user demands and weaknesses regarding information products (**output 3.1**). But, as per ProDoc, it was expected that the project would fully assess the demands of end-users and generate a list of desirable software applications to help decision-makers.

150. The assessment of the demands proved to be limited in scope, and its results were not available to the majority of the interviewed stakeholders involved in the project. A core database and framework for application development was implemented and made available to SiBBr users (**output 3.2**).

151. The development of the SiBBr core architecture came to be a learning by doing process that demanded significant efforts and resources. The final version of the SiBBr running on ALA platform was launched in August 2019 (six years after its original planning). To a large extent, the project did not make accessible to end users' applications to mapping and modelling biodiversity as it was envisioned in the ProDoc (**output 3.3**).

152. Nevertheless, a study on **modelling the niche** of 300 species of Atlantic Rain Forest was developed and, after several inquiries, the ET found out that some of these models were actually available on SiBBr Spatial Portal. These models were not easy to access (expert knowledge was necessary to use the tool), were limited in scope (just a few species of one biome), did not present advanced query and visualization tools, and most users were not aware of its existence.

153. The project was expected to make available products and services, tailored to decision-makers' requirements and needs (**output 3.4**). As per the ProDoc these products/services would '*facilitate decision-making about natural resource and land-use planning, development of conservation project infrastructure, judicial and legislative decisions, implementation of public policies, and any other public or private sector interventions in natural areas that will benefit from access to biodiversity data*'. But the project focused its efforts to deliver some products and services, mostly tailored to data provider's and researchers needs (i.e. the Catalog of Species and the National Catalog of the Biological Collections of Brazil).

154. At the end of project, the Biodiversity and Nutrition tool, and the Spatial Portal[27] were also available on the SiBBr platform. However, most decision

[27] The Spatial Portal has a significant potential, not yet properly explored, to support public policies related to land-use planning involving biodiversity. According to the EA, the Spatial Portal is able to subsidize environmental studies, such as Environmental Impact Assessments, by allowing the drawing of polygons in the area of a project, bringing species with records of occurrence, as well as species threatened at the state and federal levels, in addition to species of economic value. For threatened species it is possible to access occurrence data, number of records for a species, last observation / collection, data from the literature. Specific geospatial tools allow the generation of the Occupation Area (AOO) and the Area Occurrence Extension (EOO) of a given species, enabling the process of evaluating the species that generate the red list, a public policy at the level state, federal or even municipal. The Spatial Portal also allows the generation of reports for a given area, through a

makers, identified in the ProDoc as end users, were not aware about the existence and usefulness of these tools. Significant effort will be necessary to promote the ownership of such tools by, and usefulness to, intended beneficiaries.

155. **Output 3.5** was expected to contribute to building ownership and increasing the utility to intended beneficiaries of the tools under output 3.4. Under output 3.5, the project was expected to implement a dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels. But during project implementation, most of the communication effort was targeted at data providers, seeking to create awareness and to promote their engagement with SiBBr (i.e. provision of data to the system).

156. So far, the capacities of end-users to use the SiBBr and make better decisions on biodiversity conservation and sustainable use were not properly strengthened (**output 3.6**). The project reported having carried out several training courses aimed at data publishers and presenting the system in some technical meetings. SiBBr produced six videos available on YouTube to help users, both data providers and potential decision makers, better understand the system. It should be noted that the capacities of data providers to update records and to access scientific/technical information on SiBBr was strengthened by the project and it was accounted in the components I and II. But as presented on ProDoc, output 3.6 sought to strengthen the capacity of end-users (decision makers), not data providers.

157. A system of governance for SiBBr was developed and it is reflected on MCTI's Order No. 6,233, published in November 2018 (**output 3.7**). Several interviewed project partners considered this as the only possible governance system given the context. However, this system has several limitations that need to be addressed by the GoB to ensure the long-term sustainability of SiBBr and promote its use by decision-makers.

Table 9 - Delivery of Outputs (summary of findings and evidences) – Component III

Output as per reconstructed ToC	Summary of Findings / Evidence
3.1 Greater awareness by MCTI on end-user demands and	**Partially available** – MCTI awareness on end-user demands and weaknesses regarding products was increased through several actions, including: (i) organic and planed interaction of the project team with several institutions over the 10 years of project implementation (i.e. meetings, events, etc.); (ii) articulation with

polygon or shapefile file for a specific project. The report can inform the size of the area, and the number of total species recorded, in addition to the number of records per taxon. The Spatial Portal can inform where a chosen species was located, what species were found in a defined area and what are the environmental conditions in that area. The spatial portal is divided in four different web applications: spatial portal UI (web portal), spatial analysis service, spatial layers service and spatial actions. N.b. Despite its significant potential, the Spatial Portal does not have user-friendly interfaces, and the user experience to access information on this tool proved to be not satisfactory. Furthermore, end users interviewed for this evaluation were not aware about the existence and usefulness of this tools.

Output as per reconstructed ToC	Summary of Findings / Evidence
weaknesses regarding products (institutional, software, etc.)	MMA that resulted in a Technical Cooperation Agreement signed in 2017; (iii) consultations that took place in late 2015 in a workshop with representatives of 7 Sub-National Secretaries of Environment (Acre, Bahia, Distrito Federal, Minas Gerais, Pará, Rio de Janeiro, São Paulo), federal institutions and NGOs; and (iv) production of a report briefly presenting the demand for biodiversity information from 23 institutions (including Federal and state governmental institutions and NGOs). According to ProDoc, it was expected that the project would fully assess the demands of end-users, through a series of group meetings, expert meetings, interviews, and surveys. Decision-makers responsible for conservation and sustainable use of biodiversity were expected to be prioritized within this process. This output was supposed to generate a list of desirable software applications to help decision-makers, from which, at least, four software applications would be selected for implementation under output 3.4. The assessment made by the project proved to be limited in scope, and its results (e.g. the list of desirable software applications to help decision-makers) were not available to the majority of the interviewed stakeholders, including several that participated in the workshops and consultations.
3.2 Core database and framework for application development implemented and made available to SiBBr users	**Available** – The SiBBr core database and framework for application runs on ALA, a state-of-the-art open-source system adopted by more than 15 countries. Nevertheless, the process of developing the SiBBr core architecture proved to be a learning by doing exercise that demanded significant amount of effort and resources (including precious time). On the first years of the project, a Working Group (under the TSC) was proposed to advise on SiBBr architecture and metadata. A partnership was established in 2012 with LNCC (National Laboratory for Computing Science) to develop the SiBBr Core. In 2013, a cooperation with the GBIF node in Colombia (who was some steps ahead of SiBBr regarding biodiversity informatics) took place aiming to provide support to the development of the SiBBr's architecture. From 2011 to 2014, the project team envisioned a partnership with CRIA to learn from their long experience (since 2001) implementing databases and frameworks for applications under SpeciesLink. A partnership with the World Wildlife Fund for Nature (WWF), signed in 2016, was also expected to contribute with this output by developing and implementing the basic architecture for three new modules conceived for SiBBr. These initiatives, despite not being entirely successful, provided important lessons to the project team (such as using the technical knowledge of the RNP staff to provide support for the design of products). The first version of core database and framework for application was made available to SiBBr users in November 2014. With the establishment of a partnership with RNP and the consolidation of the SiBBr staff team based in Brasilia working in close connection with GBIF and project partners, the SiBBr architecture and framework were improved. This first version SiBBr core adopted the Canadensys platform. The Canadensys was selected as the best alternative for SiBBr in its earlier years, nevertheless by 2015 there were already indications that the system would not be further updated by the developers and it was no longer the best solution for SiBBr. As a matter of a fact, between 2016 and 2017, there was severe criticism from SiBBr data providers regarding, among other things, the poor trackability and reliability of the system, which was deemed a high reputational risk. The ALA platform was becoming, since 2014, a reference on Biodiversity Information System for some countries. Comparing to Canadensys, ALA allowed better

Output as per reconstructed ToC	Summary of Findings / Evidence
	indexing, integration and visualization of data and information. After customization of the ALA platform (that took place between 2018 and 2019), the SiBBr architecture has been completely redesigned by RNP which is also maintaining it. The new version of the SiBBr running on ALA platform was launched in August 2019.
3.3 Service environments and applications for mapping and modelling biodiversity developed and accessible to SiBBr users	**Partially available** – As per ProDoc, the project was expected to make available to SiBBr users a '*system that will periodically harvest data from existing species distribution data sources to update a centralized spatial database. The new system will also allow users to upload, download, visualize and query the data.'* It would include '*(i) generation of distribution maps for species of special interest (e.g. rare, endangered or invasive species);…and (iii) integration of data about real and potential species distributions into the SiBBr, offering advanced query and visualization tools*.' Several partnerships/initiatives to develop applications for mapping and modelling biodiversity were explored during the project execution: i) between 2012-2015 partners, such as LNCC, were asked to provide technical knowhow and expertise; ii) in 2016 activities related to this output were '*placed in standby for the finalization of other needed features'; iii)* during 2017-2018 an app related to 'Species Registry' was developed using the Canadensys system, but there is no record of its availability to users - it should be noted that in 2018 started the migration to ALA; and iv) during 2017-2019 a partnership with the JBRJ generated a study on modelling the niche of 300 species of Atlantic Rain Forest. During the TE period, some of these models were still available on SiBBr Spatial Portal. Nevertheless, these models were not easy to access (requiring expert knowledge on the tool), were limited in scope (just a few species of one biome), did not present advanced query and visualization tools on data about real and potential species distributions, and most users were not aware of its existence.
3.4 Products and services, tailored to decision-makers' requirements and needs, are available and accessible to end-users	**Partially available** – Since 2015, the project had dedicated efforts and resources to develop products and services, tailored to end-users' requirements and needs. Nevertheless, the vast majority of this end users were not decision makers, they were researchers and members of the academic community that provided data to SiBBr and used SiBBr information for scientific proposes. To reach this output the project established partnerships with WWF and the World Conservation and Monitoring Center (WCMC), hired several consultancy services and formed a team with IT experts and biologists based in Brasilia, managed by project director to, among other roles, develop these products and services to end users. Some of the tools developed by these initiatives were successful, such as the 'Food and Nutrition Database', others proved to be too ambitious for the moment, such as the module 'Decision-making support area'. Initially the products and services developed by the project were designed for the Canadensys, platform. With the migration of SiBBr to the ALA platform, initiated in 2018, and the launch of the new SiBBr portal in August 2019, several products and services are currently been deactivated or transformed, such as tools developed to help data providers on the publication and / or verification of data quality in taxonomic information (AttaPublica; HarpiaTax; NephilaPaper; MycenaConverte and RivulusValida). At the end of the Project, four products/services were available on the SiBBr platform using the architecture of ALA (see details on output 3.2 above): the Catalog of Species (including Threatened Species), the National Catalog of the Biological Collections of Brazil,

Output as per reconstructed ToC	Summary of Findings / Evidence
	the Biodiversity and Nutrition tool[28], and the Spatial Portal. Considering that these tools had been made available on the last year of the project, significant effort will be necessary to promote their ownership by, and usefulness to, intended beneficiaries.
3.5 A dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels implemented	**Partially available** – During the first half of the project implementation (2011-2015), no dissemination strategy was designed and the development of communication products happened in an organic way (i.e. there were: a webpage, folders, newsletters, press releases, participating and organizing events, visiting institutions, etc.). In 2015, a yearly work plan for communication was produced and, in 2016, a communication strategy for the project was designed. The implementation of the communication strategy between 2016 and 2019 resulted in: (i) the maintenance and improvements to the webpage (portal); (ii) the production of videos, a bi-monthly newsletter, press releases, content for the portal, printed materials – such as folders etc.; (iii) the promotion of the SiBBr in scientific meetings and at other events; (iv) creation and management of SiBBr channels on Facebook and Twitter; (v) press relation; (vi) public relation; (vii) organization of events such as 23rd Meeting of GBIF Governing Board; and (viii) liaison with members of the Brazilian Network of Citizen Science that resulted in the creation of the Citizen Science Portal under SiBBr platform. It should be noted that these communication efforts were done for the first SiBBr platform (running on Canadensys). In 2019, RNP, the host institution of SiBBr, developed a new communication plan for the launch of the latest version of the SiBBr platform and to disseminate SiBBr, targeting the two major stakeholder groups: data providers and end-users. So far, most of the communication efforts was targeted at data providers, seeking to create awareness and to promote their engagement with SiBBr (i.e. provision of data to the system). Nevertheless, Output 3.5 was targeted to potential end-users in the private, non-governmental and governmental sectors at federal, state and local levels, a much broader spectrum than just data providers. To a large extent, this stakeholder group was not prioritized during project implementation. Some leaders on the project team believed that first the SiBBr platform needed to be fully operational before reaching end-users in the private, non-governmental and governmental sectors. In the perspective of the SiBBr team *'the system had to be solid, operational, well regarded and with a comprehensive database before presenting it for non-scientists'*. Currently, stakeholders outside the sphere of influence of the project, including the vast majority of potential users of SiBBr in the private, nongovernmental and governmental sectors at federal, state and local levels, are not yet aware of SiBBr platform and its possible uses. According to the ProDoc, this output was expected to promote '*better use of the available information for conservation of biodiversity by decision makers; and a change of culture among end-users in relation to the perception of the benefits, value and potential uses of biodiversity information*'. The deliveries under Output 3.5 were not enough to improve the use by decision makers nor to promote a cultural change among them about the relevance of biodiversity information. Currently, MCTI is seeking to raise awareness of decision makers about SiBBr, but a solid

[28] The Biodiversity and Nutrition Tool is a database of nutritional composition and a database of recipes with native species of Brazilian flora of current or potential economic value, with emphasis on fruit and vegetables. This tool is the result of a joint effort of the Project 'Conservation and Sustainable Use of Biodiversity for Improving Nutrition and Human Well-being' (Biodiversity for Food and Nutrition - BFN), MCTI, universities and research institutes of Brazil.

Output as per reconstructed ToC	Summary of Findings / Evidence
	communication plan with detailed workplan, products, responsibilities, milestones, budget and monitoring instruments was not made available for the ET.
3.6 Capacities of end-users strengthened to use the information system	**Not Available** – On one hand, the capacity of data providers to use SiBBr was strengthened through several training courses, materials and activities delivered by the project (i.e. training courses for researchers and taxonomists, tutorial videos on the steps necessary for the publication of biodiversity data, and a booklet for the training course on the organization of data papers). These initiatives contributed to the successful delivery of some outputs under components 1 and 2 (i.e. Outputs 1.4, 1.7 and 2.2). On the other hand, output 3.6 sought to strengthen the capacity of end-users (decision makers), not data providers. According to ProDoc, it was expected that the project would develop and implement dedicated training courses aimed at state and federal level users on how to use the products and services tailored to decision-makers' requirements and needs. The project was also expected to prepare training manuals for the available tools and services of the SiBBr, aiming decision makers. The fact that the first version of the SiBBr had several limitations and the new version of the SiBBr was only launched on the last year of the project contributed to the fact that only a very limited number of decision makers, mostly the ones involved on the SiBBr implementation, have the capacitates to use SiBBr tools. A very limited number of stakeholders in a decision-making position related to the use and conservation of biodiversity were aware about the existence and relevance of the SiBBr.
3.7 A system of governance for the information system developed	**Partially available** – A system of governance for SiBBr was developed and is reflected on MCTI's Order No. 6,233, published in November 2018. This ministerial order institutionalized SiBBr under the MCTI structure, established its Governance Committee (composed by institutions under the sphere of influence of the MCTI), and delegated SiBBr operation to RNP (with financial resources to be provided by MCTI). According to the ProDoc, this output 3.7 was expected to develop a sustainable financing model for SiBBr. At TE, the financial strategy for SiBBr governance system was not clear – no formal study or analysis for the development of a sustainable financing model for SiBBr was consolidated nor made available to the evaluation team. At present, the financial sustainability of SiBBr depends solely on MCTI resources. The governance system in place for the SiBBr, if properly implemented, might be adequate to promote some short-term sustainability of the SiBBr. Nevertheless, it is not enough to actually promote its long-term sustainability, considering the challenges that SiBBr has to face to become the reference system for information about Brazilian biodiversity and to actually be used by decision makers to improve, through access to systematized information, the conservation and sustainable use of Brazil's biodiversity (expected impact of SiBBr as per ToC). Section V.H Sustainability analyzes in detail the governance system proposed for the sustainability of the project results.

158. Forty four percent (44%) of the expected outputs were fully available and, also, forty four percent (44%) were partially available. The delivery of most

outputs was delayed affecting their utility to intended beneficiaries. Among the delivered outputs, some of the most important ones to achieve outcomes (such as outputs 1.7 and 3.2), were considered to be of good quality by project partners.

159. Whereas, other key outputs (such as output 3.4) were not properly communicated nor presented to end users outside the sphere of the project, and sometimes neither for stakeholders involved on the project. On one hand, there was a high ownership of the academic partners involved in the delivery of the outputs from components I and II. On the other hand, there was a low level of ownership from decisions makers on the availability of outputs from component III. The delivery of the outputs was rated 'Moderately Satisfactory'.

Rating for Availability of Outputs: Moderately Satisfactory

ii. Achievement of Project Outcomes

160. The achievement of the three project outcomes was assessed as performance against the outcomes as defined in the reconstructed Theory of Change at Evaluation (Table 10). These outcomes were intended to be achieved by the end of the project timeframe and within the project's resource envelope. This TE also analyzed to what extent the assumptions for progress from project outputs to outcomes were held, and the drivers to support transition from outputs to outcomes were in place.

161. **Outcome 1** *"SiBBr becomes the reference Information system about Brazilian biodiversity for data providers'* was partially achieved. Its achievement contributed to consolidate the infrastructure, instruments, tools, and technology necessary to qualify, gather and make the biodiversity information contained in the country's biological collections freely available online through the SiBBr platform (www.sibbr.gov.br). The assumption that Brazil would have sufficient communications infrastructure and technical capacity to develop an appropriately sophisticated information system was held (**Assumption 1**).

162. This outcome generated changes on the data culture and institutional framework related to knowledge management of biodiversity information. For the first time research institutes in Brazil had an **official government system** (hosted by the MCTI) where they could store, share and retrieve the information on Brazilian biological collections.

163. Despite not being yet the reference system on biodiversity, SiBBr does host the largest number of species records, compared to the other major systems (SpeciesLink and Biodiversity Portal – see paragraphs below). On 01 November 2020, SiBBr hosted more than 16M occurrences of species, provided by 131 institutions composed of 256 collections and 422 data sets

of Brazilian biodiversity. SiBBr still shares the stage with SpeciesLink and with the Biodiversity Portal.

164. **SpeciesLink** was the first successful Biodiversity Information System of Brazil, created in 2001 and hosted by the NGO CRIA. SpeciesLink has a good penetration and acceptance with several research institutes and curators, especially from medium and small size. To some extent, SpeciesLink depends on resources from public funds for its maintenance. On 01 November 2020, it provided information from 529 collections on Brazilian biodiversity, from all states and biomes of Brazil, with almost 15M occurrences

165. Around 5M records are shared between SiBBr and SpeciesLink. Both systems feed information into **GBIF** global platform. Some researchers in Brazil usually access information on Brazilian biodiversity through GBIF platform (not SiBBr nor SpeciesLink), mostly because there they can find both SiBBr and Species Link information. Furthermore, they can also obtain on GBIF information about biodiversity of neighboring countries, and some of them were more used to access GBIF than SiBBr.

166. The **Biodiversity Portal**, launched in 2015, is hosted by the Ministry of Environment (MMA for its acronym in Portuguese), through ICMBio (Instituto Chico Mendes de Conservação da Biodiversidade), an autonomous organization of MMA. On 28 August 2020, it had around 2M records of Brazilian biodiversity not shared with SiBBr. Both SiBBr and Biodiversity Portal are official initiatives of the GoB, the former with incidence on the academic and research community and the latter acting as the formal information system of biodiversity for the institutions under MMA.

167. The willingness of a high proportion of data providers to contribute to the SiBBr and to share data and technical information was one of the drivers that, if in place, could contribute to this outcome (**Driver 1**). This driver was partially in place, as several data providers continue to share data through SpeciesLink and the Biodiversity Portal, and these 3 systems are not yet properly interconnected. Other systems also host valuable information about Brazilian biodiversity, including Ocean Biodiversity Information System Brazil (OBIS – Brazil), Alelo – the information system on genetic resources of Embrapa, and other systems at state level (e.g. hosted by the State Secretariat of Environment).

168. Systems like the National Management System of Genetic Resources and Associated Traditional Knowledge (**SISGEN**)[29], created by MMA in 2017, and Biodiversity Authorization and Information System (**SISBIO**)[30], created by ICMBio in 2007, where researchers have to register similar data to the ones provided to SiBBr are not yet integrated into SiBBr. They reinforce the

[29] SISGEN: https://www.gov.br/mma/pt-br/noticias/noticia-acom-2017-04-2291
[30] SISBIO: https://www.icmbio.gov.br/sisbio/

perception of data providers that, to some extent, the information on Brazilian biodiversity is still scattered among various databases under different governmental bodies and other institutions. During the review of the draft version of this TE report (February 2021), the EA reported that the integration of SISGEN was underway, but the system was not yet ready. Regarding SISBIO, the EA expects the integration to take place as soon as the SISBIO is online.

169. However, the project did contribute to the promotion of a **cultural change** within Brazilian scientific community regarding the relevance of sharing data, making it free and openly accessible. This was not an easy task and involved the need of building trust and fostering relationships with many scientific institutions and individuals. The project, after the *Carta do Rio*, adopted a clear approach of working first with the large institutions (JBRJ, MPEG, INPA, Fiocruz, MZUSP and National Museum), which was considered by some interviewees as a factor of success[31].

170. **Outcome 2** '*Strengthened institutional and taxonomic capacities enable continuous upload and update of information into SiBBr*' was partially achieved. To some extent, institutions and capacities had been strengthened with support (funds) from the GoB. This resulted, during project implementation, in increasing capacities for data acquisition and management of biodiversity knowledge. To some extent, the collaboration between institutions to produce the National Catalog of Fauna and the National Catalog of Flora[32], contributed to strengthening inter-institutional collaboration helping to increase taxonomic capacities (**Driver 3**).

171. Nevertheless, the maintenance of biological collections infrastructure, and a sustained and predictable support to biodiversity research, including salary or scholarships to preserve and strength taxonomic capacities, **is still a challenge** faced by Brazilian society (including its governments at all levels – federal, state and local; legislators, private sector, NGOs and research institutions). Furthermore, the 2006 Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections became obsolete and was not updated.

172. There are still significant **gaps to be overcome in taxonomic knowledge** about the less studied geographic areas (e.g. ocean biodiversity) and taxonomic

[31] Some interviewees considered that the *Carta do Rio* marked a rupture in the project's original concept of further developing a collaborative and cooperative network, where each and every participant was important. According to these interviewees, after *Carta do Rio*, large institutions came first, and the network became less important. Some interviewees considered that, this new approach led to exchange collaboration via grants and not via a genuine commitment in building and being part of a collaborative and cooperative network.

[32] The Catalog of the Flora of Brazil had more than 500 taxonomists responsible for updating information on nomenclature (accepted names vs synonyms) and their geographic distribution (area of occurrence in Brazil, endemism and phytogeographic domains) as well as information on life forms, substrate and vegetation types for each taxon. The Fauna Catalogue had more than 500 researchers in Zoology and 119,226 taxonomically valid species that were identified. The SiBBr, from these two reference lists created a database in the *DarwinCore* standard with more than 165,000 species that feeds the platform with taxonomic information, generating statistics, searches for taxa, form for each of the 165 thousand species described, and validation of the names of the collections of the collections, among other features. (source SiBBr Final Report)

groups (e.g. fungi). These factors negatively affect the capacities to continually upload and update information into SiBBr. The compilation and organization of biodiversity data is still a challenge, as there is an enormous amount of not yet digitized data to be recovered, repatriated and made available.

173. As per the ToC of the project, the achievement of Outcome 2 would contribute to Outcome 1, and two external factors, Assumption 2 and Driver 4 could have contributed to this change process. On one hand, **Assumption 2** was considered too ambitious by some project partners and was not held: there is still a significant gap of qualified human resources in specific regions or taxonomic domains that require strengthening.

174. On the other hand, there was a perception among project stakeholders that, compared with the situation in 2011, by the end of the project, there was a better infrastructure, with greater data quality tools and increased visibility of biodiversity information that incentivizes data providers to participate and share information through SiBBr. However, there are yet significant challenges to overcome, especially regarding incentives for researchers to share data from their studies through SiBBr (i.e. such as proper mechanisms to recognize and account the time and effort necessary to handle biodiversity data and make it available through an information system). **Driver 4** was partially in place.

175. **Outcome 3** '*Decision-makers at country, state, and local level use SiBBr as a support tool for improved biodiversity conservation*' was not achieved. The achievement of this outcome, as mentioned by a key actor of the project, '*still is in the future*'. Most of the decision-makers, beyond the direct sphere of influence of the project (i.e. research institutes and stakeholders involved in some activity of the project), are not yet aware of SiBBr and how to use it for their benefit. However, SiBBr has a high potential to actually be the foundational block of several support tools to be developed in the future for decision makers aiming to improve biodiversity conservation.

176. To some extent, Outcome 3 was an ambitious component that would require closer engagement with several stakeholders outside the direct sphere of influence of the project. The project, at its design, envisaged several outputs tailored to build mechanisms to motivate the engagement of many stakeholders necessary to reach this outcome. The assumption that the SiBBr would be widely adopted throughout federal, state and local government institutions and the private sector as an essential tool for environmental decision-making (**Assumption 3**) did not hold.

177. The achievement of outcome 1 was a prerequisite to the causal pathway leading to outcome 3. As previously mentioned, outcome 1 required a lot of effort and was only achieved with the migration to ALA and the launch of the new SiBBr portal in the last year of the project (2019). The assumption related to this change process held (**Assumption 1**): Brazil had sufficient

communications infrastructure and technical capacity to develop an appropriately sophisticated information system.

178. However, **Driver 2**, that was expected to contribute to the change process, was only partially in place: several existing institutions and initiatives handling biodiversity information (such as line ministries of Agriculture, Environment, and Health; sub-national and local governments, NGOs and private companies) had not yet subscribed to SiBBr. It should be noted that during the TE, the MCTI was dedicating efforts to create partnerships with some of these institution (e.g. Embrapa and Renova Foundation).

179. Two outcomes were partially achieved (Outcomes 1 and 2) and one was not achieved (outcome 3). All three outcomes are relevant to attain the intermediate state (IS) and impact expected by the project. However, outcome 3 was, and still is, a **key outcome to reach the IS**. Therefore, it is crucial that GoB and other project partners continue to work towards the achievement of this outcome.

180. The integration of SiBBr, SpeciesLink and Biodiversity Portal should also be a priority for the GoB, to avoid duplication and to bring **integration and cooperation** instead of competition and segregation. To a certain extent, the delivery of products, especially those under components I and II, contributed to promote changes of behaviors, attitudes and conditions, among stakeholders involved in the project (mostly related to the perspective of data providers regarding the relevance of sharing biodiversity data).

181. During TE, some project partners had the perception that **the project achieved what was possible** considering: i) the external context (i.e. impeachment, lack of high-level of political support, etc. – see details on section V.C Nature of the External Context), ii) the project performance (i.e low efficiency, centralization of project decisions, etc. – see details on sections V.F Efficiency and V.I Factors Affecting Performance), and iii) the risk of delivering a system that had proved to be flawed (considering that the first version of SIBBr used the Canadensys Platform). The migration from Canadensys to ALA platform, on the last months of the project, was a bold and necessary action.

182. However, none of the expected outcomes were fully achieved. The assumptions for progress, from project outputs to outcomes, partially held, and the drivers to support transition, from outputs to outcomes, were partially in place. The achievement of outcomes is therefore rated as 'Moderately Unsatisfactory'.

Rating for Achievements of Project Outcomes: Moderately Unsatisfactory

Table 10 - Achievement of Outcomes (summary of findings and evidence)

Outcome as per reconstructed ToC	Summary of Findings / Evidence
OUTCOME 1: SiBBr becomes the reference Information system about Brazilian biodiversity for data providers	Partially Achieved - The SiBBr portal is operational and, on 01 November 2020, it hosted more than 16M occurrences of species, provided by 131 institutions composed of 256 collections and 422 data sets of Brazilian biodiversity. Currently, the SiBBr platform is fed semi-automatically and the number of occurrences is growing steadily. Nevertheless, despite project partners' efforts, SiBBr is not, yet, the reference system on Brazilian biodiversity. It shares the stage with SpeciesLink (hosted by the NGO CRIA) with almost 15M occurrences (around 5M of them are shared with SiBBr) and with the Biodiversity Portal, also called PortalBio, (hosted by the Ministry of Environment) with around 2M records not shared with SiBBr. Both SiBBr and Biodiversity Portal are official initiatives of the GoB, the former with incidence on the academic and research community and the latter acting as the formal information system of biodiversity for the institutions under MMA, such as ICMBio, Conservation Units managed by MMA, etc.
OUTCOME 2: Strengthened institutional and taxonomic capacities enable continuous upload and update of information into SiBBr.	Partially Achieved - Institutions and capacities had been strengthened with support (funds) from the GoB, especially during the first half of the project 2011-2015. Since 2016, there has been a significant decrease on the support provided by the GoB to maintain biological collections infrastructure, to support research and to strength taxonomic capacities. Furthermore, the 2006 Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections was not updated. There are still significant gaps to be overcome in taxonomic knowledge about the less studied geographic areas and taxonomic groups. At the present, these factors negatively affect the capacities to continually upload and update information into SiBBr.
OUTCOME 3: Decision-makers at country, state, and local level use SiBBr as a support tool for improved biodiversity conservation	Not achieved – SiBBr has a high potential to become the foundational block of several apps and tools tailored to decision makers to improve biodiversity conservation. Nevertheless, the achievement of this outcome, as mentioned by a key actor of the project, *'still is in the future'.* Most of the decision-makers at country, state, and local level, beyond the direct sphere of influence of the project (i.e. research institutions and stakeholders involved in some activity of the project), are not yet aware of SiBBr and how it can benefit them. This was an ambitious outcome that would require close engagement with several stakeholders outside the direct sphere of influence of the project. As per ProDoc, it was expected that by the end of the project at least 2 new policy/legal instruments at federal and state level, and 10 protected area management plans would incorporate or make use of qualified information produced by the SiBBr. Despite some efforts to build a Technical Cooperation Agreement for promoting the integration of data, information and services between portals of MMA and ICMBio – the PortalBio and SiBBr, no evidence was found to demonstrate that new policy/legal instruments or PA management plans incorporated or made use of the SiBBr. It was also expected that by the end of project, '*MMA and MCTI and at least 3 additional Ministries/ institutions would be using and/or citing SiBBr resources or information in biodiversity and environmental policy/programme design and implementation*'. MCTI and MMA had been citing SiBBr on official documents, such as the fifth and sixth National Reports for the Convention on Biological

Outcome as per reconstructed ToC	Summary of Findings / Evidence
	Diversity and the National Strategy and Action Plan for the Biodiversity. Institutions related to other Ministries, such as Ministry of Education through universities, the Ministry of Health through the FIOCRUZ and the Ministry of Agriculture Livestock and Supply through Embrapa, had been providing data to SiBBr and using SiBBr information for research and academic proposes. But no further evidence was found on how SiBBr resources and information had been used by decision makers in the design and implementation of environmental policy/program at country state and local levels.

iii. Likelihood of Impact

183. The likelihood of the intended impacts of the project becoming a reality was assessed based on the articulation of longer-term effects in the reconstructed Theory of Change - i.e. from outcomes, via intermediate state, to impact. As indicated in the ToR for this evaluation, the excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree' was used to guide the evaluation rating. The approach follows the 'Likelihood Tree' from outcomes to impacts, taking into account whether the assumptions and drivers identified in the reconstructed ToC held.

184. The **intermediate state** '*Data-driven policy design and implementation generated by the mainstreaming of biodiversity into decision-making and policy development processes*' was expected to be reached through the achievement of Outcome 3. The shortcomings on outcome 3 is hindering the likelihood of reaching the IS in the near future.

185. Furthermore, **Assumption 4**, a contributing condition to the change process from Outcome 3 to IS did not hold. Since the impeachment process in 2016, and especially during the current presidential mandate, several key decision makers from development sectors (i.e. agriculture, industry, infrastructure, energy, etc.) had demonstrated decreasing willingness to actually access authoritative, strategic and timely information on biodiversity to support the development and implementation of policies and strategic planning. Exceptions can be found on actors such as some private companies that seem to understand the risks and opportunities of biodiversity related issues to their business (i.e. such as Renova Foundation and Natura).

186. **Driver 5** 'strong governance structure and long-term financing would ensure sustainability of the system and continuous and increased use in decision-making'**,** an external factor that to some extent could be influenced by the project and its partners, was not in place (see details on section V.H Sustainability). The current governance structure is enough to maintain and update the system, but there is not a long-term financing plan to ensure the sustainability of the system and increase its use in decision-making.

187. Two contributing conditions (Assumption 5 and Driver 6) that were expected to support the change process from IS to the overall **impact** of the project '*Improved conservation and sustainable use of Brazil's biodiversity thought public access to systematized information*' are not yet in place. Despite the recognized potential of SiBBr, the improved access to biodiversity information has not yet resulted in enhanced sectorial policies and regulations, better business practices, and to make better choices regarding development project alternatives (**Assumption 5**). Interviewed partners reported that only a few decisions-makers were using SiBBr to make informed decisions about the conservation and use of biodiversity in Brazil **(Driver 6)**.

188. The project SiBBr has played a relevant role in implementing a state-of-the-art information system on biodiversity. The project promoted changes that may lead to the expected impact, but the magnitude (related to the expected extent), broadness (related to the wide scope required for change to happen) and effectiveness (related to the degree to which the project would produce the desired effect) of the change process are **not yet sufficient** to reach the desired intermediate state and impact in a reasonable timeframe.

189. A GEF project aims to support a **transformational change** promoting long-lasting benefits to the environment and human well-being. In some cases, such as in the current project, a GEF project represents a rare opportunity to dedicate significative amount of resources (funds, people, tools, etc.) to reach outstanding results that would not be reached in a business as usual approach.

190. The SiBBr project invested over 28 Million USD, counted with active collaboration of hundreds of professionals, involved more than 50 institutions in delivering outputs and took more than one decade from its design to closure. Some interviewed stakeholders considered that this was **an exceptional opportunity** that had never happened in Brazil and that might not happen again in the near future. According to the evidence gathered by the TE, this opportunity was not maximized by the SiBBr project.

191. In order to reach the long-lasting change envisaged by the SiBBr project a reality, the Brazilian society (governments, private sector, NGOs and Civil Society Organizations) will have to dedicate significant efforts and resources in the upcoming years. It should be noted that the loss of biodiversity is happening in unprecedent rates and a significant portion of Brazilian biodiversity had been lost for good. Initiatives such as SiBBr and biodiversity collections (genome banks) should be considered as priorities in this race against the clock to promote the development and implementation policies and initiatives to actually conserve and convert Brazil's magnificent biodiversity part of the solutions to the so desired social and economic development of the country.

192. As per the ToR, this TE assessed to what extent the project promoted a **catalytic role, scaling up and/or replication** as factors that are likely to contribute to longer term impact.

193. The SiBBr project, on one hand, benefited from other countries and initiatives that were more advanced in developing similar systems (e.g. Colombia and GBIF). On the other hand, being part of GBIF also put SiBBr in a good position **to foster scaling up** and replicability to other countries (i.e. some Latin American, such as Uruguay and Ecuador, and Portuguese Speaking countries had already approached SiBBr team to learn from its experience). GBIF recently approved an initiative proposed by Brazil to support training initiatives at other seven Latin American countries for the customization of some Living Atlas tools and taxonomic lists. To some extent, being part of GBIF can contribute to the project impact by promoting lessons learned and collaboration among countries.

194. It should be noted that SiBBr generated a number of experiences and lessons-learned, relevant to both Brazil (e.g. state and local government levels and other data holders) and elsewhere, in particular to megadiverse countries, such as China, Congo, India, Indonesia and Philippines. The ProDoc described a high **replication** potential of this project and it stated that 'a strategic map of actions, tools and results consolidated during the life cycle of the project will serve as a robust framework for the development of similar initiatives'.

195. The ProDoc envisaged that the project would 'ensure that **lessons learned** through different initiatives could be replicated throughout Brazil'. MTR also reinforced this call and stated 'the development of a strategic map of actions, tools and results proposed in the ProDoc should not be forgotten as the means to document these experiences and lessons-learned'. Unfortunately, these issues did not seem to a be priorities of the project and the project ended without recording its expected role of replicability.

196. The project had the opportunity to play a relevant catalytic role by, on one hand, integrating in a one stop-shop of all information available on biodiversity and, on the other hand, offering decision makers tools tailored to their need to easily use this information. There is no evidence to demonstrate that the project*, per se,* had properly promoted this **catalytic effect**. No negative unexpected impacts of relevant nature were identified.

197. Based on the 'Likelihood of Impact Assessment Decision Tree' flow chart used by the Evaluation Office, the likelihood of impact was rated as Unlikely. This does not mean that the SiBBr will not reach its expected impact in the future. It means that the GoB and SiBBr partners will have to dedicate significant **additional efforts** to actually increase the likelihood of reaching the impact envisaged by the project.

Rating for Likelihood of Impact: Unlikely

Overall Rating for Effectiveness: Moderately Unsatisfactory

E. Financial Management

i. Adherence to UNEP's Financial Policies and Procedures

198. The ET was presented with budget information covering the life of the project, with regular analysis of actual expenditure against budget and workplan - with yearly information on expenditure per outcome level.

199. Evidence gathered by ET indicates that, on several occasions, the project could not provide timely approval and disbursements of funds (e.g. e-mail from PM to FMO on October 8th, 2018). Reasons involved a reported rigidity in UNEP's structure (with country offices with a low level of autonomy vis a vis regional offices and HQ); project personnel turnover; and the change in the system from IMIS to UMOJA - with the associated learning curve to master the new system.

200. The TE identified that, in 2016, several project commitments were affected by delays, as stated in the technical note to support the project extension in document 'Doc de Revisao Assinado jun 2016-Port.doc': 'it is necessary to highlight that there were at least two operational system changes in UNEP in the last three years, affecting, in a significant way, the budget expenditure. Each system change implied in a learning curve of 3 to 4 months, approximately.'

201. The project underwent three formal no cost extensions (June 2016, December 2017 and November 2018). Budget revisions details for the first extension was clearly documented, while the other two were only time extensions. Conversely, details of budget revisions for other purposes (not related to the no cost extensions) were not clear or available (e.g. reallocation of project funds).

202. In the 2012 PIR, both PM and TM marked 'substantial risks involved' requiring budget reallocation. The 2013 PIR indicated that the budget revision was prepared and approved, but there were no details of the approved version - a file 'Budget Revision 2013' was found with no dates or signature. Three SC minutes (SC1, SC5, SC6) made references to budget revisions without details; SC5 mentioned an aide memoir attached which was not made available to the ET. Nevertheless, SC 7 had a budget screenshot attached and SC 8 and 9 included budget figures in the text.

203. According to the inception workshop minutes, a project budget revision would be necessary - however, since no evidence on this was made available to the ET, it was not possible to assess its details. A mission report from the TM in December 2013 explained that budget revision #1 was lost and never uploaded into the system, becoming known as the 'ghost revision'. The need for this first budget revision was justified due to: i) the delayed start and the

need to adjust budget distribution of GEF funds through the years remaining as per the agreement; ii) changes in domestic regulation regarding rules and procedures for the execution of national funds (Federal Court of Accounts Agreement 1339/2009 and Presidential Decree 5151); and iii) the 10% limit cost for Project Management Costs.

Rating for Adherence to UNEP's Financial Policies and Procedures: Moderately Satisfactory

ii. Completeness of Financial Information

204. The financial information provided presented the budget and its funding sources. Signed endorsement letters from the GEF Trust Fund, in May 2010, totaling USD 8,172,728; and from the Brazilian government, in December 2009, totaling USD 20 million, were made available.

205. Project expenditures were detailed by outcome, but the level of information regarding expenditures varied. It is possible to track yearly expenditures for outcomes throughout the full project. However, detailed expenditures by budget lines were only available from 2012 until part of 2015 – when the switch from IMIS to UMOJA took place, resulting in a change of format which makes comparisons between the periods pre and post UMOJA implementation difficult.

Table 11 - Expenditure by Outcome/Output*

Component/sub-component/output *All figures as USD*	Estimated cost at design**	Actual Cost/ expenditure***	Expenditure ratio % (actual/planned)
Outcome 1	3,733,900	5,280,908	141
Outcome 2	20,000,000	20,000,000	100
Outcome 3	3,706,828	2,883,899	78

** It was not possible to compare the expenditure by outcome in relation to cost at design and the actual expenditure because the ProDoc was conceived using 4 outcomes (the 3 outcomes + a project management outcome) whereas the final budget report distributed the Project Management cost between outcome 1 and 3.*
*** Estimated cost at design extracted from: SIBBr PRODOC eng_signed.pdf item 7.1 with budget listed on it*
**** Actual cost expenditure from SiBBr-financial statement from 2012 to 2019 December.pdf*

206. There was inconsistency in the budget figures, with varying numbers between different files. One reason identified by the ET is that, for years, the project misplaced the 'budget original 2010' column with the 'budget for the outcome 1' column (which explains why the 'budget original 2010' for the project, in several files, is only USD 3.7 million instead of USD 8.1 million – e.g. SiBBr-Financial statement-2012 to the end of 2017_signed.pdf). Another explanation might be changes in project lines caused by the switch from IMIS to UMOJA which might explain why the 'budget original 2010' under the 'travel' line skyrocketed from USD 211,200 in the ProDoc (IMIS line 1601) up to USD 2,119,228 (FT30_Class_160) on the 'SiBBr-financial statement from

2012 to 2019 June.pdf' (which is actually the last signed financial document, but has no date, budget file). These misplacements did not affect the financial health of the project, but they indicate that a more throughout analysis might be necessary (i.e. an audit).

207. Some files missed signatures (e.g. Report of planned and actual co-finance.pdf) and/or the date of approval (e.g. Expenditures 2012 to June 2018-signed.pdf), therefore it is not possible to assess if all material was submitted or approved in a timely fashion.

208. The ET received several project legal agreements, but some of them came only at a late stage of the TE cycle, during the final review of the draft TE report (February 2021).

209. The reported co-financing figures were inconsistent, and the ET was not given a clear explanation for these differences:

- PIRs 2014 until 2018 reported USD 22.16 million in total co-financing (the same figure presented in the 'co-finance report jun20016.pdf'). However, in the ProDoc, in the PIR 2019 and in the final report, the total co-finance figure is USD 20 million, therefore it is not possible to determine whether co-finance exceeded the total envisaged.
- the co-finance report points out that the co-finance was 'in cash' whereas the final report classifies it as 'in-kind'.
- The ET was not able to find proof of delivery of in-kind contributions from the Brazilian government after 2014, and/or from stakeholders, beyond the co-financing report.

Table 12 - Co-financing Table

Co-financing (Type/Source)	UNEP own Financing (USD 1,000s)		Government (USD 1,000s)		Other* (USD 1,000s)		Total (USD 1,000s)		Total Disbursed (USD 1,000s)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
Grants									
Loans									
Credits									
Equity									
In-kind									
Other: Cash			20,000	22,162			20,000	22,162	22,162
Totals			20,000	22,162			20,000	22,162	22,162

Source: Co finance Report Jun 2016.pdf

210. The budgets for the no-cost extensions were part of the documents for the extensions A, B, and C (see para. 216). The ET was only able to find a single disbursement document to partners: one fund transfer from UNEP to Fundação Jardim Botânico, in December 2014. Through correspondence

with partners, the ET managed to find evidence of transfers from UNEP to WWF and WCMC.

211. The project envisaged five annual audits, but none was carried out, despite the request for UNEP to carry out a finance audit of the project and present the results to GoB in the 7th Steering committee meeting. There was no reference or follow up to this request in the following Steering Committee meeting.

Rating for Completeness of Financial Information: Moderately Unsatisfactory

iii. Communication Between Finance and Project Management Staff

212. Due to the lack of evidence, it was not possible to rate this evaluation criteria. The current FMO joined the project in August 2020, and the financial focal point for the project joined in late 2018. Despite two attempts, the ET could not interview the previous FMO, and the UNEP Brazil Finance Manager left his position during this TE. Based on the information provided for a limited period, it was noted that communication with PM and TM was smooth and that they would discuss emerging issues until a solution was found. The quality of the financial documents presented by SiBBr was considered 'Satisfactory'. There were also indications that the information was handed over to the FMO within the expected timeframe. However, there was not enough information available for triangulation.

213. Interviewees indicated that PM and TM were aware of financial details and took necessary steps to solve critical issues. Evidence suggests that financial issues were addressed retrospectively when identified by senior management. However, no evidence was found regarding narrative reports being only reviewed by PM and financial reports only by the FMO.

Rating for Communication Between Finance and Project Management Staff: Not Rated

Overall Rating for Financial Management: Moderately Satisfactory

Table 13 - Financial Management Table

Financial management components:	Rating	Evidence/ Comments
1. Adherence to UNEP's/GEF's policies and procedures:	**MS**	-
Any evidence that indicates shortcomings in the project's adherence to UNEP or donor policies, procedures or rules	Yes	Yes: Project suffered several delays in disbursements affecting partners and the EA. Reasons given were the rigidity of UNEP procedures; hierarchical relations between UNEP stances (country / regional office / HQ). Constant

Financial management components:		Rating	Evidence/ Comments
			changes in internal systems. Budget revisions were not clear except in the project extension request in 2016. Several interviewed partners reported that, to their view, there was insufficient transparency in the selection of partners and disbursement of funds. But this is an issue beyond the scope of this TE and should have been tackled by the audits that did not happen. The ET considers that by not conducting any audits there was a missed opportunity to identify these issues during project implementation and adopt the necessary measures to address them, thus reducing project efficiency.
2.	**Completeness of project financial information:** Provision of key documents to the evaluator (based on the responses to A-H below)	**MU**	-
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	Yes. Only 2 co-finance reports were provided. Budget reports were provided for all the project life but budget lines changed after switch from IMIS to UMOJA
B.	Revisions to the budget	Yes	Yes. But budget revisions were clearly documented only for the first no cost extensions, and not for revisions undertaken for other purposes. Steering Committee minutes mentioned budget revisions but only one had full supporting files attached.
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	The ET had access to ICAs between DRC and DGEF, and between WCMC and UNEP CO Brazil. A PCA with WWF was also presented to the ET. Upon request, the ET received electronic copies of legal agreements between the project (most by EA) and several other institutions, including LNCC, MMA, GBIF, RNP and a draft agreement not signed with CRIA. Sixteen Terms of Decentralized Execution (TEDs – legal agreements used by MCTI to delegate execution of actions to other national entities) were presented to the ET. They included TEDs with MPGE, MN, INPA, MZUSP and Fiocruz.
D.	Proof of fund transfers	Yes	Only for JBRJ.
E.	Proof of co-financing (cash and in-kind)	No	No, only the co-finance report
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes	Yes, however the summary report did not detail the budget lines expenditures after 2015 except for Personnel. The final summary report was not signed or dated.
G.	Copies of any completed audits and management responses *(where applicable)*	No	5 annual audits were planned but none was carried out, despite request from the Steering Committee
H.	Any other financial information that was required for this project (list)	-	Documents were not properly filed and ET had to request information and missing files.
3.	**Communication between finance and project management staff**	**Not rated**	-

Financial management components:	Rating	Evidence/ Comments
Project Manager and/or Task Manager's level of awareness of the project's financial status.	S	PM 2 and TM had a strong awareness of the project financial status
Fund Management Officer's knowledge of project progress/status when disbursements are done.	Not rated	Last FMO joined project in August 2020 and could not comment on this topic. Since the previous FMO was not available, the ET could not assess the prior level of knowledge.
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.	Not rated	Last FMO joined project in August 2020 and could not comment. Since the previous FMO was not available, the ET could not assess the prior level of involvement.
Contact/communication between by Fund Management Officer, Project Manager/Task Manager during the preparation of financial and progress reports.	Not rated	Last FMO joined project in August 2020 and could not comment on this topic. Since the previous FMO was not available, the ET could not assess the prior level of communication.
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the evaluation process	S	New FMO was helpful and quick in talking to the ET. Project Manager and Task Manager did respond to the financial requests by the ET. However, the ET could not speak to the Financial Officer in the UNEP Brazil CO as he left UNEP during the evaluation process.
Overall rating	**MS**	**-**

F. Efficiency

214. The MTR considered premature to assess the level of efficiency obtained by the project, since there was no functional operational system at the time. Six years later, interviewed project consultants unanimously agreed that the project could have been more **cost-effective** and could have delivered more in relation to the inputs used (time, funds, personnel, resources available). Only one of the seven interviewed project personnel (at IA and EA) considered the project cost-effectiveness to be 'Satisfactory' (stating that the project did what was possible), while two highlighted that the important aspect to bear in mind was that the project delivered a system (suggesting that if a system was not delivered the losses would be greater).

215. Being able to deliver an operational system was indeed a victory of the SiBBr project. Being able to deliver an operational system was indeed a victory of the SiBBr project. It is important, however, to assess the project efficiency under the categories of timeliness and cost-effectiveness. **Timeliness** is probably the most striking aspect when dealing with a project that, all in all, lasted around twice the expected duration (for more details please visit section V.I 'Factors Affecting Performance') and had three no cost-extensions.

216. The **no-cost extensions** allowed the project to deliver the system - which would not have been possible otherwise. The inception workshop report indicated that UNEP was following GEF's policy of no project extension, but

it soon became clear that more time would be required to structure the necessary foundations to deliver the project. Below a list of the extensions, justification and details:

- Extension A (June 2016): extended the project from December 2016 to December 2017. Justified based on: country political instability that impacted the inter-ministerial management of the SiBBr; financial instability and currency devaluation; delays in equipment acquisition (including slowness of UNEP procurement processes) and applications/tools development; lack of final definitions on infrastructure; need to develop the capacity building process; to finalize a plan for sustainability, audit and final reports.
- Extension B (December 2017): extended the project from December 2017 to June 2018. Justified on the need to extend project duration due to several delays (including issues with some partnerships, such as WWF) and adjust the budget. A signed version of this extension was not provided.
- Extension C (December 2018): extended the project until December 2019. Justified on political transition; strong exchange rate variation that created a financial surplus, the need to institutionally anchor the SiBBr, and transfer remaining funds to allow RNP's operation and system maintenance.

217. An issue that was raised during interviews is that despite the title 'no-cost', the extension did create an administrative burden for UNEP which is required to cover expenses related to the new period, occupying staff and consuming other resources. While this was the case, the extensions were justified to finish the project. Interviews revealed that there was a political determination from GoB of using all the foreign funds available, which would justify project extensions until the depletion of those funds.

218. Although extensions were justified, the project could have taken measures to expedite implementation and compensate for the delays. For instance, changing to ALA sooner would have saved time and resources.

219. The project did try to adopt **cost-saving measures** with a relative degree of success:

- The international procurement process is noteworthy because it enabled a substantial saving thanks to the purchase of hardware abroad.
- Developing in-house solutions with the project consultants, such as support tools for the system, instead of hiring external resources. Some of these tools are still in use today.
- The association with other ministries (such as MMA, or Ministry of Agriculture) to share the SiBBr - and its costs in the long run. This initiative did not pan out and the three ministries have, each, its information system

on biodiversity. This is clearly a lack of efficiency for the GoB and for the international organizations that also finance these endeavors[33].

220. In the documentation analyzed by the ET, **cost concerns** did not appear to play major role in decision-making (n.b. there were initiatives to reduce costs, but they did not appear to rank among the top priorities). For instance, a detailed procurement plan and explicit references to cost saving initiatives were not found nor mentioned by the interviewees.

221. The Project faced several **delays** that affected project implementation. These included:

- Delays impacted financial execution, hampering an even disbursement of the available funds over the project lifecycle. There were references to this in the PIR 2012, SC1 and in the inception workshop minutes, when the project found itself having to condense 5 years of planning and spending in the three years remaining. This detachment from the ProDoc deadlines, helped to reduce the importance of the document, affecting the project efficiency. Since the ProDoc was written a couple of years prior to the project implementation, some interviewed project staff considered that it did not reflect the changes in the world, but the project decided not to amend the ProDoc and to use it in a 'flexible way'.
- UNEP's corporate decision to change its internal operational system from IMIS to UMOJA. UMOJA was not functional enough during its launch and created internal problems. External impact, however, was more serious as it led to substantive delays in disbursements The EA officially criticized UNEP in the project extension document and in technical notes for the delays and inconveniences caused.
- The frequent staff turnover created delays in approval processes. During the implementation period, the SiBBr had 3 National Project Directors, 2 UNEP Project Managers and 5 Administrative Assistants. Coupled with the changes in the operational system, this created delays (e.g. in travel arrangements for consultants and stakeholders).
- Interviewees reported that the lack of knowledge regarding IT and information systems made it hard for project management to sequence efficiently the actions and activities required for project implementation.
- The majority of the interviewed consultants complained about the absence of a close coordination to guide, inform, motivate and solve disputes, leading to delays. Over three interviewed consultants mentioned that the SiBBr only managed to deliver part of its tools because there was no close leadership (N.B. this was not expressed in a positive way, but to highlight

[33] For example, the GEF is also financing, through the FUNBIO **GEF Pro-Species project**, updates/ improvements on the Portal da Biodiversidade which, to a large extent, duplicates efforts with the SiBBr. The FUNBIO GEF Pro-Species project (GEF ID 9271) ''National Strategy for the Conservation of Threatened Species' is an ongoing national project (with GEF CEO approval in July 2017), executed by MMA, ICMBio, JBRJ and other partners between (13.4M USD GEF grants)

that the team would have been capable of delivering much more if guidance was available).

222. The SiBBr project tried to increase overall efficiency in biodiversity management innovating in the information management. According to GEF's definition of **innovation** (i.e. 'doing something new or different in a specific context that adds value') the project was, in the national context, more innovative on the decision-making side than on the species information side. Probably its main value was in providing the centralized service free of charge and open, which allowed virtually all interested parties to adopt it, generating a potential transformational change in environmental decision making.

223. Conversely, GBIF is a proof that the idea in itself was not unheard of abroad. Several of the IT specialists interviewed explained that Brazil was trying to reinvent the wheel – worse is that the country was trying to build it over a system that would not cope with the SiBBr ambition. The addition of spatial layers, if not a brand-new idea, is not something widely used due to the difficulty in developing the service. SiBBr main innovation hurdle might have been waiting for too long to break the news of the system. When it was finally released, it was less innovative than back in 2009. In sum, it was a good idea, with a challenging implementation, but not innovative per se.

224. No evidence was found regarding project initiatives to reduce its **carbon footprint**.

Rating for Efficiency: Moderately Unsatisfactory

G. Monitoring and Reporting

i. Monitoring Design and Budgeting

225. The ProDoc proposed a M&R model that followed UNEP standards, used SMART indicators for each outcome, and left to be developed at a later stage its details, approaches and tools. The MTR classified the M&R system in place by 2013-2014 as 'weak, not applied and under-resourced'. This ET found that the ProDoc was more ambitious than the project management in relation to M&R. Its importance was, to some extent, understated by the EA. As explained in the efficiency section, the SiBBr presented a low level of accountability, which can be traced back to the weak M&R. The ET considered a paradox that a project aiming to gather and give visibility to information produced by others was not able to do the same for its own operation.

226. Comprehensive budgeting was a positive aspect of the M&R design process (see appendix 7 of ProDoc: Costed M&E plan). Funds were provided to: run the inception workshop, hire a part-time M&E specialist, conduct a MTR and a TE, commission five annual audits (which did not take place), and to organize

publications, communication activities, as well as steering committee meetings.

227. The monitoring plan presented in the ProDoc included 10 indicators to monitor progress against project objective and outcomes, data collection frequency and methods. However, it is important to note that some indicators baselines were missing because the project was starting from scratch, therefore no historical series was available. More precise indicators would have allowed greater inputs for project decision-making (and the M&R as a whole). Moreover, due to its nature, the indicators adopted could have benefited more frequent data collection and monitoring[34]. Lastly, indicators at outcome level focused on the frequency of mentions/ references to the SiBBr instead of capturing its importance/ contribution towards the project objective.

228. Funds for MTR and TE were present and considered adequate by the evaluation office. The project had a costed M&E plan but the budget by monitoring activity was still to be calculated. Some items, such as TE, MTE, inception workshop already had their budget defined. Responsibility for monitoring progress against each indicator were broadly defined between M&E specialist and external evaluators. There was no disaggregation in by relevant stakeholder groups - including gender and minority/disadvantaged groups. No additional gender indicators were developed either.

Rating for Monitoring Design and Budgeting: Moderately Satisfactory

ii. Monitoring of Project Implementation

229. The SiBBr counted with a basic monitoring system, anchored on the PIRs, that tracked results and progress towards project objectives. There was no functional monitoring system or tools to facilitate the timely tracking of results, adaptative management, and progress towards projects outcomes. At project design it was envisaged that a M&E specialist would be hired in the beginning of the project to develop an operational M&R Plan. A M&E specialist was only hired three years after project initiated and, to a large extent, acted more as a liaison person to the project director.

230. Some relevant, but incomplete, baseline data were collected. Regarding baselines, not only did the project face the issue of 'no historical series', but also, for most baselines, the information was either 'non-existent' or unclear (e.g. base line for outcome 3 indicator 1 'Several tools and services available (SpeciesLink, SinBiota, etc.) but with limited geographical scope and not targeting decision-makers'). Moreover, the project apparently did not try to

[34] Indicators collection frequency was annual. If they were bi-annual or quarterly indicators, they could provide more feedback to guide de implementation processes.

build the baselines. No mid-term targets or milestones were found for most indicators.

231. Complete monitoring data were collected regularly and reported in the PIRs. However, the ET found no evidence that the data have been shared besides the PIRs. Project adopted a creative interpretation of the data collected to present its results. In Project Objective Indicator 3, to explain the number of ministries using or citing SiBBr resources or information, the following justification was used: '*In addition, SiBBr publishes data from about 100 institutions linked to different Ministries, including the Ministry of Education through various collections of universities, the Ministry of Health through the FIOCRUZ collections, and the Ministry of Agriculture - through Embrapa's collections*.'

232. Aside from the M&E plan in the ProDoc, no updated versions of the plan and the workplan were produced. The M&E files' folder made available to the ET were older than the project, dating back to November 2009. To some extent, M&E was considered by project partners more as GEF requirement than an instrument to improve project execution, achievement of outcomes and to ensure sustainability.

233. The project did not spend the funds for M&R as planned: for instance, the M&E specialist was only hired after the project was already under way, none of the annual audits were conducted (despite several recommendations by the SC and the EA to carry out audits), no references were found for specific M&R publications released, and only some recommendations from the MTR were observed.

234. Project expenditure reports show that funds were spent on monitoring but not in accordance with the costed workplan. Spending level was lower than approved. Important to notice that data collected was not disaggregated by vulnerable/marginalized groups, including gender.

Rating for Monitoring of Project Implementation: Moderately Unsatisfactory

iii. Project Reporting

235. Limited project documentation and information was available in the UNEP system 'Advanced DGEF Database Information System' (ADDIS). The assessment for this section therefore relied on documents provided by the project team: PIRs, SC minutes and half yearly reports.

236. The evidence provided covered substantially the whole life of the project without gaps. There were few issues regarding templates (that varied over the years, especially PIR 2019), periods covered (the half yearly report in 2016 covers January to June, instead of July to December as in other years).

237. Collaboration and communication with UNEP colleagues, especially TM and UNEP CO Brazil staff, occurred in order to produce the reports.

238. The reports adequately reflected the project scope of work. There was some consistency between report progress PIRs and available evidence, however, in some cases, the ET found that the project adopted a positive reading of its achievements (e.g., reporting that Outcome 3 was satisfactorily achieved). Data reported was not disaggregated by vulnerable groups, including gender.

Rating for Project Reporting: Moderately Satisfactory

Overall Rating for Monitoring and Reporting: Moderately Satisfactory

H. Sustainability

i. Socio-political Sustainability

239. The continuation and further development of project outcomes are **highly dependent** on political will and social ownership. It was noted that there were different levels of ownership, interest and commitment among stakeholders to sustain project outcomes. On one hand, there is high ownership, interest and commitment among people and institutions that participated in the project execution, mostly the EA and research / academic institutions that provided data to SiBBr. On the other hand, stakeholders outside the sphere of influence of the EA that are crucial in the causal pathway of change, including major decision makers in the government, private sector and NGOs, have little to no ownership and knowledge of the projects outcomes.

240. The current **level of support** from the EA and research institutions might be enough to maintain, and further expand, outcome 1 - keeping SiBBr as a powerful repository/ recovery system of information on biodiversity mostly attending the needs of data providers which also uses biodiversity data for scientific/ academic proposes.

241. But this level of support does not reach the levels which have the power **to achieve outcome 3** (providing authoritative, strategic and timely information to support decision-makers in the development and implementation of their policies and decisions). As described in para. 175 and 184, outcome 3 was not achieved during project life span and it is the key outcome to reach the expected impact of the project. Only by reaching this outcome the SiBBr initiative will actually contribute to make better executive choices for the conservation and sustainable use of Brazil's globally significant biodiversity.

242. Concrete action has been taken by the project to promote **political sustainability**. The publication of the Ministerial Order 6233 in November 2018 was a relevant project milestone (see details on paras. 263 to 270). Nevertheless, this is an internal administrative order that is applicable only to the MCTI and it is not binding to other Ministries nor sub-national entities, neither any private company nor NGO entity operating in Brazil. So, the present

mechanism should be seen, from one side, as the best possible solution that could be put in place during the lifespan of the project to bring some level of sustainability to SiBBr.

243. This mechanism, however, **should be seen as a temporary solution** to maintain SiBBr during the next 'turbulent' couple of years when it will be very unlikely that science and biodiversity will be considered as a relevant priority to the current federal government. SiBBr partners seem to be aware that in order to reach the expected impact, a broader mechanism (such as presidential order or a law) should be developed to actually promote the integration of line ministries, sub-national governments, private companies, NGOs and Civil Society Organizations.

244. It should also be noted that, in the **political and social agendas** of many developing countries – including Brazil, priorities like security, employment, health, education, and economy very often overshadow the relevance of sustainable development, biodiversity, environment and even science. In the short term, the crisis generated by the COVID-19 pandemic is very likely to contribute to further decrease in the political and social perception of the SiBBr relevance vis-a-vis other priorities aforementioned.

245. Since project design, and through the project execution, project partners were aware of the **need to foster partnerships** and collaboration among relevant stakeholders to create an enabling framework for long-term support and achievement of project objectives. As a matter of fact, the project had many activities and two outputs designed for this purpose (output 1.1 'Increased stakeholder and political articulation' and output 3.7 'A Governance system developed').

246. Unfortunately, this enabling framework **was not fully established**. Interviewed project partners indicated that some of the main reasons behind this shortcoming were: the late and slow start of the project; the technical problems faced with the architecture of SiBBr and its late migration from Canadensys to ALA; the lack of a solid stakeholder engagement plan; the need for more high level political support from the GoB, both within and beyond MCTI; among other issues described at sections V.F Efficiency and V.I Factors Affecting Performance.

247. Last but not least, the **outreach campaigns** of the project were targeted mostly at data providers and, to a large extent, did not yet reach a broader public (see details in section I.vii. Communication and Public Awareness). So far, most social or political players (especially from the productive sectors) that could be in a position to advocate in favor of the sustainability of the SiBBr are not aware of the SiBBr platform existence, or do not understand its relevance or how it can contribute to national social and economic development.

248. The majority of the key end users in a position to make executive decisions on the conservation and sustainable use of biodiversity **were not engaged** in the

project activities, did not participate in the development of the SiBBr and, therefore, are not in position to actually contribute to its social and political sustainability. The socio-political sustainability is therefore rated as Moderately Unlikely.

Rating for Socio-political Sustainability: Moderately Unlikely

ii. Financial Sustainability

249. Project outcomes have a **high dependency** on future funding / financial flows to persist. Since project design, the financial sustainability of SiBBr has been considered as a key element by project partners. A study on the sustainable financing model for SiBBr was one of the products that the project was expected to develop under Output 3.7. Furthermore, one of the recommendations of the MTR explicitly called the project team to develop a long-term funding strategy[35]. Project partners recognized the relevance of building mechanisms for the financial sustainability of the project, as can be noticed in PIR 2014 '*the financial sustainability needs to be worked with political articulation to secure government budget to SiBBr after project ending.*'

250. During the project execution there were efforts **to engage with other governmental institutions** (i.e. MMA, Embrapa and IBGE), that, as end users, could be a in a position to contribute directly or indirectly to the financial sustainability of the system. At the end of the project, these institutions were not actually contributing to the sustainability of project outcomes (i.e. they do not have representatives on SiBBr SC and were not contributing to the financial sustainability of the platform).

251. Furthermore, **no study on the financial sustainability** of the SiBBr was produced. So far, project partners do not seem to know the financial needs to maintain, update and expand the SiBBr platform on short, medium or long terms. Funding sources to cover the financial needs of SiBBr depend solely on MCTI funds.

252. MCTI funds were secured for 2020, through a **Management Contract** with RNP of around USD 100,000 (R$ 530,000) mostly allowing to keep the system running and receive more records. The Management Contract indicated that RNP was expected to delivery four results: i) to keep the system operational and updated; ii) to promote the integration of new data into the system; iii) to develop an interface between the records available on SiBBr and an app on Citizen Science; and iv) creation of a repository of ecological data in the SiBBr Metadata Catalog and structured in the IPT.

253. With these funds, 3 full time staff that came from the GEF project team were hired. The evidence indicated that these funds could be enough to maintain

[35] MTR recommendation to develop a long-term funding strategy: '*post-project strategy designed to up-scale SiBBr will benefit from a detailed investment and maintenance budget including the identification of funding sources to cover these future costs*'

and update the system in the current year (2020). There were indications that funds might be secured for 2021. However, there was no evidence that that the required funding needs would be secured **beyond 2021**.

254. There was also a high level of **uncertainty** regarding which funds will be available in the future to develop key actions, beyond regular maintenance and update, that still are required to reach Outcome 3 and sustain the benefits from Outcomes 1 and 2. These key actions go beyond keeping the system running and bringing some incremental change on apps. They include the need:

- to design and implement a solid communication & outreach strategy,
- to build and execute a set of coordinated adaptative strategies for stakeholders engagement,
- to develop strategic partnerships with several stakeholders (from federal, sub-national and local level, private sector and NGOs/CSOs),
- to produce end-users' tools and apps, and
- to build capacities of users to understand the value of biodiversity information for decision making and to actually know how to use SiBBr for their benefit.

255. So, SiBBr will have to face the challenge of financing costs both on the maintenance of the system (i.e. maintaining personnel, keep up-to-date with technological evolution, etc. beyond 2020) and, above all, the need to increase the usefulness of the systems. Some funds might also be necessary for the development of the framework for a National Coordination System of Biodiversity Information (see details on para. 270). However, to build this coordination mechanism, human resources and political willpower will be far more important than financial resources.

256. The vast majority of the project partners interviewed raised concerns about the financial sustainability of the SiBBr. The ET noted that after the launch of the new version of SiBBr, there was increased efforts of MCTI to engage with private companies (i.e. Renova Foundation) that could bring additional financial resources onboard. These engagements were made on an ad-hoc basis and/or with a flexible approach, with no clear planning nor strategy. These efforts were built on the understanding that stakeholders benefiting from SiBBr would be interested in contributing to its sustainability.

257. The emerging **bioeconomy** agenda in Brazil had also been targeted by MCTI considering the potential of the sector to finance SiBBr. SiBBr had a stand and participated in the Bio Latin America in the city of São Paulo in September 2019. This was the largest regional event in the biotechnology sector. SiBBr's participation aimed to bring the attention of the business and industrial public to the platform, with the ultimate goal to establish service partnerships / contracts to be provided through SiBBr. Despite this attempt, no contracts or alternative funding sources had been attained at the time of the evaluation.

258. There is still uncertainty on the potential impacts of the **coronavirus crisis** in the financial sustainability of SiBBr, but there is a perception that the Brazilian economy will be severely impacted. One direct effect is the recent budget cut imposed to all ministries in Brazil (except to Ministry of Defense) for the 2021 fiscal year. This crisis could bring more challenges to guarantee funds and resources for the environment and biodiversity sectors. It is very relevant to increase decision-makers awareness regarding the **economic value of ecosystems and biodiversity** for society (in monetary terms, if necessary) by clearly demonstrating their contribution to promote equitable and sustainable development.

259. No formal **exit strategy** with a financial component was developed for the project. Nevertheless, the project team considers that the Ministerial Order (see paragraphs 263 to 270) serves as a makeshift exit strategy. However, according to best practices for project management, there should be a formal exit strategy, **with a clear financial analysis** of the need/ availability of resources.

260. This exit strategy should be developed at the onset of the project in close collaboration with key project partners, **approved by the SC and broadly communicated** to major stakeholders. In some cases, the process of building the exit strategy could serve as an opportunity for the project to identify and engage with key stakeholders during project execution. The financial sustainability is thus rated Moderately Unlikely.

Rating for Financial Sustainability: Moderately Unlikely

iii. Institutional Sustainability

261. Project outcomes have a high dependency on, and sensitivity to, institutional support. Two mechanisms are in place to support the institutionalization of project outcomes, namely: i) the Ministerial Order number 6,233, published by MCTI on November 2018; and ii) the formalization of the SiBBr as the Brazilian node of GBIF.

262. Since 2019, Brazil is a full member of **GBIF**[36], increasing its integration on the ALA international community. ALA community uses open-source systems and IPTs that contribute to bring sustainability to the SiBBr system. As a member of GBIF, Brazil gained access to infrastructure and technology developed for the interoperability of biodiversity data. These mechanisms can partially support Outcomes 1 and 2, but they are not yet enough to achieve, and then sustain, Outcome 3.

[36] Since 2012, SiBBr is the Brazilian node of this network. In 2019 Brazil started to cooperate financially, becoming a voting participant. Participation as a full member of the global network supports the platform's sustainability, in the sense that SiBBr receives technical support both for updating and maintaining the Living Atlas infrastructure, as well as for new tools, publication format and data mobilization. The exchange of experiences between experts in the world, involving worldwide standards of data sharing, with open solutions to common problems, is essential for the non-obsolescence of the platform.

263. The **Ministerial Order number 6,233** issued by MCTI presented a governance mechanism for SiBBr. This order established that SiBBr would be 'used as infrastructure for the compilation, indexing, storage, integration and availability of biodiversity data produced by research units and institutions that belong to the structure of the MCTI, as well as data from the projects and programs promoted by the National Council for Scientific and Technological Development (CNPq) on themes related to SiBBr'. The ministerial order assigned to MCTI the responsibility to implement, develop and sustain SiBBr, with the operational support of RNP through a Management Contract between MCTI and RNP.

264. The operation of SiBBr was delegated to **RNP**, not only because this organization was able to provide IT technical assistance throughout all stages of development and deployment of services and tool, but also because RNP provides a more agile and flexible framework. RNP had been recognized by project partners as being more efficient than MCTI to hire and manage contracts and staff, and to internalize funds from other partners (i.e. stakeholders interested in developing SiBBr apps targeted to their needs which can pay directly to RNP for their development and maintenance).

265. The governance of the SiBBr, according to this order, would be established by a **Steering Committee** composed by 8 institutions under the sphere of influence of the MCTI[37]. The order indicated that the SiBBr SC (here on called 'SiBBr SC' to differentiate form the 'GEF project SC' or just 'PSC' – composed by UNEP, ABC and MCTI) may invite experts and representatives from other public or private bodies or institutions to participate in its meetings.

266. Furthermore, the order stated that the Ministry of the Environment (**MMA**) is considered a permanent guest at the SC meetings. At the time of the evaluation, the MMA had not yet nominated any representative to attend these meetings. The SiBBr SC had formally met only once in August 2019, back-to-back to the launch of the new SiBBr portal, and an Operating Statute for SC had not been developed yet.

267. The ministerial order gave **little attention to end users'** needs and mostly targeted data providers. For example, paragraph #5 of the first article of the order determines that SiBBr will provide tutorials, courses and training events for the scientific community in the adoption of good practices for the structuring, standardization and publication of data. No mention was made, in the entire document, regarding the provision of capacity building to end users. The order does not bring enough elements to actually lead to outcome 3.

[37] The Steering Committee of the SiBBr established by MCTI ministerial ordenance 6,233 of 2018 was composed by 8 institutions: I - MCTI; II - RNP; III - CNPq; IV - Instituto Brasileiro de Informação em Ciência e Tecnologia - IBICT; V - INPA; VI - MPEG; VII - Instituto de Desenvolvimento Sustentável Mamirauá - IDSM and, VIII - Instituto Nacional da Mata Atlântica – INMA.

268. Because it is a ministerial order, not a presidential decree or a law, it is **only binding to the MCTI** and its subsidiaries institutions. This is a constraint that should be addressed as soon as possible, in order to face the challenges related to bring end users (e.g. MMA) to be an active part of SiBBr governance mechanism, not only guests to attend meetings with no power or responsibilities.

269. The Order also mentions **3 instruments** that should be discussed and approved by the SiBBr SC: i) a strategic and operational plan for implementing and sustaining SiBBr; ii) pluriannual plans, containing goals, specific objectives, and necessary resources (financial/human); and iii) strategies for the mobilization of relevant institutions and actors, aiming at the continued update of datasets and the use of the data and information available in SiBBr. They were considered by interviewed stakeholders as relevant tools to enhance the sustainability of SiBBr. Yet, two years after the publication of the order (November 2020), none of these instruments had been developed.

270. It should be noted that the Ministerial Order was published just a few weeks before the end of the last government and was considered by several interviewed project partners as the **only possible solution** considering the political situation at the moment.

271. The governance system designed for the SiBBr, if properly implemented, might be adequate to promote some **short-term** sustainability. Nevertheless, it is not enough to actually promote its **long-term** sustainability, considering the challenges that SiBBr will have to face to become the reference information system about Brazilian biodiversity and to actually be used by decision makers to improve, through access to systematized information, the conservation and sustainable use of Brazil's biodiversity.

272. Other institutional mechanisms, such as the establishment of a **National Coordination Mechanism for Biodiversity Information**, should be considered to promote the coordination of the diverse actors involved in the generation and use of biodiversity information in Brazil.

273. The **capacity of relevant individuals** in research institutions to provide biodiversity data to SiBBr has been enhanced by the SiBBr project. Some personnel continue in positions that support the provision of data to SiBBr. But several individuals that used to support the digitalization of the collections and data quality/curation procedures, are no longer in the research institutions, as most of them depended on scholarships that were terminated due to public budget restrictions.

274. The project promoted some capacity transfer to RNP to where three **project staff migrated** during the last years of the project. The SiBBr initiative continues to provide training (e.g. tutorial videos) and support (e.g. help desk)

to biodiversity data holders that contact SiBBr in order to properly upload and update their records.

275. To a fair extent, the **partnerships** with RNP, GBIF and ALA international community also acts as a mean to provide continued capacities to the individuals involved in the SiBBr. However, as already mentioned (e.g. in paras. 267), the project did not properly develop the capacities of end-users to actually demand and benefit from SiBBr.

276. While the Ministerial Order 6,233 can be seen as an alternative **exit strategy** of the SiBBr project that brought some level of institutional sustainability, it cannot be considered *per se* an exit strategy with an institutional component to sustain project outcomes. As a Ministerial Order, it is not required to present some details that are usually relevant for an operative exit strategy, such as clear definitions of activities, roles and responsibilities, with milestones, timeframes and any mechanism to monitor its implementation.

277. As mentioned in para. 269 above, the Ministerial Order established 3 instruments that were expected to cover some of these issues, but 2 years after the publication of the Ministerial Order these instruments are not available yet. An adequate exit strategy is key to maximize the maintenance of the outcomes and foster the change process toward the expected impact. All projects of this nature (GEF and non-GEF Large Size Projects) should develop a solid exit strategy **shared and agreed with the key stakeholder** who would be responsible for its implementation after the closure of the project. The institutional sustainability is thus rated as Moderately Unlikely.

Rating for Institutional Sustainability: Moderately Unlikely

Overall Rating for Sustainability: Moderately Unlikely

I. Factors Affecting Performance and Cross-Cutting Issues

i. Preparation and Readiness

278. The project's relative success was affected by a Preparation and Readiness phase characterized by a long period involving project approval (June 2010), first TSC meeting (December 2011)[38], first disbursement (January 2012), inception workshop (April 2012) and first meeting of the SC (November 2012). PIR 2012 describe the delay as a 'slow process of Project Document and Executive Programme signatures by the parties'.

279. It is important to highlight that the project suffered delays even before the official approval. According to evidence gathered, the first correspondences about a 'virtual information network regarding Brazilian Biodiversity' dates back to October 2005, emerging from the GEF PROBIO project. There was a

[38] The first TSC was organized with the GoB co-financing funds.

negative answer from the GEF on a Project Identification Form submitted by World Bank to GEF for 'Brazil: virtual network of biological information' in November 2006. The GEF Secretariat recommended to replace the implementing agency from the World Bank to UNEP.

280. Therefore, another Project Identification Form was submitted, and a Project Preparation Grant was cleared in September 2008. Yet, work on the ProDoc was only started in late 2009, with the document being approved by UNEP in October 2009, submitted to GEF Secretariat in December 2009, and finally approved by the GEF in May 2010. It is important to highlight that the ProDoc was written over a short period (three months) and submitted in the dusk of GEF4 cycle, in December 2009. Thus, work was concentrated on the consultants over a period of a few weeks without much stakeholder engagement and collective collaboration. All in all, the negotiation round lasted almost as long as the project estimated initial duration: five years.

281. The tripartite agreement (called the Executive Programme) between UNEP, ABC and MCTI was signed in January 2010. ABC had to discuss specific roles for MCTI and for UNEP, since UNEP did not have up until then a comprehensive agreement with ABC that allowed it to use GEF funds. Some former UNEP staff interviewed explained that the UNEP Brazilian office used to play a liaison/political role. The SiBBr project was UNEP Brazil's and MCTI's first GEF project.

282. Most interviewees agreed that the project had a slow start due to 'lack of traction'. A reason pointed out for the delay was the fact that the nature of the ProDoc was not fully understood by staff, since it was ambitious in several aspects and that there was a discontinuity between the team who wrote the ProDoc prior to its approval and the team who started project implementation. It was also necessary to build domestic consensus among the parties. Some high-level interviewees explained the initial delays were due to lack of details in the ProDoc, that despite calling for an inception workshop to define the way ahead, did not provide a suitable roadmap.

283. The project organized a two-day long Inception Workshop in April 2012 (23 months after project approval) that included an afternoon session in the National Senate conceived to increase visibility and highlight the policy making nature of the system. The importance of the SiBBr becoming a Federal Government Program to guarantee its sustainability, the permanent staffing and high-level political coordination necessary to include SiBBr in the long-term budget planning (Pluri-annual Plan) were highlighted.

284. Workshop minutes signaled an attempt to overcome weaknesses in project design and respond to changes that happened since the ProDoc was written. For instance, it was explained that project would need to incorporate changes in the national political & legal frameworks and adapt to GEF's results-based management that could require changes in the logical framework indicators.

No specific follow up details were present in PIR 2012, PIR 2013 or minutes of SC1.

285. Since the first PM was only hired after the inception workshop, the Country Office capacity to support the project during the preparation and readiness period was limited. The ET could not find evidence showing relevant support from UNEP, as an GEF IA, to the EA between 2010 and 2011. The TM participated in the Inception workshop, but only two mission reports for December 2013 and March 2018 were presented to the ET.

286. The successive delays registered by the SiBBr ended up impacting project results in several ways, part of which are described in this TE report under efficiency. Besides efficiency aspects, delays might had created credibility issues among early stakeholders whom had to wait successive postponements and missed starting dates. A number of project consultants mentioned that stakeholders were frustrated by delays and missing features (the project promised more than it could deliver (i.e. oversold), according to triangulation with interviewees).

287. The project managed to organize and report on the Inception workshop on April 2012 - 23 months after the project approval. Seven months later, the SC, with appropriated representation, was established - in November 2012. A budget revision was reportedly developed to serve as a new workplan but never uploaded to the system, therefore its level of detail was not clear. There were no references regarding a procurement plan, no environmental and social safeguards assessment nor a confirmation of partner capacities.

288. The inception workshop described the agreements with partners as a work in progress, there were only four partnership agreements among the original material received by the ET, all of them signed in the years after the inception workshop was held. Older material was more difficult to identify and retrieve (e.g. partnership agreement with LNCC that supposedly happened in the first years of the project). Staffing mobilization was not timely, since the PM and the administrative assistant were only hired two years after project approval and the M&E specialist after the MTR.

289. Despite remarks of the need of a governance structure involving other bodies of the government, there were more signs of engagement with organizations outside the administration, especially academia and some NGOs, than with other ministries and other government levels. Measures taken to respond to contextual change were listed, but their outcome and execution were not clear. The creation of the TSC was an initiative taken by the project to strengthen the system. Stakeholder engagement was discussed, but the project would have benefited from a stronger communication strategy and partnership engagement plan.

Rating for Preparation and Readiness: Unsatisfactory

ii. Quality of Project Management and Supervision

290. The SiBBr managed to create its Steering Committee (SC) and also a Technical Steering Committee (TSC), which is noteworthy. The SC met nine times and its minutes were made available to the ET. The TSC met at least 14 times between 2011 and 2016 (however, not all minutes of these meetings were made available to the ET, and nor could the project partners confirm the actual number of meetings). It was agreed that a representative of UNEP CO would participate in the TSC meetings. The SC discussed relevant issues, reaching decisions and providing guidance through concrete recommendations - the level of details of decisions could not be fully assessed since most minutes did not have its supporting material attached.

291. It would have been important for the SC to have a more balanced representation, including other ministries and governmental representation (which would work as a token of good faith to prove the interest of the EA in having other decision makers on board). The EA, thus, played the protagonist role, assuming the drivers' seat of the project, but not actually using the ProDoc as a relevant guidance tool. The ET considers that a more protagonist role from the IA would have benefited SiBBr by enabling a more efficient project implementation, thanks to its global network and experience in GEF project management.

292. The project did not embrace risk management in the day-to-day management. Such a long and intricate project involved more risks than the ProDoc could anticipate, especially when dealing with a myriad of stakeholders. A GoB representative called the project "octopus" because it was always bringing up new features and functions, which increased overall risk. A regular and comprehensive risk assessment strategy would have facilitated project management and supervision and reduced delays in implementation.

293. The evaluation found that the majority of project staff, including some key members, had the technical profiles aligned with the project requirements. However, the project team's performance was reportedly affected by a top-down project management and supervision approach. To a large extent actions taken reflected the interests and/or discretion of the project directors. Interviewees agreed that there was a lack of, or limited clarity in, guidance received from management on the expected work and deliverables. Consultants, and some project staff, explained that considerable time was spent going back and forth over the directors' priorities. Nevertheless, the directors' technical capacity was unanimously recognized with the exception of coping with other stakeholders; schedules not compatible with the project workload; and a certain degree of subjectivity in decision-making processes.

294. There were mixed comments regarding support provided by the UNEP office in Brazil. Consulted stakeholders and GoB representatives highlighted, on different levels, that relationship with UNEP needed improvement. Some

clarified that it was not the PM's fault, recognizing the efforts to sort the issues. The common opinion expressed to the ET was that obstacles were caused by UNEP's culture, small country office team and a lack of experience managing large scale projects in Brazil.

295. Interviewed project consultants reported having limited communication with, and support from, UNEP's Brazil CO. The relationship with UNEP was affected by the multiple misunderstandings of UNEP's administrative and financial procedures. While the PM attempted to overcome these issues, the consultants expressed an overall sense of dissatisfaction with the quality of support.

296. The quality of project management and supervision was also affected by a high staff turnover. During the project lifespan, there were 3 directors, 2 PM, 5 assistants plus several regular changes in the EA structure and consultants' team. To a large extent, handover processes were poor or did not even take place most of the times. Interviewed project personal and consultants highlighted the need for UNEP to enable better working environments for them, as there were over four references to a 'toxic working environment'.

297. The level of constructive information exchanged between the management team had ups and downs and depended on who was the project director at the EA and the project manager at UNEP CO Brazil. Interviews confirmed that the exchange of information happened at PM level (UNEP side) and Director and M&E specialist (EA).

298. The project adopted a moderate adaptative management approach, that seemed to be more organic than adaptative. SC minutes and PIRs revealed that steps were taken to respond to execution and contextual challenges but not immediately (for example, the relationship issues that led to the *Carta do Rio*, low level of response to the MTR recommendations, time to solve problems with WCMC and WWF, or not being able to deliver the SiBBr according to its result framework). PIRs and interviews provided evidence of joint work between TM and PM.

Rating for Quality of Project Management and Supervision: Moderately Unsatisfactory

iii. Stakeholder Participation and Cooperation

299. As any comprehensive information system, the SiBBr had to deal with a broad variety of stakeholders, from data providers to end users. Project was more successful in dealing with data providers, especially those from the academia, than with end users, notably decision-makers. Therefore, there was a significant disparity involving the stakeholder's participation.

300. In stakeholder engagement, project reports emphasized the information production side and mentions that 'several articulations were made'. The latter misrepresents the current situation in which the SiBBr is still waiting enhanced participation from other governmental bodies, especially from the Federal Government. The negotiations to bring MMA on board, despite initial success, came to a halt. ICMBio still believes that they are the guardians of Brazilian biodiversity and continue developing their own information system in parallel to the SiBBr. With the latest project director, negotiations with private sector were resumed and were reaching an auspicious new high level, that unfortunately was affected by the Covid-19 crisis.

301. An assessment of possible data providers was done by the project, however project implementation started without a thorough stakeholder evaluation or capacity assessment. Interviewees mentioned that the first contacts relied heavily on the directors' networks. The SiBBr concept initially motivated several actors to become stakeholders, however as project developed it became clear that there were obstacles in the project's path, especially regarding data ownership and engaging other ministries, the private sector and NGOs. In order to build trust with data providers, the project compromised and adopted clear and transparent data publication policies (that recognized the data publisher).

302. After a rough start, project was successful in promoting ownership by data providers, researchers, and academic end-users. Some actors, especially the so called Big-5 (JBRJ, MPEG, MZUSP, INPA and National Museum)[39], played a more relevant role than others, thus receiving more support and attention from the EA. Conversely, the SiBBr did not manage to fully engage the list of potential end-users mentioned in ProDoc to use the biodiversity information for policy work or decision-making.

303. To a large extent, the project did not consider and address, in a consistent way during its implementation, linkages to poverty alleviation or impact on economic livelihoods. Since the project was seen as an information system, human rights and environmental concerns were not directly taken into consideration.

Rating for Stakeholder Participation and Cooperation: Moderately Unsatisfactory

iv. Responsiveness to Human Rights and Gender Equity

304. Regarding gender mainstreaming, the ProDoc briefly mentions gender (para. 110) and the need to take this into account during project implementation. However, project reports noted that gender mainstreaming was not applicable to UNEP projects launched before 2012 and to a project such as

[39] The Big 5 host a significant amount of Brazilian biodiversity records within their collection and, through the Carta do Rio, demonstrated their interest in collaborating with the SiBBr project.

SiBBr that dealt with an information system that does not discriminate between genders. Therefore, gender was not mainstreamed during project implementation. The ET believes that the project could have been at least gender sensitive and adopted the "Recommendations for Integrating a Gender Perspective in Science and Technology Policies and Programs in the Americas" (OAS, 2004), as indicated on the ProDoc (para. 110).

305. However, it is extremely important to highlight the relevant role that women, in general, played in the implementation of the SiBBr project. Several stakeholders' representatives are women; out of 3 directors, 2 were women; half of the PMs involved were women; both UNEP country representatives that covered the life of the project are women; and all project assistants and the M&E specialists were women.

306. The ProDoc (para. 32) mentions indigenous peoples indirectly, when referring to indigenous women as 'key users and managers of biodiversity'. As indicated in the GEF Principles and Guidelines for Engagement with Indigenous Peoples (2012), the Project could have recognized the important role of indigenous people, especially women, elders and youth, in the maintenance, enhancement, and transfer of traditional knowledge associated with the biodiversity resources (e.g. knowledge often used for field research on taxonomy, bioprospecting, etc.). The ET considers that the project, by being blind to gender and minorities, missed an opportunity to assess how the biodiversity information in SiBBr could support the livelihoods of marginalized groups and promote women empowerment.

307. Human rights and gender issues were not actively taken into consideration during project implementation. No evidence was found regarding the incorporation, or discussion, over these issues as a result of adaptive management. There were no references to the human rights-based approach. Therefore, there were no considerations to (i) inequalities; (ii) vulnerabilities of disadvantaged groups; and (iii) the role of disadvantaged groups in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

308. Interviewed project staff mentioned that these issues were not applicable to the project because it was an information system implemented centrally, thus with no implication to human rights and indigenous peoples. The ET does not share this vision and considers that the project could have taken the opportunity to contribute to foster a relevant change process: to recognize, through the SiBBr platform, the strategic role of women, indigenous people and local communities, especially youth and elders, in preserving traditional knowledge (often used by taxonomists and naturalists) and conserve biodiversity in situ.

Rating for Responsiveness to Human Rights and Gender Equity: Moderately Satisfactory

v. Environmental and Social Safeguards

309. The relationship between a system that deals with biodiversity and the environment is undeniable, however the documents provided to the ET did not make it clear. When questioned about this, the answer from many interviewees was that environment is implied in the SiBBr. When questioned about safeguards, the explanation given by project staff during interviews was that environmental and social safeguards were an analogous situation to gender equity and human rights (i.e. these issues were not applicable to the project because it was an information system implemented centrally, thus with no implication to environmental or social aspects). There is a clear contradiction in relation to what was planned in the ProDoc.

310. The ProDoc had a full section devoted to environmental and social safeguards (section 3.11). The section focus was more related to project results, however, it explains that a 'participatory approach will provide the mechanism to address concerns and changing points of view within the stakeholder community throughout the course of the project and to make necessary adjustments'. It further adds that the M&E system will 'enable project management to make decisions that address issues as they arise, thus ensuring that the above conditions would be met during project implementation and contributing to achievement of project outcomes and objective.'

311. Project reports addressed the environmental conditions risk stating that it was 'not really an issue for this project'. In PIR 2015 it was classified as 'does not apply' and then left blank. The field in the PIR template for social, cultural and economic risks was only used to discuss economic risks to SiBBr. The PIR 2018 stated that even though 'the Project has been designed to achieve positive environmental and social impacts' the proposed solution to tackle the issue was 'making use of a project website and institutional email address as tools to monitor project effects'. It also explained that workshops and events were also used to gauge stakeholder's perception on potential negative environmental and social impacts. No evidence was found regarding these issues.

312. It is worth highlighting that for UNEP, an Environmental, Social and Economic Review note (ESERN) was established in 2016 for project design, and later replaced in 2019 with the Safeguard Risk Identification Form (SRIF) for new projects. In GEF projects safeguards have been considered in project designs since 2011 – so at the time of project design, this was not a requirement.

313. The ET recognizes that there are no major social and environmental risks due to the SiBBr operation, however environmental and social concerns are still applicable. The project could have paid more attention to the issue, especially regarding possible risks associated to the use of the information presented by the system in activities such as poaching and biodiversity

exploitation. No evidence was found regarding environmental and social screening; risk assessment and management of potential environmental and social risks and impacts associated with project activities; or initiatives to minimize UNEP's footprint.

Rating for Environmental and Social Safeguards: Moderately Satisfactory

vi. Country Ownership and Driven-ness

314. This was a project under the National Implementation Modality and the project director was on the driver's seat, being responsible for both the day-to-day and the strategic guidance of the project. Besides the EA, no other ministries that were essential for moving from outcomes to intermediate states took a leadership role (e.g. MMA and Ministry of Agriculture). There was also a lack of high-level support for the project even from the MCTI.

315. The SiBBr was envisaged as a project that would leverage governmental engagement, creating a snowball effect (with more users driving more users to use the system). The gains in efficiency would be clear and there would be a vibrant win-win scenario in case the SiBBr had fully achieved its outcomes.

316. Evidence indicated that the level of interest generated varied over time. It was high back in 2005 in the early discussions about the virtual system; decreased when the ProDoc was written, in 2009; increased when project was approved in 2010; reduced with the delays related to project start; increased again with the inception workshop and the launch at the Federal Senate; and reduced again as the MMA and other relevant ministries decided not to be part of project implementation.

317. MCTI did a great job in mobilizing some key actors to deliver the project outputs (e.g., JBRJ, MZUSP, etc.). For example, the Big 5 played a relevant role in providing strategic guidance for the system and developing complementary activities. However, the project mobilization power was more focused on scientific and research organizations, but not in other relevant ministries and end users.

318. The SiBBr also registered a heavy dependence on governmental funds to move forward. The project devoted its attention to deliver the information system, placing in the backend the importance of creating an enabling environment to guarantee the project's financial and institutional sustainability. With the growing cuts in the EA budget, the medium-term continuity of the SiBBr can be at stake.

Rating for Country Ownership and Driven-ness: Moderately Unsatisfactory

vii. Communication and Public Awareness

319. SiBBr communication was, to some extent, effective and relatively successful when dealing with stakeholders under the sphere of influence of the EA and related to biodiversity scientific community (universities, museums, and research institutions). Situation changed with respect to other key stakeholders, such as potential end users, or to the general public.

320. Even within the sphere of influence of the EA, communication was done in a non-structured way. SiBBr was mostly presented in events, either mentioned in presentations or using stands. Word of mouth played an important role, as well as capacity building sessions. Social media and the institutional e-mail were the main tools for communication (however, the last post in Twitter was back in 2018 and in Facebook in May 2020).

321. The project had a communications specialist for only a limited time (2015 – 2018). The ET could not find a communications brief, Key Performance Indicators or metrics regarding the communication strategy to be followed by the communications specialist.

322. The developed communication plan for the project was narrow in scope and only targeted the academia and research institutes. As a result, there was an uneven awareness level of the SiBBr's messages by the different stakeholders: some groups were well aware whereas others, especially the main public and decision makers, were, to a large extent, not aware of the system.

323. Communication strategy was targeted towards a specific audience, but infrequent over the life of the project. There was some level of interaction and response from the intended public. Activities were not properly monitored (mainly due to lack of interest from project management – please visit M&E section for more on this topic). Funds were allocated for communication, but they were not properly spent. Evidence suggests that communication was, to a large extent, ineffective in driving change towards results beyond outputs. At present, the SiBBr would benefit from a full-fledged communication strategy to raise awareness of other key stakeholders.

Rating for Communication and Public Awareness: Moderately Unsatisfactory

Overall Rating for Factors Affecting Performance and Cross-Cutting Issues: Moderately Unsatisfactory

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

324. Based on the evaluation findings, the evaluation team has drawn the following main conclusions from the assessment. The evaluation ToR presented three strategic questions which were of interest to UNEP and to which the project was believed to be able to make a substantive contribution. These questions and their answers are addressed in this section of the TE report.

325. **Conclusion 1**: **The project delivered a state-of-the-art information system on Brazilian biodiversity with more than 16M occurrences of species**. **The SiBBr Platform is recognized by data providers involved in the project as a reference repository of information on biodiversity, but it is not yet a reference for mainstreaming biodiversity into the planning of actions and design of policies[40].**

326. The SiBBr system is composed of 256 collections and 422 data sets provided by 131 institutions. Currently, the SiBBr platform is populated semi-automatically and the number of occurrences is **growing steadily**. The project contributed to promote a cultural change within Brazilian scientific community regarding the relevance of sharing data, making it freely and openly accessible. This was not an easy task and involved building trust and relationship with several scientific institutions and individuals (para. 169).

327. The project, after the *Carta do Rio*, adopted a clear approach of working first with large institutions (JBRJ, MPEG, INPA, Fiocruz, MZUSP and National Museum), which was considered, by some interviewees, as a factor of success (para. 298). **Data mobilization** is, however, an endless pursuit, given the continuous growth of the biodiversity data and the significant amount of data available in collections that were not yet integrated into SiBBr.

328. SiBBr is becoming a reference in the provision of information on biodiversity for several data providers who also use the information available on SiBBr for academic and scientific studies. However, **SiBBr shares the arena with other platforms**, such as Species Link, Portal da Biodiversidade, Ocean Biodiversity Information System Brazil (OBIS – Brazil) and other systems, such as Alelo from Embrapa (para. 167).

329. This dispersion brings additional workload to researches who have to search on a few platforms, an issue SiBBr aimed to address (para. 63). Some researchers interviewed during the TE, indicated that they usually access the information on Brazilian biodiversity through the **GBIF platform**, mostly because there they can find both SiBBr and Species Link information. On

[40] This conclusion addresses the Strategic Question 2 - *To which extent is the SiBBr Platform recognized by partner organizations and key users as a reference in the provision of information on biodiversity and for mainstreaming biodiversity into the planning of actions and design of policies?*

GBIF they can also obtain information about biodiversity of neighboring countries, besides, they were more used to access GBIF than SiBBr (para. 165).

330. Most end users **are not yet aware of SiBBr** and do not know how to use it to their benefit (para. 175). So far, SiBBr has not become a reference regarding the provision of information on biodiversity for mainstreaming biodiversity into the planning of actions and design of policies. Despite some initiatives from the project team, key users (i.e. line ministries, policy makers, private sector and NGOs), at federal, state and municipal levels were not effectively involved in the project implementation.

331. Notwithstanding, there is a **high potential** to use SiBBr in the future for mainstreaming biodiversity into the planning of actions and policy design (para. 175). Additional efforts and funds will be needed to sensitize potential end users of the importance of biodiversity data, to train them to use the available tools and to develop new tools tailored to their needs, ultimately leading to more informed and effective decision-making (para. 254).

332. **Conclusion 2: Considering the resources available, the project was partially effective and delivered less than expected. Project partners, however, considered that the project delivered what was possible in the given context.**

333. The project **faced many challenges** throughout its lifespan and had to repeatedly adopt adaptive/responsive management solutions. Key interviewed stakeholders had a perception of its high risk of failure and considered a big victory that it had actually came to an end and that the SiBBr is fully operational.

334. Despite the efforts of the EA, the project took more than two years to reach a reasonable implementation speed. During its 9 years of execution, the project adopted an organic and, to a large extent, responsive management approach. The project could have adopted better management practices and tools to be fully effective (see section V.I.ii Quality of Project Management and Supervision).

335. Outcomes 1 and 2 were partially achieved and Outcome 3 was not achieved. Institutional and taxonomic capacities have been strengthened, to some extent, with support (funds) from the GoB. Nevertheless, the maintenance of biological collections infrastructure, and a constant and predictable support to biodiversity research is still a challenge to be overcome by Brazilian society (paras. 171). Decision-makers at country, state, and local levels are not yet using SiBBr as a support tool for improved biodiversity conservation. However, SiBBr can potentially be **the foundational block of several support tools** to be developed in the future tailored to decision makers aiming to improve biodiversity conservation (para. 175).

336. The lack of **high-level political support** was recognized by several interviewed stakeholders as one of the reasons for the shortcomings of the project (para.

181). High-level political support could have helped to foster partnerships with Species Link and Portal da Biodiversidade, and therefore reduce duplication with GEF Pro-Species project (para. 135 and 180). The project could not promote collaboration and integration among these systems and instead, fostered some competition. Shortcomings in communication, outreach, stakeholder engagement, partnership management and project execution were identified as factors that also affected the performance of the project to deliver as planned.

337. **Conclusion 3: The project did not adopt an adequate monitoring and reporting approach and did not take full advantage of the MTR to increase its effectiveness and efficiency[41].** The MTR, finalized in March 2014, presented nine recommendations[42]. The SiBBr project did not address these nine recommendations in a structured way. No formal implementation measure, such as an implementation plan, was developed and implemented.

338. Instead, as a management response, the PIR 2014 addressed the MTR criteria with ratings below 'Satisfactory' (e.g. criteria A.1 Effectiveness, C. Achievement of Outputs and Outcomes, etc.). The PIRs adopted an action plan matrix to respond to these missed achievements, but the recommendations themselves were not addressed in the PIRs. The following SC (SC3 in November 2014) broadly discussed the MTR and no concreate measures were reported on how the project would implement the recommendations (see details on section V.G Monitoring and Reporting).

339. By the end of the project, it became clear that the MTR's recommendations were, to a large extent, overseen or not considered as a priority. Even at the time of this terminal evaluation, six years after the MTR, there were several recommendations of this TE that mirror the MTR recommendations (i, ii, iii, iv, v, vi, vii and viii - see footnote #40).

340. The evidence gathered in this TE indicates that the project did not adopt adequate monitoring and reporting mechanisms to increase its effectiveness and efficiency during project implementation. Besides not following up on the MTR recommendations in a structured manner, the project did not carry out any audits (despite these being envisaged and requested by the PSC - para. 233). The poor monitoring of project implementation and the limited use of M&R as a tool to improve project effectiveness affected the efficiency and impact of the project.

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[41] This conclusion addresses the **Strategic Question 1**: '***To what extent did the project implement the recommendations from the Mid-Term Review? How did these recommendations support the project's effectiveness?***'.

[42] Summary of MTR's recommendations: i) Project Revision - to revise and update the implementation framework; ii) Budget M&E Plan – to set up and put in place an operational M&E system; iii) MCTI project commitment - to increase number of staff dedicated to the project, to improve internal processes and to increase delegation of authority; iv) UNEP support - to increase its profile, support and efficiency in backstopping; v) Political articulation - to develop closer inter-institutional arrangements (line agencies, private sector and NGOs); vi) Diversify stakeholders – to target specific groups beyond big data providers; vii) Training strategy and plan - to increase end users' awareness of the importance of, and how to, best use biodiversity information; viii) Funding strategy - to develop a long-term funding strategy, with detailed investment and maintenance budget including the identification of sources; and ix) GEF Tracking Tool – to correctly fill it out.

341. **Conclusion 4: The current governance and financial sustainability mechanisms established by the project, if properly implemented, could guarantee short-term sustainability of the SiBBr platform. However, these mechanisms are not enough to ensure long-term sustainability nor to lead to full achievement of all outcomes**[43]**.** Not only is there a high dependency on a single funding source (MCTI) but also the severe budget cuts on public spending for 2021 and beyond are likely to impact the sustainability of the system. MCTI's efforts to bring additional financial resources onboard, both from private sector (e.g. Renova Foundation) and public (e.g. Embrapa) sources are noteworthy - but so far these efforts have not yet paid-off (para. 256).

342. It should also be noted that the sustainability of the system goes beyond keeping the platform running and receiving new information from data providers. In order to achieve outcome 3, the intermediate state and expected impact, as reflected in the Theory of Change, resources will be needed for many activities such as to develop end-user tools, to carry out communications and outreach activities, and, especially, to develop a national framework for a National Coordination System of Biodiversity Information (para. 241).

343. **Conclusion 5: The project did not take into account the perspectives of human rights, indigenous peoples' rights and gender equity**[44]. The project team considered that these issues were not applicable to the project because they were not a requirement in 2011 and the project was about an information system, thus with no direct implication to gender, human rights and indigenous peoples.

344. The ET considers that the project could have been somewhat gender sensitive adopting, at least, the recommendations from OAS for integrating a gender perspective in science. There were missed opportunities to recognize the strategic role of women, indigenous people and local communities to preserve traditional knowledge and to conserve biodiversity. See details on section I.iv. 'Responsiveness to human rights and gender equity'.

345. **Conclusion 6: A transformational change of the nature proposed by the GEF SiBBr project is not easy to achieve and requires the involvement of several institutions and individuals, beyond IA and EA.** A GEF project aims to promote a transformational change leading to long-lasting benefits to the environment and human well-being (para. 189). The GEF SiBBr project represented a rare and unique opportunity to dedicate a significant amount of resources to reach outstanding results that would not be reached with a business as usual approach.

[43] This conclusion addresses the **Strategic Question 3 -** ***Do the mechanisms of governance and financial sustainability established within the SiBBr Project ensure the maintenance and continued update of the platform?***

[44] According to the Evaluation Office of UNEP and GEF guidelines, the **human rights and gender dimensions** of the intervention should also be discussed explicitly in the Conclusions of the TE report.

346. The SiBBr project was indeed a **relevant project for Brazil**, a mega diverse country that aims to promote sustainable use and conservation of its rich biodiversity (para. 111). However, the responsibility for biodiversity management in Brazil is spread over a number of public agencies characterized by differences in institutional culture and technical understanding. Developing a common understanding and fostering the political support to facilitate the integration of biodiversity data into decision-making tools require significant efforts.

347. The project was not entirely successful in securing **high level political support**, fostering partnerships and collaboration among relevant stakeholders in Brazil, including line minister, private sector, NGOs, sub-national governments, etc. This clearly impacted its ability to create an enabling framework for long-term support and achievement of project objectives (para. 245).

348. The evaluation recognizes that the people and institutions involved in the project have put a significant amount of resources, time, dedication, passion and hope in this project. Despite the positive results achieved, the project had several shortcomings. A change of the magnitude proposed by the SiBBr Project might require more time and additional effort to be achieved. The project can be seen as the first step of a long and complex path towards reaching its expected impact – that the public access to systematized information would improve the conservation and sustainable use of Brazilian Biodiversity.

349. The **enormous potential of SiBBr** is recognized by project partners (para. 175). However, the continuity and enhancement of several processes over time are required to actually promote the transformational change envisaged by the project, placing SiBBr as an essential piece in the mainstreaming of biodiversity into decision-making and policy development processes (paras. 184 and 196). The evaluation recognizes the will of the project partners and encourage them to continue working together towards strengthening the SiBBr and promoting the integration of the several systems that handle biodiversity information in Brazil.

B. Summary of project findings and ratings

350. The overall assessment of the project was rated as **Moderately Unsatisfactory**. This rating was obtained using the 'weightings table for evaluation criteria rating', according to Evaluation Office of UNEP guidelines[45]. On one hand, project showed good performance on Strategic Relevance, Quality of Project Design, and Monitoring and Reporting. On the

[45] It is important to take note on the long period, nine years, between project approval (2010) to this evaluation (2020). During this period the requirements, guidance and criteria of UNEP and the GEF for the evaluation of projects have been changed/improved. These changes may lead to ratings different from the ones that would be given if the evaluation instruments of 2010 were to be used. Nevertheless, the criteria applied here are the ones from 2020 criteria revision.

other hand, the project had lower ratings for Effectiveness, Financial Management, Efficiency, Sustainability and Factors Affecting Performance. The table below provides a summary of the ratings and finding discussed in Chapter V.

Table 14 - Summary of project findings and ratings

Criterion	Summary assessment	Rating
Strategic Relevance	-	**S**
1. Alignment to MTS and POW	Relevant, and aligned, to UNEP's mandate and strategic priorities including the Bali Strategic Plan for Technology Support and Capacity Building and South-South Cooperation.	S
2. Alignment to UN Environment /Donor strategic priorities	Relevant, and aligned, to GEF Strategic Priorities on Biodiversity: GEF 4 Strategic Objective 2 and Strategic Program 4.	S
3. Relevance to global, regional, sub-regional and national environmental priorities	The project responded to environmental concerns and needs of Brazil, including its NBSAP. It was aligned to global priorities, such as the Aichi Biodiversity Targets and the 2030 Development Agenda with its SDGs, especially SDG #15 "Life on Land".	S
4. Complementarity with existing interventions (at design)	At design, it was expected that the project would take advantage of IABIN, SpeciesLink and GBIF's technical expertise. Close dialogue and engagement with several related areas, such as agriculture and health, were also envisaged at design.	MS
Quality of Project Design	There was a comprehensive explanation of the problem to be tackled, especially regarding its potential use by different stakeholders. The ProDoc emphasized domestic cooperation and made clear that achieving the outcomes in the proposed timeframe would require strong interinstitutional engagement. More focus was given to project results than to operational details, leaving some issues to be developed later.	**MS**
Nature of External Context	There was no armed conflict or major political upheaval in Brazil, and due to the nature of the project, natural and manmade disasters, did not directly affect project operations. The Covid-19 pandemic happened after technical closure of the project and was, to some extent, affecting negatively the sustainability of SiBBr.	**MF**
Effectiveness	-	**MU**
1. Availability of outputs	Forty four percent (44%) of the expected outputs were fully available and forty four percent (44%) were partially available. Some relevant outputs to achieve outcomes were delivered too late for their intended use. Among the delivered outputs, some of the most important to achieve outcomes (such as outputs 1.7 and 3.2), were considered to be of good quality by project partners. Nevertheless, several of the most important outputs to achieve outcomes (such as output 3.4) were not properly communicated nor presented to end users outside the sphere of the project, and sometimes neither for stakeholders involved on the project. There was a high ownership of the academic partners involved in the delivery of the outputs from components I and II. Conversely, there was a low level of ownership of decisions makers on the availability of outputs from component III.	MS

Criterion	Summary assessment	Rating
2. Achievement of project outcomes	Outcomes 1 and 2 were partially achieved; and Outcome 3, a key outcome to reach the expected IS and impact of the project, was not achieved yet. Regarding Outcome 1, for the first time Brazil had a governmental official system (SiBBr) where researchers could store, share and retrieve the information about Brazilian biological collections. The project generated changes on data culture and institutional framework related to knowledge management of biodiversity information. But SiBBr is not yet the reference system on Brazilian biodiversity. It shares the stage with other systems such as SpeciesLink and with the Biodiversity Portal. On Outcome 2, institutions and taxonomic capacities had been, to some extent, strengthened with co-finance funds (20M USD) from the GoB. Nevertheless, the maintenance of biological collections infrastructure, and a constant support to biodiversity research, are still challenges to be faced. Regarding Outcome 3, most decision-makers are not yet aware of SiBBr and its uses and potential to be explored. To some extent, this was an ambitious outcome that would require closer engagement with several stakeholders outside the direct sphere of influence of the project.	MU
3. Likelihood of impact	The project unquestionably promoted changes that may lead to the expected impact, but the magnitude (related to the expected extent), broadness (related to the wide scope required for change to happen) and effectiveness (related to the degree to which the project would produce the desired effect) of the change process were not yet sufficient to reach the desired intermediate state and impact in a reasonable timeframe.	U
Financial Management	**-**	**MS**
1. Adherence to UNEP's financial policies and procedures	There was regular analysis of actual expenditure against budget and workplan, and to some extent a timely submission of regular expenditure reports. However, part of the documentation presented to the ET lacked consistency, missing signatures and dates. Frictions with EA and partners due to UNEP's financial policies and procedures affected the timely delivery of the project outputs and its efficiency. Limited autonomy of UNEP CO (in relation to HQ and Regional Office) generated frustration within staff. Some budget revisions were not clear.	MS
2. Completeness of project financial information	A yearly financial statement was presented for the project duration (2012 – 2020), however information at the component level was no longer available after the shift from IMIS to UMOJA. The produced co-finance report only recorded cash contributions (and not in-kind). There was a missed opportunity of reporting co-financing by the GoB beyond 2013. The project design included five annual audits, but none was carried out.	MU
3. Communication between finance and project management staff	PM and TM were aware of financial details and took necessary steps to solve critical issues. Current FMO only joined the project in August 2020. There were some indications pointing that there was a good relationship between finance and project management teams; that information was exchanged within the expected timeframe; and that product quality was considered 'Satisfactory'. Unfortunately, there was not enough information available to be triangulated. Furthermore, ET was not able to assess what happened before 2019 since the previous FMO and the UNEP CO Brazil finance manager were no longer involved in the project. Therefore, due to the lack of evidence the ET decided not to rate this evaluation criteria.	Not rated

Criterion	Summary assessment	Rating
Efficiency	Project implemented some cost saving initiatives, such as teaming up with GBIF and RNP, which led to positive results. Delays in starting meant that some actions had to be condensed, affecting quality and performance. Considering the operational context, the project delivered what was possible. Overall perception by interviewees was that it could have delivered more vis-a-vis its costs. Project faced some dead-ends and attempts to stick to certain technical solutions (with limitations for the intended use) that affected timely delivery. Low level of IT understanding and a steep learning curve reduced process efficiency. To some extent, the three no cost project extensions were justified but could had been avoided through a result-oriented project management.	**MU**
Monitoring and Reporting	-	**MS**
1. Monitoring design and budgeting	ProDoc included a basic, but solid, M&E framework, however M&E process were expected to be detailed and M&R tools to be developed during the Inception Phase by the M&E expert to be hired by the project. The project adopted 10 indicators to track progress, but to a large extent some lacked baselines and others were not robust enough to capture suitable evidence on results. Funds for MTR and TE were considered adequate.	MS
2. Monitoring of project implementation	There was no functional monitoring system, besides the PIRs, or tools to facilitate the timely tracking of results, adaptative management, and progress towards projects objectives. M&E specialist was only hired three years after project initiated and to a large extent acted more as a liaison person. To some extent, M&E was considered more as a GEF requirement than an instrument to improve project execution, achievement of outcomes and to ensure sustainability.	MU
3. Project reporting	PIRs, steering committee minutes, and half yearly progress were presented. The reports adequately reflected the project scope of work. There was some inconsistency between report progress PIRs and available evidence, and in some cases, the project adopted a too positive reading of the achievements.	MS
Sustainability	-	**MU**
1. Socio-political sustainability	The continuation and further development of project outcomes are highly dependent on political will and social ownership. There were different levels of ownership, interest and commitment among stakeholders (e.g. data providers vis a vis end users). To a large extent, the project was not able to build an enabling framework for long-term support of key political and social actors. Current political and social agenda in Brazil brings additional pressure to the sustainability of the system.	MU
2. Financial sustainability	Project outcomes have a high dependency on future funding / financial flows to persist. Funds to maintain the system up and running were secured for 2020. There were significant reductions of public funds for data providers since 2016. There is uncertainty regarding funding to key actions (i.e. communication & outreach, stakeholder engagement, partnerships development, production of end-users tools and apps, capacity building of users, etc.).	MU

Criterion	Summary assessment	Rating
3. Institutional sustainability	Project outcomes have a high dependency on, and sensitivity to, institutional support. SiBBr currently has an institutional framework established by the Ministerial Order 6233. However, this Order is limited in scope (is not binding to other stakeholders than MCTI) and two years after its publication it was not yet fully implemented. RNP hosts system operation and maintenance, bringing flexibility and agility. SiBBr is the Brazilian node of GBIF and part of the ALA international community. There is a fairly strong ownership, interest and commitment among MCTI and other project partners, but it is not clear if it will be enough to sustain/ achieve the project outcomes.	MU
Factors Affecting Performance	-	**MU**
1. Preparation and readiness	The project was approved in June 2010, but it had a very slow start with its first disbursement only in January 2012. An Inception Workshop was held in April 2012 and SC1 happened in November 2012. Staffing mobilization was not undertaken in timely manner. None of the limitations of the ProDoc were properly addressed in Inception Phase.	U
2. Quality of project management and supervision	The management performance of the executing agency and the technical backstopping and supervision provided by UNEP proved to be insufficient for the full delivery of the project`s outputs and achievement of its outcomes. Despite the notable efforts made by the IA, the project did face shortcomings and would have been more successful if it adopted a more proactive role. Lack of a clear, present, leadership on site prevented more robust/consistent results and did not motivate consultants' team.	MU
3. Stakeholders' participation and cooperation	Project missed a robust stakeholder assessment, communication & engagement plans. Despite success with the academic community, the SiBBr has yet to gain traction with most end-users.	MU
4. Responsiveness to human rights and gender equity	It was not a GEF requirement in 2009. Notwithstanding, the project counted with a strong gender balance, with women occupying key roles such as national director, project officer and country representative. The project was blind to the role of indigenous' and traditional communities' knowledge on biodiversity science and decision making.	MS
5. Environmental, social and economic safeguards	The project had a very low ESS risks due to its nature – an information system with no direct impact on the ground. No evidence was found regarding initiatives to minimize the project's environmental footprint.	MS
6. Country ownership and driven-ness	The National Implementation Modality and having the project director, a MCTI officer, on the driver's seat were expected to bring high country ownership, however no ministries other than MCTI became actively involved. There was also a lack of high-level political support for the project even from within the MCTI.	MU
7. Communication and public awareness	There was no systematic communication plan. A considerable share of users got to know it via participation in technical events or recommendations from acquaintances.	MU
Overall Project Performance Rating	-	**MU**

Legend: S - Satisfactory; MS – Moderately Satisfactory; MU – Moderately Unsatisfactory or Moderately Unlikely; MF – Moderately Favourable; U – Unsatisfactory or Unlikely

C. Lessons learned

Lesson Learned #1:	**Permanent high-level political support is key to projects that aim for transformational change and that need active engagement of several stakeholders beyond the sphere of influence of EA.**
Context/comment:	Achieving and maintaining high-level political support should be addressed at the onset of the project, adopting strategies, methods, tools and resources to promote the necessary buy in from all relevant stakeholders. The importance of political support for SiBBr was recognized since its designed and was reinforced during the Inception Workshop with the addition of high-level support. The project failed to foster permanent high-level political support, thus not creating a link with decision-makers. Even within the EA, the project did not manage to secure the collaboration from the MCTI ministers. High level political support is a key ingredient to gather followers because it materializes the 'leading by example'. High level political support is a gradual process and not limited to the EA. It is important to gather support in other governmental levels and ministries. The SiBBr took a positive first step organizing one session of the Inception workshop in the Federal Senate. Evidence suggest that the project's political networking was left aside and only resumed at a later stage, when much more support would be necessary than if a continuous relationship was cultivated. *See details on Conclusion 2, Conclusion 6, and para. 135, 181, 245 and 316.*

Lesson Learned #2:	**Trust building is a key element for the effective set up of an Information System, like SiBBr.**
Context/comment:	Popular wisdom says that "information (knowledge) is power". The SiBBr aimed at creating an open and free platform to centralize information access on Brazilian biodiversity. Despite its democratic nature, the concept clashed with interests of many whom like to control who has access to information / data. This is particularly true among researchers, academic world, politicians and private sector representatives – all potential or current users of the SiBBr. Convincing data holders to share some of their most prized possessions (data) is not simple. In fact, this was a key obstacle faced by SiBBr in its early days. Since the project adopted a more top-down approach in the beginning, it created resistance within information providers, especially those under direct influence of the EA (para.169). Things went sour to the point that the Big 5 published a letter calling for changes in the relationship. The EA stepped back and adopted a new approach with its stakeholders that made the relationship

Lesson Learned #2:	**Trust building is a key element for the effective set up of an Information System, like SiBBr.**
	smoother (para. 298). This incident highlights the importance of commitment, sincere communication and accepting trade-offs. It is also important to bear in mind that the SiBBr was designed before the popularization of the concept of open-source and open-software. What was not acceptable in the past can be acceptable now. The project also learned, to build trust by adopting compromises and adapting to new times (para. 301). Transparency and proper information management play a crucial role in shaping relationships. If information is clearly organized, properly systematized and made available for those who need, it can survive to staff turnover and rumors, reinforcing accountability. It also makes easier the M&R process which can provide relevant information for the project and the parties involved, creating a more trustworthy environment for all – including external evaluators (see section V.G. Monitoring and Reporting). *See details on Conclusion 1 and paras.169, 298, and 301.*

Lesson Learned #3:	**The execution of a GEF project is not simple. It requires the best possible PM structure and mechanisms to achieve outcomes with potential to promote transformational changes.**
Context/comment:	A GEF project involves a great level of complexity and idiosyncrasies that cannot be downplayed under the risk of not fully achieving the expected results. The SiBBr was the first GEF project both for the EA and UNEP Brazil CO, which meant that a learning curve was expected. The UNEP Brazil CO decided to offer administrative support within its capabilities and could not assume a more proactive role to help or provide the required guidance to the EA. This lack of adequate support, as reported by interviewed stakeholders, had a reputational risk for UNEP. The main causes for this unsatisfactory performance were: understaffing, strict rules and procedures, lack of expertise in logistics and faulty operational systems. Observing the ProDoc is a lesson that was partially overlooked by the SiBBr project. The ProDoc suggested a roadmap that would need to be detailed later, at the inception phase. The inception workshop dealt with some issues, but left important aspects untouched, such as the M&R organization, and arrangements to promote its enforcement. The PMU was not operationalized in a timely manner or as intended, which affected its capacity to provide efficient support to project implementation. Other GEF projects evaluated by the ECs had presented similar issues of overlooking the ProDoc, do not taking full advantage of the inception phase and MTR, taking a longer than ideal time have an operational PMU and not adopting a result-oriented management. A result-oriented management can be boosted if due diligences, partnerships management and pro-active risk mitigation are put in

Lesson Learned #3:	**The execution of a GEF project is not simple. It requires the best possible PM structure and mechanisms to achieve outcomes with potential to promote transformational changes.**
	practice. These initiatives are likely to foster greater effectiveness levels, especially in complex, and multi-stakeholder, initiatives such as the GEF projects. Projects should fully explore the opportunities offered by the Inception Phase and MTR. If SiBBr had followed these steps, as suggested in the ProDoc, it is very likely that it would have leveraged the effectiveness of project implementation. *See details on Conclusion 2, Conclusion 3, section I.i Preparation and Readiness, and section I.ii Quality of Project Management and Supervision.*

Lesson Learned #4:	**Communication and outreach are paramount for success and necessary to ensure strong ownership and continued support, especially for a biodiversity information system.**
Context/comment:	This last lesson wraps up all the other lessons. Communication and outreach, in different levels, are paramount to project success. Despite its appealing concept, the SiBBr had a hard time to convince others to jump aboard or gather support (para. 320). The project management largely ignored the importance of communication in an information system. The lack of an early communication plan or hiring a communication specialist only in October 2015 and not replacing this person after June 2018 is a clear sign of communication short sightedness. The project had funds allocated for communication purposes. Bad communication makes it harder to manage partnership, gather high level political support, maintain users and express the project objective to a broader audience. Interviewees commented that most of those who currently use the SiBBr got to know about it via their networks. A lesson from the project is that preaching to the choir will not win the project more users. By focusing on outcomes 1 and 2, mostly under the sphere of influence of EA, the project decided to go for the low hanging fruit. By not reaching out, the project could not gain traction and attract a user base that would justify building the solutions that would be offered within outcome 3 (para. 155). One example of this is that the communications focused on the academia audience, leaving other target audiences to a later stage (which did not fully happen). Without proper communication it is hard to keep a userbase and, especially, add new users, creating a vicious cycle. That is not an auspicious scenario, and without communication and outreach it is hard to break that cycle. *See details on Conclusion 2, Conclusion 4 and paras. 155 and 320.*

D. Recommendations

The following recommendations are based on the findings, conclusions and lessons learned presented in this evaluation report. As there is no follow up project to the SiBBr, most of the recommendations (#4 to #9) are addressed to and require the action from the Government of Brazil and key SiBBr partners.

Recommendation #1:	**UNEP should improve guidance for the design and implementation of future GEF projects of this nature.**
Challenge/problem to be addressed by the recommendation:	The SiBBr faced several obstacles in its design and implementation. In order improve the likelihood of success of future GEF UNEP projects, this TE recommends for UNEP to improve its guidance on the design and the implementation of GEF projects of this nature (i.e. full sized projects that involve several stakeholders and/or that are under National Implementation Modality). The ET considers that UNEP should strengthen guidance on these 10 topics to improve results: i) Capacity of the executing agency; ii) Inception phase; iii) Implementation plan; iv) Training and capacity building on GEF project management; v) Communication strategy; vi) M&E Plan; vii) Stakeholder engagement plan; viii) Partnership management; ix) Risk management; and x) Information and Knowledge Management. **Annex VIII** presents details on what needs to be strengthened for each topic of this recommendation.
Anchored in:	Conclusion 2 and Conclusion 3
Priority Level [46]:	Critical recommendation
Type[47]:	UNEP-wide
Responsibility:	UNEP (Policy and Programme Division and the GEF Unit of the Corporate Services Division)
Proposed time-frame:	Up to one year after the publication of the TE

Recommendation #2:	**UNEP should improve guidance for the compliance with audit requirements for GEF projects, including the ones implemented under National Implementing Modality.**
Challenge/problem to be addressed by the recommendation:	Audits were listed in the M&E plan and funds were allocated for five annual audits. The project missed an opportunity to carry out these audits to aid the M&E process, provide feedback for the result-oriented management and increase efficiency. GEF projects, including the ones implemented under National Implementation Modality, should have

[46] Priority level categories (as per UNEP guidelines):
Critical recommendation: address significant and/or pervasive deficiencies in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of program objectives.
Important recommendation: address reportable deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance might be at risk regarding the achievement of program objectives.
Opportunity for improvement: comprise suggestions to improve performance that do not meet the criteria of either critical or important recommendations.

[47] Type of recommendation categories (as per UNEP guidelines):
Project: where the actions of those UNEP staff managing the evaluand can address the recommendation or the underlying problem independently.
UNEP-wide: (i) where the actions of those UNEP staff managing the evaluand cannot address the recommendation or the underlying problem independently or (ii) where the actions to be taken to resolve the problem, which could have been caused by systemic issues or gaps in UNEP's operational requirements, require approval/leadership from UNEP senior management and/or coordination among several different parts of UNEP. In such a case, the Evaluation Office would need to pass on the UNEP-wide recommendation to the responsible entity(ies).

Recommendation #2:	UNEP should improve guidance for the compliance with audit requirements for GEF projects, including the ones implemented under National Implementing Modality.
	audits, mainly because in several countries, such as Brazil, the funds from GEF projects do not go through regular national audit systems.
Anchored in:	Conclusion 3
Priority Level:	Critical recommendation
Type:	UNEP-wide
Responsibility:	UNEP
Proposed time-frame:	Up to one year after the publication of the TE

Recommendation #3:	UNEP should formulate guidelines for the reporting of co-finance for GEF projects.
Challenge/problem to be addressed by the recommendation:	In this project, the co-finance reports were inconsistent, only recorded cash contributions (and not in-kind) until 2013 (not beyond) and no proof of co-financing was presented. It is relevant to develop approaches towards recognizing, valuing and reporting co-finance, including in-kind contributions. UNEP should formulate guidelines on how to define, estimate, report and verify co-financing on GEF projects.
Anchored in:	Conclusion 3**Error! Reference source not found.**
Priority Level:	Critical recommendation
Type:	UNEP-wide
Responsibility:	UNEP (Policy and Programme Division and Corporate Services Division)
Proposed time-frame:	Up to one year after the publication of the TE

Recommendation #4:	The Government of Brazil should consider promoting mechanisms for effective synergies between GEF Pro-Species project and SiBBr.
Challenge/problem to be addressed by the recommendation:	The internal competition between GoB bodies became clear when several interviewees highlighted the overlap between the ongoing GEF Pro-Species (led by MMA) and the SiBBr initiative (led by MCTI). The dispute between the two ministries leads to duplication of efforts with GEF funds. It is suggested that the ABC, the GEF Operational Focal Point in Brazil (OFP), the CBD National Focal Point in Brazil (NFP), with the collaboration of GEF Secretariat, the EA of SiBBr (MCTI) and the EA of GEF Pro-Species project (MMA), together promote mechanisms to foster the collaboration and synergies between the GEF Pro-Species project and SiBBr initiative.
Anchored in:	Conclusion 2
Priority Level:	Opportunity for improvement
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC, GEF OFP, CBD NFP, MMA and GEF Secretariat
Proposed time-frame:	Up to one month after the publication of the TE

Recommendation #5:	The MCTI should consider developing, in a participatory way, and put in place the 3 key instruments established by the Ministerial Order and to bring additional stakeholders to the Steering committee
Challenge/problem to be addressed by the recommendation:	The SiBBr could greatly benefit from increased participation and enhanced governance. In order to achieve that, it is recommended that MCTI, together with other key actors, firstly work to make the three key instruments established in the ministerial order operational, namely: the strategic and operation planning, pluriannual plans, and strategies for the mobilization of relevant institution and actors. That will create a foundation that will increase the robustness and sustainability of the project. In order to attract new users, it is important that SiBBr initiative invests in implementing more user-friendly interfaces to its Spatial Portal, and make the user experience to use this tool more enjoyable, especially if the goal is to make the system appealing and useful to decision and policy makers.
Anchored in:	Conclusion 4
Priority Level:	Important recommendation
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC, GEF OFP in Brazil, and CBD NFP in Brazil
Proposed time-frame:	Up to one month after the publication of the TE

Recommendation #6:	The Government of Brazil, with support of the private sector and the international community, should consider strengthening taxonomic capacities and biodiversity science.
Challenge/problem to be addressed by the recommendation:	Despite the support provided by the SiBBr project, the maintenance of biological collections infrastructure, and a constant and predictable support to biodiversity research, to preserve and to strength taxonomic capacities, is still a challenge faced by Brazil. It is recommended that the GoB, if necessary, with support of the private sector and the international community, increases the support (including funds) to strengthen taxonomic capacities and biodiversity science, especially considering that it is one of the most relevant assets of Brazil.
Anchored in:	Conclusion 1 and Conclusion 2
Priority Level:	Important recommendation
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC, GEF OFP in Brazil, and CBD NFP in Brazil
Proposed time-frame:	Up to one month after the publication of the TE

Recommendation #7:	**The Government of Brazil should consider promoting South-South and Triangular cooperation with other countries to share the lessons and experiences from the development and implementation of SiBBr.**
Challenge/problem to be addressed by the recommendation:	International cooperation was listed as one of the project objectives in the ProDoc. Despite the original focus on other mega-diverse countries, it is clear that other interested parties could benefit from the Brazilian experience, especially neighboring countries, and other GBIF members, since Brazil took an unorthodox path to implement the SiBBr. It is recommended that GoB shares its lessons and experiences in the development of the SiBBr with other countries. This would help other countries save time and resources. Representatives from ABC have already expressed the interest of countries in the Community of Portuguese Speaking Countries (CPLP) to learn more about the Brazilian experience via international South-South Cooperation.
Anchored in:	Conclusion 6
Priority Level:	Opportunity for improvement
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC, GEF OFP in Brazil, CBD NFP in Brazil, GEF Secretariat and GBIF
Proposed time-frame:	Up to one month after the publication of the TE

Recommendation #8:	**SiBBr partners should strengthen the human rights and gender dimensions of SiBBr and explore how the SiBBr information could be of benefit to marginalized and gender groups.**
Challenge/problem to be addressed by the recommendation:	The SiBBr project was, to a large extent, blind to indigenous people, gender equity, and human rights approach. The key role of women, indigenous and local communities regarding biodiversity information and conservation of ecosystems should be recognized by the SiBBr platform. It is recommended that SiBBr partners strengthen the human rights and minorities approach of SiBBr - taking into account the rights of indigenous peoples and the gender perspective as core values of SiBBr. Project partners are encouraged to consider and/or explore how to include gender perspective in any upcoming SiBBr activities.
Anchored in:	Conclusion 5
Priority Level:	Important recommendation
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC and project stakeholders
Proposed time-frame:	Up to one month after the publication of the TE

Recommendation #9:	**The Government of Brazil should consider establishing a National Coordination Mechanism for Information on Biodiversity.**
Challenge/problem to be addressed by the recommendation:	In a mega diverse country with different stakeholders running their own biodiversity systems, it is of upmost importance the creation of a National Coordination Mechanism to oversee the information on biodiversity, solve controversies respecting the mandate of the institutions, and to promote cooperation. This would reduce duplication of efforts and promote synergies. It is therefore crucial for the SiBBr partners and GoB, to consider establishing, as soon as possible, a National Coordination Mechanism for Information on Biodiversity, respecting the mandate of the institutions bring together the major players: SiBBr, MMA, ICMBio, Ministry of Agriculture, SpeciesLink, states, etc.
Anchored in:	Conclusion 6
Priority Level:	Important recommendation
Type:	Project
Responsibility:	UNEP to pass on the recommendation to EA, ABC, GEF OFP in Brazil, and CBD NFP in Brazil
Proposed time-frame:	Up to one month after the publication of the TE

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Table 15: Response to stakeholder comments received but not (fully) accepted by the reviewers, where appropriate

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
10	The assessment as below is at odds with the results as per the Logframe indicators and their objectively quantifiable targets for end of project: Regarding 1 and 2 being only partially achieved: Outcome 1 has two indicators with targets largely achieved and surpassed. Outcome 2 indicator targets were both achieved. Regarding 3 not being achieved: Outcome 3 has three indicators, the target for the first and third ones were most definitely achieved, for the second one it was certainly partially achieved, while full achievement may be debatable if absolute strictness is applied. In strict sense, the outcomes are measured by the indicator targets in the logframe. It is not the same to assess these within the reach of the project, as to evaluate long term results and impact which depend on elements outside the reach of the project. It seems the evaluation is taxing the project with the latter rather than the former. It is also at odds in the broader sense for the achievement of outcomes, reference is made to the "Before and After" scenario table provided at the end of these comments.	Thanks for the comment. The achievement of the outcomes was assessed based on the guidelines from UNEP and GEF for terminal evaluations. As indicated in the ToR for this evaluation, the achievement of the three project outcomes was assessed as performance against the outcomes as defined in the reconstructed Theory of Change at Evaluation. The Logframe indicators and their objectively quantifiable targets for end of project were analysed in detail and taken into account. This TE also took into consideration the "Before and After" scenario table presented below (see response below). All information was triangulated, and the evaluation was based on evidence. Paras 161 to 169 explain the achievements of Outcome 1. The achievements of Outcome 2 are explained on paras 170 to 174. Paras 175 to 178 explain the achievements of Outcome 3. Outcome 1, as per the ProDoc, was formulated as an output (availability of data in the SiBBr system) and consequently, the achievement of the two indicators is considered under the assessment of outputs 1.1 to 1.7 which contribute to Outcome 1 (see para. 143 where we mention 'more than 100 key stakeholders, mostly data providers'). The evaluation report also recognizes that SiBBr has the largest occurrences of species compared to other systems under Conclusion 1 and para.163.	
12	Sobre a integração da perspectiva de gênero, direitos humanos, indigenas, objeto da recomendação, não consigo verificar o que	Thank you for your comment. The evidence indicated that the findings reflect the reality of the project. As presented in para. 343 and 344 "The	

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
	poderia vir a ser feito. Não concordo que tenha sido uma omissão do Projeto.	project team considered that these issues were not applicable to the project because they were not a requirement in 2011 and the project was about an information system, thus with no direct implication to gender, human rights and indigenous peoples. The ET considers that the project could have been somewhat gender sensitive adopting, at least, the recommendations from OAS for integrating a gender perspective in science. There were missed opportunities to recognize the strategic role of women, indigenous people and local communities to preserve traditional knowledge and to conserve biodiversity. See details on section I.iv. 'Responsiveness to human rights and gender equity'." Recommendation 8 presents what can be done to strengthen the human rights and gender dimensions of SiBBr and explore how the SiBBr information could be of benefit to marginalized and gender groups.	

ANNEX II. PEOPLE CONSULTED DURING THE EVALUATION

Table 16: People consulted during the Evaluation

Organization	Name	Position	Gender
UNEP	Roberth Erath	GEF Task Manager	M
UNEP	Denise Hamú	Country Representative (Brazil)	F
UNEP	Regina Cavini	Programme Officer (Brazil)	F
UNEP	Yunae Yi	Senior Programme Management Officer - ESS	F
UNEP	Joel Mbothu	Financial Management Officer (2020)	M
UNEP	Lilian Musyoka	Financial Focal Point for the project (2018-2020)	F
UNEP (former)	Anna Fanzeres	SiBBr Project Manager 2016-2020	F
UNEP (former)	Michaela Batalha Juhásová	SiBBr Administrative Assistant 2012-2013	F
UNEP (former)	Tatiana Alves de Almeida Silva	SiBBr Administrative Assistant 2013-2014	F
UNEP (former)	Maria Beatriz Vargas	SiBBr Administrative Assistant 2017-2018	F
UNEP-WCMC (former)	Helena Pavese	Focal point for SiBBr-WCMC partnership	F
MCTI (former)	Carlos Nobre	Secretary of Policies and Programs 2011-2015	M
MCTI (former) / UnB	Mercedes Bustamante	SiBBr National Director 2012-2013 / Professor	F
MCTI	Andrea Portela	SiBBr National Director 2013-2019	F
MCTI	Luiz Henrique Pereira	SiBBr National Director 2019-2020	M
MCTI	Claudia Morosi Czarneski	SiBBr National Coordinator MCTI	F
MCTI	Keila Macfadem Juarez	SiBBr Component Coordinator and Project Monitoring	F
ABC	Alessandra Ambrosio	ABC Multilateral Cooperation Programs Manager	F
ABC	Alda Silva	Program Assistant	F
Project Team (former)	Francisco Mario de Moura	Information System Specialist	M
Project Team (former)	Pedro Dantas Palmeira Guimarães	IT technician	M
Project Team (former)	David Valentim Dias	Biodiversity data specialist/GBIF Node Manager	M
Project Team (former)	João Fernando Gonçalves	Communication Coordinator	M
Project Team (former)	Rafael Luis Fonseca	Coordinator of Participation	M
Project Team (former)	Fabio Oliveira Lima	IT Senior Support Analyst	M
Project Team (former)	Nayara Tartary Soto	Biodiversity data specialist	F
Project Team (former)	Thiago de Lima Gualberto	Front end developer	M
Project Team (former)	Rafael Sacramento	Full developer	M

Organization	Name	Position	Gender
Project Team (former)	André Freitas	Full developer	M
Project Team (former)	Camila Prado Motta	Assistant biodiversity data entry	F
Project Team (former) / RNP	Maria Luiza Correa Brochado	Geographic information specialist	F
Project Team (former) / RNP	Clara Baringo Fonseca	Biodiversity data specialist / RNP Consultant	F
Project Team (former) / RNP (former)	Angélica Leite	Full developer / RNP Consultant	F
Botanical Society of Brazil / Regional University of Blumenau	André Luís Gasper	Herbarium Network Coordinator / Professor	M
Brazilian Network on Plant Pollinators Interaction / Federal University of Alfenas	Marina Wolowski	Coordinator / Professor	F
Brazilian Society of Zoology / Federal University of Paraná	Luciane Marinoni	President / Professor	F
Butantan Institute	Fernando de Castro Jacinavicius	Researcher	M
Butantan Institute	Gabrielle Ribeiro de Andrade	Researcher	F
Butantan Institute	Valeria Onofrio	Curator	F
CRIA	Dora Ann Lange Canhos	Director	F
Ecological Researches Institute	Suzana Pádua	President	F
Embrapa	Maria Cleria Valadares Inglis	Genetic and Biotechnology Resources General Head	F
Embrapa	Samuel Paiva	National Coordinator Genetic Resources Program	M
Embrapa	Wagner Lucena	Research and Development Deputy Head	M
Federal University of Paraíba	Rui Macedo	Professor	M
Federal University of Rio Grande do Sul	Mara Rejane Ritter	Professor and Herbarium Curator	F
FIOCRUZ	Manuela da Silva	Coordinator of Biological Collections	F
Fundação Renova	Larissa Herzog	Biodiversity Specialist	F
GBIF	Tim Hirsch	Deputy Director	M
Greenpeace Brazil	Cristiane Mazzetti	Forest Campaigner	F
IBGE	Leonardo Begamini	Natural resources and environmental studies manager	M
IBGE	Luciano de Lima Guimaraes	Herbarium Curator	M
IBGE	Maria Luisa Pimenta	General Manager for environment	F
IBGE	Therence Paoliello de Sarti	Geography and environment Coordinator	M
IBICT	Washington Luís Ribeiro	SiBBr Council (alternate member)	M
ICMBio	Kátia Torres Ribeiro	Environmental Analyst	F

Organization	Name	Position	Gender
ICMBio	Keila Mendes	Research and biodiversity monitoring general coordinator	F
IDSM	João Valsecchi	SiBBr Council (full member)	M
INMA	Felipe Morais Santos	SiBBr Council (alternate member)	M
INMA	Leandro Biondo	SiBBr focal point at INMA	M
INMA	Sérgio Lucena	SiBBr Council (full member)	M
INPA	Camila Cherem Ribas	SiBBr Council (full member)	F
INPA	Fernanda Werneck	Coordinator of the scientific biologic collections program	F
INPA	Lucia Rapp Py-Daniel	Senior Researcher	F
INPA	Roberto Oliveira dos Santos	Senior technologist	M
INPA	William Ernest Magnusson	Senior Researcher	M
Institute of Applied Economic Research – IPEA	Júlio César Roma	Environmental Sustainability Studies Coordinator	M
JBRJ	Marina Landeiro	Science and Technology Analyst	F
JBRJ	Rafaela Campostrini Forzza	Coordinator of Biological Collections	F
Ministry of Economy	Isis Smidt	Assistant of the GEF OFP	F
Ministry of Foreign Affairs	Renato Leonardi	Interim Head of the Environment Division, GEF Political Focal Point and CDB Primary NFP	M
MMA	Adriana Bayma	Environmental Analyst	F
MMA	Camila Oliveira	Environmental Analyst	F
MMA (former)	Carlos Scaramuzza	Ecosystems' Conservation Director 2013-2017	M
MMA (former) / CBD (former)	Braulio Dias	National Secretary of Biodiversity until 2012 / CBD Executive Secretary 2012 - 2016	M
MMA (former) / UNB	Roberto B. Cavalcanti	National Secretary of Biodiversity / Professor	M
MNRJ	Cristiana Serejo	Deputy Director	F
MPEG	Cléverson Rannieri Meira dos Santos	SiBBr Council (full member)	M
MZUSP	Marcelo Duarte	Director	M
Research and Project Financing Agency - FINEP	Dalmo Moreira Junior	Innovation Analyst	M
RNP	Antônio Carlos Nunes	SiBBr Council (full member) / Deputy Director	M
RNP	Christian Miziara	Solutions Manager	M
State of Acre Secretary of Environment	Marilene Vasconcelos da Silva Brazil	Biologist	F
State of São Paulo Secretariat of Infrastructure and Environment	Arlete Tieko Ohata	Director of Environmental Information	F

Organization	Name	Position	Gender
University of Sao Paulo	Antonio Mauro Saraiva	Professor and Coordinator of the Research Center on Biodiversity and Computing	M
WWF	Paula Valdujo	Conservation Specialist	F

ANNEX III. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- ProDoc - Project document
- Mid-Term Review of the project
- Half Yearly Progress Reports
- Half Yearly Expenditures Reports
- Project Implementation Reviews
- PIF, PPG and CEO Endorsement documents
- GEF Tracking Tools
- Project Steering Committee meeting minutes
- Project Technical Committee meeting minutes
- Inception Report
- Final technical report
- TM Mission Reports
- Project Cooperation Agreements (JBRJ, WWF)
- Technical Cooperation Agreements (LNCC, MMA, CRIA, RNP)
- Internal Cooperation Agreements (DRC, WCMC)
- Executive Programme between GoB and UNEP
- Co-finance Reports
- MCTI Technical Notes, Memorandums and Terms of Decentralized Executions
- Several project materials, including terms of reference, reports, power point presentations, letters, e-mail exchanges, meeting's agenda and reports, folders, newsletters, videos, work plans, financial excel and pdf tables, cash advance requests, financial statement reports, budget revision tables, co-finance reports, etc.
- SIBBr portal (www.sibbr.gov.br), including the digitized biodiversity data and the national repository for observation data and the dynamic catalogue for species found in Brazil (2020)
- Assessment of end-user demands and product weaknesses for SiBBr - Report 'Levantamento de requisitos, demandas por informação em biodiversidade e bases de dados junto às potenciais instituições parceiras do SIBBR' (2015)
- Report on Legal Mechanisms and Management Modelo f SiBBr (2013)
- SiBBr communication and outreach strategy (2015)
- MCTI ministerial order 6,233 (2018)
- MCTI GBIF project proposal 'Increasing capacities to develop National Species Checklists in the Latin America and the Caribbean Region' (2018)

Previous evaluations

- TE WB GEF project IABIN 'Building the Inter-American Biodiversity Information Network', 2012
- TE UNEP GEF project 'Development of a National Implementation Plan in Brazil as a first step to implement the Stockholm Convention on Persistent Organic Pollutants (POPs)', 2019
- TE UNEP GEF project 'Sustainable management of the water resources of the la plata basin with respect to the effects of climate variability and change', 2019

Reference documents

- Brazilian Fifth National Report (NR) for the CBD, 2015
- Brazilian National Biodiversity Strategy and Action Plan (NBSAP), 2017.
- Brazilian Sixth National Report (NR) for the CBD, 2020
- Carneiro, A.; Pisupaty, B.; Murillo, M. 'The State of Biodiversity and Ecosystem in Latin American and the Caribbean'. UNEP. 2010.
- Carneiro, A.; Hernandez, H.; Astralaga, M. 'Opportunities for Financing Biodiversity in LAC Region'. UNEP, 2012.
- Carneiro, A. (Coordinator); Hernández, H.; Piedrahita, T.; Von Braun, J.; Cocchiaro, G.; Larrarte, M. 'Biocultural Community Protocol for the Territory of the Supreme Community Council Alto San Juan'. UNEP, 2012. 41 p.
- CBD decision IX/30 on Scientific and Technical Cooperation and the Clearing House Mechanism taken by the Conference of Parties at the ninth meeting of the CBD in 2008 available at http://www.cbd.int/doc/decisions/cop-09/cop-09-dec-30-en.doc
- Decreto no. 8.772/2016 (Regulamenta a Lei da Biodiversidade)
- Dias D, Baringo Fonseca C, Correa L, Soto N, Portela A, Juarez K, Tumolo Neto R, Ferro M, Gonçalves J, Junior J (2017) Repatriation Data: More than two million species occurrence records added to the Brazilian Biodiversity Information Facility Repository (SiBBr). Biodiversity Data Journal 5: e12012. https://doi.org/10.3897/BDJ.5.e12012
- Estratégia Nacional de Ciência, Tecnologia e Inovação 2016-2022 – ENCTI http://www.mcti.gov.br/noticia/-/asset_publisher/epbV0pr6eIS0/content/mcti-lanca-estrategia-nacional-de-ciencia-tecnologia-e-inovacao-2016-2019
- Evaluation Office of UNEP – Evaluation Policy (2016)
- Evaluation Office of UNEP - Assessment of the Likelihood of Impact Decision Tree (2018)
- Evaluation Office of UNEP - Evaluation Criteria (2018)
- Evaluation Office of UNEP - Evaluation Process Guidelines for Consultants (2018)
- Evaluation Office of UNEP - Evaluation Ratings Table (2018)
- Evaluation Office of UNEP - Gender Note for Evaluation Consultants (2018)
- Evaluation Office of UNEP - Guidance on Stakeholder Analysis (2018)
- Evaluation Office of UNEP - Matrix Describing Ratings by Criteria (2018)

- Evaluation Office of UNEP - Structure and Contents of the Inception Report (2018)
- Evaluation Office of UNEP - Structure and Contents of the Main Evaluation Report (2018)
- Evaluation Office of UNEP - Use of Theory of Change in Project Evaluations (2018)
- FAO OED Guidelines Series 05/2020 'Risk analysis and guidance for the management and conduct of evaluations during international and national level COVID-19 crisis and restrictions' (2020)
- GBIF.org (2020), GBIF Home Page. Available from: www.gbif.org
- GBIF Strategic Plan 2017-2021
- GEF 4 Strategy - Revised Programming Document GEF-4 (2005)
- GEF C.59/Inf.03 Guidelines on the Project and Program Cycle Policy (2020)
- GEF Evaluation Office Ethical Guidelines, Evaluation Document No. 2 (GEF Independent Evaluation Office, 2007)
- GEF Guidelines: SD/GN/01 Guidelines on the implementation of the policy on stakeholder engagement (2018)
- GEF Policy: SD/PL/03 Policy on ESS Guidance (2019)
- GEF Policy: SD/PL/01 Policy on Stakeholder Engagement (2017)
- GEF Policy: FI/GN/01 Guidelines on co-financing (2018)
- GEF Policy: FI/PL/01 Policy on co-financing (2018)
- GEF Policy: GA/PL/02 Minimum Fiduciary Standards for GEF Partner Agencies (2019)
- GEF Principles and Guidelines for Engagement with Indigenous Peoples (2012)
- GEF/C.48/07/Rev.01 GEF Knowledge Management Approach Paper (2015)
- GEF/STAP/C.55/Inf.03 Innovation and the GEF - A STAP Document (2019)
- GEF/STAP/C.57/Inf.04 Theory of Change Primer (2019)
- Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects (2017)
- ILO 'Implications of COVID-19 on evaluations in the ILO' (2020)
- Lei no. 12.527/2011 (Lei de Acesso à Informação)
- Lei no. 13.123/2015 (Lei da Biodiversidade)
- Lei no. 13.243/2016 (Marco legal de Ciência, Tecnologia e Inovação)
- Magnusson, W. et. al., Biodiversidade e monitoramento ambiental integrado. Áttema Editora, 2013
- MCT (2006) Diretrizes e estratégias para a modernização de coleções biológicas brasileiras e a consolidação de sistemas integrados de informação sobre biodiversidade. PPBio
- Oliviera, E. et al. Science funding crisis in Brazil and COVID-19: deleterious impact on scientific output. An. Acad. Bras. Ciênc. [online]. 2020, vol.92, n.4 https://doi.org/10.1590/0001-3765202020200700

- PIF FUNBIO GEF Project Pro-Species GEF ID 9271 ‘‘National Strategy for the Conservation of Threatened Species’
- Prodoc UNEP GEF Project ‘Mainstreaming Biodiversity Information into the Heart of Government Decision Making’
- Prodoc UNEP GEF project ‘Realizing the Biodiversity Conservation Potential of Private Lands
- Prodoc WB GEF PROBIOII project ‘National Biodiversity Mainstreaming and Institutional Consolidation Project’
- Technical note ‘biodiversity and the 2030 agenda for sustainable development’ available at https://www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf
- UN 2030 Agenda for Sustainable Development (2015)
- UN Declaration on the Rights of Indigenous People (2007)
- UNDAF Brazil 2007-2011
- UNDAF Brazil 2012-2016
- UNDAF Brazil 2017-2021
- UNEP Medium-Term Strategies 2010-2013 / 2014-2017 / 2018-2021 and Programmes of Work
- UNEP Environmental and Social Sustainability Framework – ESSF (2020)
- UNEP Programme Manual (2013)
- UNEP Policy and Strategy for Gender Equality and the Environment (2015)

ANNEX IV. BRIEF CV OF THE EVALUATOR

Alex Pires

Massachusetts Institute of Technology
Certificate, Big Data
2018 – 2018

Universitat Politècnica de Catalunya
Doctor of Philosophy - PhD, Sustainability Studies, Outstanding "cum laude"
2005 – 2015

Multi-criteria and Participatory Approach to Socio-Economic, Environmental and Institutional Indicators for Sustainable Water Use and Management at River Basin Level

Universidade Federal da Bahia
Master of Science - MS, Environmental Engineering Technology/Environmental Technology
1999 – 2001

M.Sc. in Urban Environmental Engineering

Universidade Federal da Bahia
Bachelor of Science - BS, Civil Engineering
1993 – 1998

Major field of study: infrastructure, water and sanitation

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/alexpiresprofile

Professional Experience

I am Brazilian / Spaniard environmental specialist with over 20 years of professional experience, most of them at international level. During my career I had the opportunity to work in more than 30 countries in 3 continents on complex operations on biodiversity, climate change, water, and ecosystems for both public and private sectors.

Among other appointments, I acted as UNEP MEA Focal Point for Biodiversity in Latin America and Caribbean (2009-2013) and as Director at the Secretariat of Science, Technology and Innovation in the State of Bahia (2015-2016). Currently, I am a professor at the Federal University of Bahia, deputy coordinator of the UNESCO Chair on Sustainability and also work as an independent international consultant.

I led and participated in more than 40 projects and programmes at local, national and global level. I have worked across the whole project cycle from planning, design and execution, to monitoring, reporting and evaluation. I also have provided specialized consulting services for development banks, international organizations, companies, NGOs and the public sector.

Marcio Pontual

University of Oxford
M.Sc. Environmental Change and Management
2006 – 2007
Activities and Societies: University of Oxford Yachting Club University of Oxford Dinghy Squad Wolfson College Boat Club

Dissertation on: Multiple Environmental Standards on international Trade;
Key topics: Energy, Environmental Economics, Development, Management, Climate Change
Sponsored by the Inter American Development Bank / Japanese Government Scholarship.

University of Buenos Aires
Postgrad course, Intensive course on Industrial Propety
2003 – 2003

Sponsored by The Ford Foundation.
Dissertation on "The History of Intelectual Property in Brazil and the Role of Civil Society"

ESPM Escola Superior de Propaganda e Marketing
Post Graduate Course, Marketing
1999 – 2001

Universidade de Brasília
BA, International Relations
1996 – 1999
Activities and Societies: REL, CSOI - Debate Club, AMUN

Head delegate for AMUN I
CSOI President 1998-9

marciopontual

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/in/marciopontual

Professional Experience

I consider myself a bridge-builder: experienced in liaising private, public, and not-for-profit actors - emphasizing sustainability and climate change – currently working as an independent consultant.

My multidisciplinary background includes a MSc. in Environmental Change and Management from University of Oxford, a specialization course in Industrial Property from Universidad de Buenos Aires, a diploma in Marketing from the Escola Superior de Propaganda & Marketing (ESPM –SP), and a BA in International Relations from Universidade de Brasília.

My professional experience combines the Unilever Group (private sector); Instituto de Estudos Socioeconômicos (INESC), Centro de Gestão e Estudos Estratégicos (CGEE) and Oxfam International (not-for-profit); UNDP (International Organism); the Agência Nacional de Energia Elétrica (ANEEL), the former Brazilian Ministry of Agrarian Development and the Presidency of the Republic of Brazil (government).

ANNEX V. EVALUATION TOR (WITHOUT ANNEXES)

Section 1: PROJECT BACKGROUND AND OVERVIEW

1. Project General Information

Table 1. Project summary

GEF Project ID:	3722		
Implementing Agency:	UNEP	**Executing Agency:**	Ministry of Science and Technology (MCT - now MCTIC) with technical and administrative cooperation from UNEP
Relevant SDG(s):	15.9 – 15.9.1	**Expected Accomplishment(s):**	Not identified – to be determined by the evaluation
Sub-programme:	Environmental Governance / Ecosystems management[48]	**Programme of Work Output(s):**	2018/2019: Subprogram 3 – Healthy & Productive Ecosystems
UNEP approval date:	07 Oct 2009	**Project type:**	FSP
GEF approval date:	03 May 2010	**Focal Area(s):**	Biodiversity
GEF Operational Programme #:	N/A	**GEF Strategic Priority:**	SP4
***Expected* start date:**	27 June 2011	**Actual start date:**	17 January 2012
***Planned* completion date:**	December 2016	**Actual operational completion date:**	December 2019
Planned project budget at approval:	USD 28,172,728	**Actual total expenditures reported as of Dec 2019:**	USD 8,078,463.58
GEF grant allocation:	USD 8,172,728	**GEF grant expenditures reported as of Dec 2019:**	USD 8,078,463.58
Project Preparation Grant - GEF financing:	GEF Grant: USD 100,000 Actual Cost: USD 85,798.65	**Project Preparation Grant - co-financing:**	USD 105,820
***Expected* Full-Size Project co-financing:**	USD 20,000,000	**Secured Full-Size Project co-financing:**	USD 20,000,000
First disbursement:	17 January 2012	**Planned date of financial closure:**	31st December 2019
No. of formal project revisions:	3 (June 2016, December 2017 and November 2018)	**Date of last approved project revision:**	**December 2018**
No. of Steering Committee meetings:	10	**Date of last/next Steering Committee meeting:**	**Last:17 June 2019** / **Next: not applicable**
Mid-term Review/ Evaluation *(planned date):*	October 2013	**Mid-term Review/ Evaluation (actual date):**	March 2014
Terminal Evaluation *(planned date):*	I-II Quarter 2020	**Terminal Evaluation (actual date):**	

[48] As per Prodoc, the UNEP priority is Environmental Governance. The UNEP ADDIS system however, also mentioned Ecosystems Management.

GEF Project ID:	3722		
Coverage - Country:	National - Brazil	**Coverage - Region(s):**	Latin America and the Caribbean
Dates of previous project phases:	not applicable	**Status of future project phases:**	not applicable

2. Project rationale

Brazil is a mega-diverse country that contains an estimated 13 percent of the Earth's biodiversity, and several globally important ecosystems, including approximately 60 percent of the Amazon rainforest. This biological richness, however is threatened by biodiversity loss driven by habitat destruction and fragmentation, invasive species, over-exploitation and pollution. Widespread agricultural expansion (including forestry and conversion to pastures), road construction, and mining have been particularly important in driving population decline and species disappearance in the country. A second set of factors including hunting, overexploitation of timber and fuel wood, illegal trading of plants and animals, chemical pollution, oil exploration, hydroelectric projects and unsustainable toruism have had a significant impact on local biodiveruty loss. In addition, demographic change, inequality and poverty, macroeconomic policies, social changes and unsustainable development are root causes of biodiversity loss in Brazil.

Brazil's willingness to integrate biodiversity information into governmental planning at the federal level has been reflected in the approach on sustainable development adopted by the Government over the last 20 years. Although efforts have been made to advance the generation and availability of biodiversity information (i.e. through programms to strengthen national taxonomic capacity and the Brazilian Program for Biodievrsity Research – PPBio), the different existing systems remain geographically limited and targeted to the scientific community. The lack of mechanisms to integrate and provide access to large amounts of biodiversity data that is produced in the country has made it difficult to integrate biodioveristy in policy making at federal level.

Effective biodiversity conservation requires that governments and other policymaking bodies make rational decisions about land-use and management based on the most accurate and up-to-date information, which, in Brazil, was incomplete, scattered in different institutions, and not available in forms that were easily accessible or policy-relevant. To improve Brazil's capacity to conserve and use biodiversity through better information management and use, three groups of barriers were to be addressed through this project, namely: (i) barriers to organization, qualification and integration of information contained in Brazilian biological centers and networks; (ii) barriers to strengthening of taxonomic capacities; and (iii) barriers to effective biodiversity information management and use.

To address this issue, the United Nations Environment Programme (UNEP) implemented the Global Environment Facility (GEF) funded project "Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use".

3. Project objectives and components

The project's main objective was "to ensure data-driven policy design and implementation by facilitating and mainstreaming biodiversity information into decision-making and policy development processes". This was to be achieved by: (i) consolidating the infrastructure, instruments, tools, and technology required to qualify, gather and make the biodiversity information contained in the resources of the country's biological collections freely available online through the Brazilian Biodiversity Information System (SIBBr); (ii) strengthening institutional and taxonomic capacities to ensure continuous uploading and updating of information into SIBBr; and (iii) developing products and services that will allow key decision-makers to establish policies that integrate biodiversity conservation and sustainable use objectives into the operations of the productive sectors.

The project aimed to remove the identified barriers through the development of the Brazilian Biodiversity Information System – Sistema de Informação sobre a Biodiversidade Brasileira (SIBBr) – a fully integrated biodiversity information system with state-of-the-art visualization tools. This would

enable Brazilian decision-makers to access authoritative, strategic and timely information in support of the development and implementation of policies and strategic planning decisions and to make better executive option choices about the conservation and use of globally important biodiversity in Brazil.

The global benefits to be accrued by the project included:

i. better national decision-making processes applied to biodiversity conservation and use;

ii. enhanced exchange of information relevant to biodiversity and sustainable use of globally important biodiversity in Brazil;

iii. greater understanding and better decision-making in the conservation and sustainable use of Brazilian biodiversity;

iv. mainstreaming biodiversity information about globally important topics and issues associated with the natural environment (such as land-use planning and ecosystem management, sustainable use of natural resources, control of invasive pest species, the trade in endangered species, and the emergence of new epidemics) into global biodiversity information systems such as the GBIF and the Encyclopedia of Life (EoL), and;

v. a robust model for the development and implementation of a national level biodiversity information system, elements of which can be adopted by other countries (especially large biodiverse countries) seeking to gain similar benefits.

To achieve its main objective, the project intervention strategy focused on three main outcomes, as follows:

Outcome 1: The information contained in Brazilian biological centers and networks has been organized, qualified and integrated into the Brazilian Biodiversity Information System (SIBBr) (GEF USD 3,733,900; Co-financing USD 9,198,000). This outcome, which was implemented in the first four years of project implementation, was to consolidate the infrastructure, instruments, tools, and technology required to qualify, gather and make the biodiversity information contained in the resources of the country's biological collections freely available online through the SIBBr. It would benefit all data providers (e.g. increasing institutional visibility, data cleaning, adding value to data through integration with other databases, etc.) and data users, including decision makers as more data is made available and becomes traceable over time. MCT was to lead the implementation of this outcome's outputs and had identified potential partners, CRIA and IBICT, to assist with the outputs.

Outcome 2: Institutional and taxonomic capacities are strengthened to ensure continuous uploading and updating of information into the SIBBr (GEF USD 0; Co-financing USD 5,771,000). The purpose of this outcome was to expand the national biodiversity knowledge base and data acquisition and management capacity through increased investment in the training of qualified human resources in systematics, taxonomy and curatorship, as well as through modernization and consolidation of biological collections by adding quality, adjusting the infrastructure, and organizing and managing resources. The activities were expected to result in well-managed collections with increased expertise.

Outcome 3: Enabling framework to manage, distribute and use qualified information at federal, state, and local level decision making for conservation of globally significant biodiversity (GEF USD 3,606,828; Co-financing USD 3,856,286). This outcome, which was implemented in the second half of project implementation, was to focus at managing information in order to elaborate products and services that will meet the requirements of society and allow decision-makers to effectively take into account biodiversity conservation and sustainable use issues. Knowledge production and management would be sought from reconciliation/integration of the information around engaging issues (such as habitat destruction and transformation, endangered species, invasive species, protected areas, land use planning, etc.). Table 2 summarizes the project's outcomes and outputs.

Table 2. Project outcomes and outputs

Outcomes	Outputs
Outcome 1: The information contained in Brazilian biological centers and networks has been organized, qualified and integrated into the Brazilian Biodiversity Information System (SIBBr)	1.1 Stakeholder and political articulation 1.2 Communication infrastructure expanded and consolidated 1.3 Increased content and usability of primary species occurrence data 1.4 Biodiversity data digitized 1.5 National repository for observational data developed 1.6 Dynamic catalogue for species found in Brazil implemented 1.7 Quality added to biodiversity data
Outcome 2: Institutional and taxonomic capacities have been strengthened to ensure continuous uploading and updating of information into the SIBBr	2.1 Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections reviewed and updated 2.2 Training of staff working in taxonomy and related fields 2.3 Biological collection infrastructure and research support improved 2.4 Targeted incentives to increase taxonomic and bio-geographic knowledge
Outcome 3: Enabling framework to manage, distribute and use qualified information at federal, state, and local level decision making for conservation of globally significant biodiversity	3.1 End-user demands identified and weaknesses regarding products (institutional, software, etc.) assessed 3.2 Core database and framework for application development implemented. 3.3 Service environments and applications to map and model biodiversity developed 3.4 Products and services that meet the identified requirements for decision-makers developed 3.5 A dissemination strategy targeted at potential users in the private, non-governmental and governmental sectors at federal, state and local levels 3.6 Capacities of end-users strengthened to use the information system 3.7 A system of governance for the information system developed

Source: project document

4. Executing Arrangements

The project's institutional framework and executing arrangements comprised:

UNEP, as the **implementing agency** of the GEF, responsible for the overall project supervision and coordination with other GEF-funded initaitives to ensure consistency with GEF and UNEP policies and procedures, as well as the proejct's alignment with UNEP Medium-Term Strategy and Programme of Work, as approved by the UNEP Governing Council. As an internally executed project, UNEP's Office in Brazil was designated by UNEP, in concurrence with its Division of GEF Coordination (DGEF), as the Office responsible of executing, supervising, monitoring and supporting the Government of Brasil through operational and financial services, including procurement services, travel arrangements, payment of consultants, among others.

At project design, UNEP's Division of GEF Coordination (DGEF) was responsible for GEF implementing agency functions. Upon the Government's of Brazil request for administrative support, the Division for Regional Coordination (DRC) took on the co-**executing** role (both in GEF terms) of the project through an ICA between both divisions. During project implementation, DGEF was dissolved and DEPI (subsequently UNEP's Ecosystem Division) took over the GEF biodiversity portfolio including the SIBBr Project. Later on, DRC was also dissolved and UNEP's Regional Office for Latin America and the

Caribbean (ROLAC), together with UNEP's Brazil Office, took over DRC's previous commitments uder the ICA.

The **Ministry of External Relations,** through its **Brazilian Cooperation Agency (ABC/MRE)** was the institution responsible for providing advice on the technical and administrative aspects of the project through analysis of the annual reports, visits and meetings. In addition, the ABC/MRE acted as intermediary for dispute settling, when necessary and participated in the Steering Committee meetings.

The **Ministry of Science, Technology**, **Innovation and Communication**[49] (MCTIC) of Brazil, as the **executing agency**, was the project's **executing agency** at national level, responsible for executing all activities described in the workplan, including coordinating and monitoring the actions derived from the Executive Programme between the Government of Brazil and UNEP, in accordance with the ProDoc, and of working closely with UNEP while providing free access to all relevant information to allow the organization to fulfill its responsibilities to the GEF. As per the Executive Programme between the Government of Brazil and UNEP, the MCTIC was responsible for designating the Project National Director and Coordinator; providing the local infrastructure, information and facilities required for the implementation of activities; developing the terms of reference and technical specifications to be adopted in hiring consultants and procurement of goods and services; authorising UNEP to proceed with the payment of technical consultancy services; proposing any changes and adjustments to the project, as needed, and preparing progress reports, financial reports and the Final Report, in collaboration with UNEP, to present to ABC/MRE.

A **Project Management Unit** (PMU), to be established by the MCTIC, responsible for the day-to-day management and implementation of the project, and for the coordination with the project's main stakeholders. As per the project document, the PMU was to be composed by a Project Coordinator, 2 Component Managers, an M&E Specialist, Project Administrative/Financial Assistant, Project Secretary and a Communication Assistant. However, at the time of the Mid-term Review (MTR) in 2014, there were no Component Managers, and the PMU consisted of 3 part-time staff supported by 2 assistants located in the MCTIC with two full-time staff outposted to the UNEP Brasilia office. In 2017, the Project Administratrive/ Financial Assistant position was abolished and some tasks fell under the UNEP Brazil Office, including the UNEP Project Manager. As per the ProDoc, responsibilities of the PMU included: the achievement of the project outcomes and objective, the management of day-to-day implementation of the project, overall project coordination and M&E, technical input, coordination with project stakeholders and regional/national programs of relevance, convening of periodic Project Implementation Meetings to review progress against the workplan, etc.

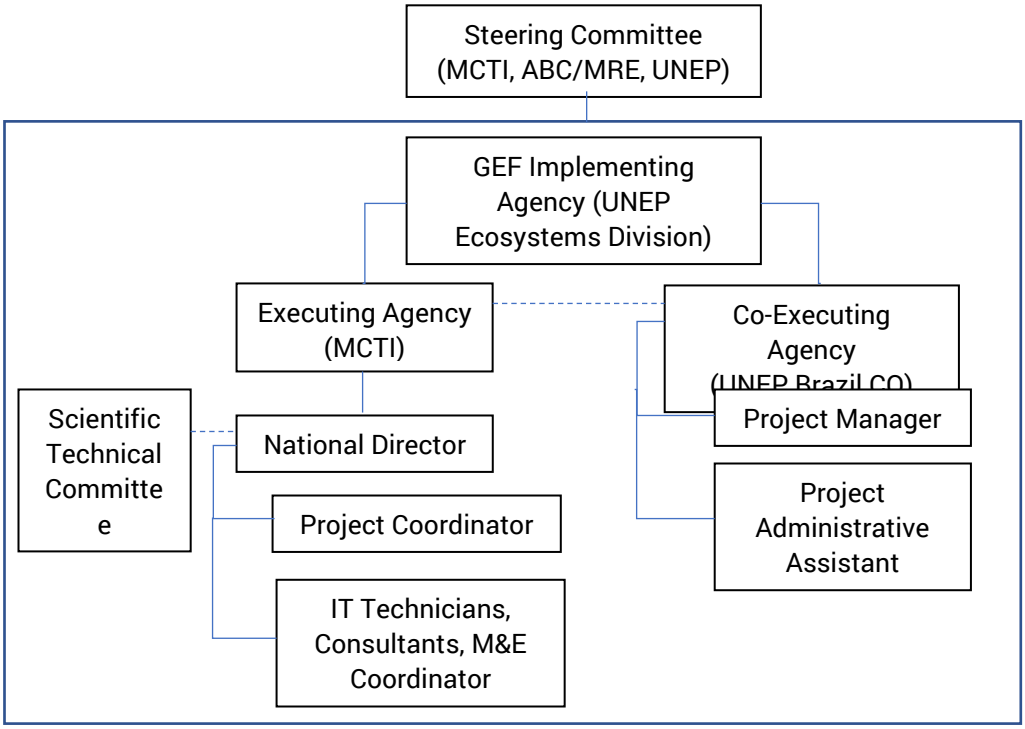
A **Project Steering Committee** (PSC), to be composed of the National Director, one representative of ABC/MRE and one UNEP representative. The PSC was to provide political and strategic guidance to the project, and oversee and approve annual work plans, budgets, and other strategic decisions. The PSC meetings were to be convened by the MCTIC, at least once a year or per request of one of the Parties.

A **Committee for Technical Consultation (CTC)** or **Scientific Technical Committee**, not originally envisaged in the project document, responsible for providing technical guidance to the project management unit. The CTC was composed by representatives of seven key institutions, namely: USP Zoology Museum, Rio de Janeiro's Botanical Garden (JBRJ), the National Network for Education and Research (RNP), the National Institute for Amazonian Research (INPA), Embraba Monitoramento por satellite, the Ministry of Environment (MMA) and the Barzilian Institute for Geography and Statistics (IBGE). These institutions are now part of the committee created within the legal framework that formalized the SiBBr platform in Brazil.

[49] At project design, the Ministry was named Ministry of Science and Technology (MCT). In 2011, its name was changed to Ministry of Science, Technology and Innovation (MCTI) and in 2016 to the Ministry of Science, Technology, Innovation and Communication (MCTIC).

The institutional framework for the project implementation, covering all components of the project as described above, is illustrated in the following chart.

Figure 1. Project institutional organigram



Source: prepared by the Evaluation Office, in consultation with project Task Manager and Project Manager

5. Project Cost and Financing

The overall project budget was USD 28,172,728, of which USD 8,172,728 derived from the GEF funding and USD 20 million was the estimated co-financing from the MCTIC on behalf of the Government of Brazil. At project design, the co-financing amount by the MCTIC had been distributed amongst the three different components. However, at implementation, the co-financing budget was completely allocated for the implementation of component 2. Table 3 presents the overall project budget and estimated expenditures per component.

Table 3. Overall project budget by outcome

Project Components/ Outcomes (In USD)	Estimated cost at design[50]		Actual Cost/ expenditure[51]		Expenditure ratio (actual/planned) – GEF grant
	GEF grant	Govt. (co-financing)	GEF grant	Govt. (co-financing)[52]	
Outcome 1. The information contained in Brazilian biological centers and networks has been organized, qualified and integrated into the Brazilian Biodiversity Information System (SIBBr)	3,733,900	9,198,000	5,280,908	0	1.41
Outcome 2. Institutional and taxonomic capacities have been strengthened to ensure continuous uploading and updating of information into the SIBBr	0	5,771,000	0	20,000,000	-
Outcome 3. Enabling framework to manage, distribute and use qualified information at federal, state, and local level decision making for conservation of globally significant biodiversity	3,706,828	3,791,286	2,883,899	0	0.77
Total Outcomes	**7,440,728**	**18,760,286**	**8,164,807**	**20,000,000**	**1.09**
Project Management	732,000	1,239,714	Not available	0	
Total	**8,172,728**	**20,000,000**	**8,164,807**	**20,000,000**	

[50] As per prodoc – 18/07/2011

[51] Estimates provided by Project Manager, as UNEP's UMOJA system does not record expenditures by project outcome but rather by budget lines.

[52] There is a discrepancy between the total co-financing figures provided by the Project Manager and the total amount in the co-financing report dated December 2016 (USD 22,162,227).

6. Implementation Issues

The first Progress Implementation Review (PIR) prepared for the project mentions a delay in Project implementation start mostly due to the prolonged negotiations on implementation arrangements and the slow signature process of the Project Document and the Executive Programme[53] between both parties. The Project Document and Executive programme were signed by the parties only in June 2011, approximately one year after the GEF Secretariat approval of the project. Subsequently the first Project National Director was officially appointed in December 2011, and only then could the project officially start. The official project launch and inception workshop, however, took place in April 2012. Delays were also faced during the project's lifecycle due to the high staff turnover. During the implementation period, the project had 3 National Project Directors, 2 UNEP Project Managers and 5 Administrive Assistants.

Challenges in the development of a governance system for the information system (output 3.7) were also noted in the 2015 PIR, due to delays with the recruitment of the adequate expertise/contractor to support this work. By 2018, however, as reported in that year's PIR, this had been settled and progress had been made in moving this output forward. Similarly, due to the low progress made in the two first years, the SiBBr had to reschedule implementation plans for the last three years.

The project's MTR, conducted between December 2013 and February 2014, rated most dimension's as 'Moderately Unsatisfactory' or 'Moderately Likely', indicating that the project was still making up for the initial delay. The MTR found that there was a need for a project revision to update the project outputs and its indicators, budget, Work and a budgeted M&E Plan and a renewed commitment of MCTIC to make up for both the lost ground suffered in the first half of the Project and ensure it would meet its (revised) outputs and outcomes in a timely fashion. The MTR also concluded that the project needed to increase and diversify its stakeholder participation, including membership of the project steering committee, as well as to revisit its long-term funding strategy.

In terms of financial management, the project director had difficulties monitoring disbursements and available project balance due to the lack of a computerized system for this purpose, as reported in the 2015 PIR. These difficulties were mostly faced before the transition to the UMOJA system by UNEP. Financial reporting processes were therefore delayed. Moreover, given the Brazilian Real devaluation, the project had residual resources to complete the planned activities and implement additional actions for the dissemination of the SiBBr platform.

Given the delays in the initiation of the Project and the residual resources, the project was extended on 3 occasions:

a. In June 2016, extending the project's end date from December 2016 to December 2017;

b. in December 2017 (as noted in the PIR covering the July 2017-June 2018 period), extending the project for an additional year (new end date: December 2018); and

c. in November 2018 (as noted in the PIR covering the July 2018-June 2019 period), extending the project's end date from December 2018 to December 2019, to allow for the completion of project activities and ensure the proper institutional anchoring within RNP of the system.

[53] The Executive Programme is the agreement between the Government of Brazil and UNEP for the execution of the project.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

1. Objective of the Evaluation

In line with the UNEP Evaluation Policy[54] and the UNEP Programme Manual[55], the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and the Government of Brazil, specifically the Ministry of Science and Technology. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation.

2. Key Evaluation Principles

Evaluation findings and judgements will be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

The "Why?" Question. As this is a terminal evaluation, particular attention will be given to learning from the experience. The "Why?" question will therefore be at the front all throughout the exercise and the use of a theory of change approach will be adopted. This means that the evaluation will go beyond the assessment of "what" the project performance was and make a serious effort to provide a deeper understanding of "why" the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.

Attribution, Contribution and Credible Association: In order to attribute any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the project (i.e. take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for evaluations. Establishing the contribution made by a project in a complex change process relies heavily on prior intentionality (e.g. approved project design documentation, logical framework) and the articulation of causality (e.g. narrative and/or illustration of the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A credible association between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes.

Communicating evaluation results. A key aim of the evaluation is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant(s) should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation

[54] http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

[55] This manual is available online within UNEP's We Collaborate intranet.

deliverables. Draft and final versions of the main evaluation report will be shared with key stakeholders by the Evaluation Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultant(s) will plan with the Evaluation Manager which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some, or all, of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

3. Key Strategic Questions

In addition to the evaluation criteria outlined in Section 10 below, the evaluation will address the **strategic questions** listed below. These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution:

(a) To what extent did the project implement the recommendations from the Mid-Term Review? How did these recommendations support the project's effectiveness?

(b) To which extent is the Sibbr Platform recognized by partner organizations and key users as a reference in the provision of information on biodiversity and for mainstreaming biodiversity into the planning of actions and design of policies?

(c) Do the mechanisms of governance and financial sustainability established within the SiBBr Project ensure the maintenance and continued update of the platform?

4. Evaluation Criteria

All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the availability of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The evaluation consultant(s) can propose other evaluation criteria as deemed appropriate.

A. Strategic Relevance

The evaluation will assess 'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'. The evaluation will include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

i. *Alignment to the UNEP Medium Term Strategy[56] (MTS), Programme of Work (POW) and Priorities*

The evaluation will assess the project's alignment with the MTS and POW under which the project was approved and include, in its narrative, reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.

[56] UNEP's Medium-Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes. https://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/un-environment-documents

UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building[57] (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries. GEF priorities are specified in published programming priorities and focal area strategies.

ii. Alignment to Donor/GEF Strategic Priorities

GEF strategic priorities vary across interventions. The evaluation will assess the extent to which the project is aligned and consistent to the GEF programming priorities and focal area strategies.

iii. Relevance to Regional, Sub-regional and National Environmental Priorities

The evaluation will assess the extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented. Examples may include: national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc.

iv. Complementarity with Existing Interventions

An assessment will be made of how well the project, either at design stage or during the project inception or mobilization[58], took account of ongoing and planned initiatives (under the same sub-programme, other UNEP sub-programmes, or being implemented by other agencies) that address similar needs of the same target groups. The evaluation will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UN Development Assistance Frameworks or One UN programming. Linkages with other interventions should be described and instances where UNEP's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include:

- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness

B. Quality of Project Design

The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established (www.unenvironemnt.org/about-un-environment/our-evaluation-approach/templates-and-tools). This overall Project Design Quality rating is entered in the final evaluation ratings table as item B. In the Main Evaluation Report a summary of the project's strengths and weaknesses at design stage is included, while the complete Project Design Quality template is annexed in the Inception Report.

Factors affecting this criterion may include (at the design stage):

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity

[57] http://www.unep.fr/ozonaction/about/bsp.htm

[58] A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

C. Nature of External Context

At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval[59]). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the evaluation consultant and Evaluation Manager together. A justification for such an increase must be given.

D. Effectiveness

i. *Availability of Outputs*[60]

The evaluation will assess the project's success in producing the programmed outputs and achieving milestones as per the project design document (ProDoc). Any formal modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations may be necessary in the reconstruction of the TOC. In such cases a table should be provided showing the original and the reformulation of the outputs for transparency. The availability of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision. The evaluation will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision[61]

ii. Achievement of Project Outcomes[62]

The achievement of project outcomes is assessed as performance against the project outcomes as defined in the reconstructed[63] Theory of Change. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project's resource envelope. As with outputs, a table can be used where substantive amendments to the formulation of project outcomes is necessary. The evaluation should report evidence of attribution between UNEP's intervention and the project outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UNEP's 'substantive contribution' should be included and/or 'credible association' established between project efforts and the project outcomes realised.

Factors affecting this criterion may include:

- Quality of project management and supervision

[59] Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management by the project team.

[60] Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions (UNEP, 2019)

[61] Project management and supervision for GEF funded projects refers to the project management performance of the executing agency and the technical backstopping provided by UNEP.

[62] Outcomes are the use (i.e. uptake, adoption, application) of an output by intended beneficiaries, observed as changes in institutions or behavior, attitude or condition (UNEP, 2019)

[63] All submitted UNEP project documents are required to present a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any formal changes made to the project design.

- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Communication and public awareness

iii. Likelihood of Impact

Based on the articulation of long-lasting effects in the reconstructed TOC (i.e. from project outcomes, via intermediate states, to impact), the evaluation will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long-lasting impacts. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the Evaluation Office website, https://www.unenvironment.org/about-un-environment/evaluation and is supported by an excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree'. Essentially the approach follows a 'likelihood tree' from project outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

The evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.[64]

The evaluation will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication[65] as part of its Theory of Change and as factors that are likely to contribute to longer term impact.

Ultimately UNEP and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the evaluation will assess the likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals and/or the intermediate-level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partners.

Factors affecting this criterion may include:

- Quality of Project Management and Supervision (including adaptive management)
- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness
- Communication and public awareness

E. Financial Management

Financial management will be assessed under three themes: adherence to UNEP's financial policies and procedures, completeness of financial information and communication between financial and project management staff. The evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output/component level and will be compared with the approved budget. The evaluation will verify the application of proper financial management standards and adherence to UNEP's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The evaluation will record where standard

[64] Further information on Environmental, Social and Economic Safeguards (ESES) can be found at http://www.unep.org/about/eses

[65] *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The evaluation will assess the level of communication between the Project Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision

F. Efficiency

The evaluation will assess the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution. Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The evaluation will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The evaluation will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

Special attention will be given to efforts made by the project team during project to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities[66] with other initiatives, programmes and projects etc. to increase project efficiency.

The factors underpinning the need for any project extensions will also be explored and discussed. As management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to implementing parties.

Factors affecting this criterion may include:

- Preparation and readiness (e.g. timeliness)
- Quality of project management and supervision
- Stakeholders participation and cooperation

G. Monitoring and Reporting

The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

i. Monitoring Design and Budgeting

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART[67] results towards the provision of the project's outputs and achievement of project outcomes, including at a level disaggregated by gender, vulnerability or marginalisation. In particular, the evaluation will assess the relevance and appropriateness of the project indicators as well as the methods used for tracking progress against them as part of conscious results-based management. The evaluation will assess the quality of the design of the monitoring plan as well as the funds

[66] Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

[67] SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.

allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation/review should be discussed if applicable.

ii. Monitoring of Project Implementation

The evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. This assessment will consider whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented, and whether it included monitoring the representation and participation of disaggregated groups in project activities. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The evaluation should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

UNEP has a centralized system for GEF projects, known as the Advanced DGEF Database Information System (ADDIS) in which project managers uploaded six-monthly progress reports, Project Implementation Reviews (PIRs) and the Tracking Tool to report against agreed project milestones. This information will be provided to the Evaluation Consultant(s) by the Evaluation Manager. The evaluation will assess the extent to which both UNEP and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

Factors affecting this criterion may include:

- Quality of project management and supervision
- Responsiveness to human rights and gender equity (e.g disaggregated indicators and data)

H. Sustainability

Sustainability is understood as the probability of project outcomes being maintained and developed after the close of the intervention. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the endurance of achieved project outcomes (ie. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of project outcomes may also be included.

i. Socio-political Sustainability

The evaluation will assess the extent to which social or political factors support the continuation and further development of project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the evaluation will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

Some project outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other project outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new resource management approach. The evaluation will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the project's outcomes have been extended into a future project phase. Even where future funding has been secured, the question still remains as to whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

The evaluation will assess the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. In particular, the evaluation will consider whether institutional capacity development efforts are likely to be sustained.

Factors affecting this criterion may include:

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined)
- Communication and public awareness
- Country ownership and driven-ness

I. Factors Affecting Project Performance and Cross-Cutting Issues[68]

i. Preparation and Readiness

This criterion focuses on the inception or mobilisation stage of the project (ie. the time between project approval and first disbursement). The evaluation will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular the evaluation will consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements. *(Project preparation is included in the template for the assessment of Project Design Quality).*

ii. Quality of Project Management and Supervision

For GEF funded projects, 'project management and supervision' refers to the project management performance of the executing agency and the technical backstopping and supervision provided by UNEP. The evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with UNEP colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive management should be highlighted.

iii. Stakeholder Participation and Cooperation

Stakeholders encompass all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UNEP and the Executing Agency. The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups should be considered.

iv. Responsiveness to Human Rights and Gender Equity

The evaluation will ascertain to what extent the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous

[68] These factors are rated in the ratings table and discussed within the Main Evaluation Report as cross-cutting themes as appropriate under the other evaluation criteria. Where the issues have not been addressed under other evaluation criteria, the consultant(s) will provide summary sections under the following headings.

People. Within this human rights context the evaluation will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment[69].

In particular the evaluation will consider to what extent project implementation and monitoring have taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially those related to gender) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

v. Environmental and Social Safeguards

UNEP projects address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage, risk assessment and management (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project and programme activities. The evaluation will confirm whether UNEP requirements[70] were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and r*eport* on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues; for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned are evaluated above under Quality of Project Design). The evaluation will also consider the extent to which the management of the project minimised UNEP's environmental footprint.

vi. Country Ownership and Driven-ness

The evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. While there is some overlap between Country Ownership and Institutional Sustainability, this criterion focuses primarily on the forward momentum of the intended projects results, ie. either a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The evaluation will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g. representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. Ownership should extend to all gender and marginalised groups.

vii. Communication and Public Awareness

The evaluation will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established

[69] https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

[70] For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

under a project the evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

The Terminal Evaluation will use a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) will provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

The findings of the evaluation will be based on the following:

(a) A **desk review** of:

- Relevant background documentation, inter alia, National Environmental Strategies and Plan, specifically those related to biodiversity conservation, UNEP Medium-Term Strategies and Programmes of Work.
- Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
- Project reports such as the annual Project implementation Reviews and Tracking Tool, progress reports from collaborating partners, meeting minutes, relevant correspondence, etc.;
- Project outputs: digitized biodiversity data, the national repository for observation data and the dynamic catalogue for species found in Brazil (all available at https://www.sibbr.gov.br), updated Strategic Plan to strengthen taxonomic capacity and consolidate Brazilian biological collections, workshop/ training reports, list and description of targeted incentives to increase taxonomic and bio-geographic knowledge, assessment of end-user demands and product weaknesses, dissemination strategy for potential users in the private, non-governmental and government sectors at federal, state and local levels, etc.
- Mid-Term Review of the project;
- Evaluations/reviews of similar projects, if any.

(b) **Interviews** (individual or in group) with:

- UNEP Task Manager (TM);
- Project management team, including the Project Manager within the Executing Agency;
- UNEP Fund Management Officer (FMO);
- Portfolio Manager and Sub-Programme Coordinator, where appropriate;
- Project partners, including the Ministry of Science, Technology and Innovation of Brazil (MCTIC)/ Secretary of Policies for Training and Strategi Actions - SEFAE, Global Biodiversity Information Facility (GBIF), National Commission on Biodiversity (CONABIO), Ministry of Environment of Brazil (MMA) , the Brazilian Institute for Geography and Statistics, the National Spatial Data Infrastructure and its Scientific Technical Committee, the National

Network for Education and Research (RNP), National Laboratory for Scientific Computation (LNCC), the Zoological Museum of the University of São Paulo (MZUSP); the Botanical Garden of Rio de Janeiro (JBRJ); The National Museum (MN); The Amazonian Research Institution (INPA); the Emilio Goeldi Museum (MPEG), the Foundation Oswaldo Cruz (Fioruz), World Wild Life Brazil (WWF-Brazil), GEF Brazil focal point, among others;

- Relevant resource persons, including the consultant that conducted the MTR.

(c) **Surveys,** to be defined during the inception phase of the evaluation.
(d) **Field visits** to Brazil, namely Brasilia, Rio de Janeiro and selected sites, to be identified during evaluation inception phase.

Other data collection tools, to be identified during the inception phase of the evaluation.

1. Evaluation Deliverables and Review Procedures

The evaluation consultant(s) will prepare:

- **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.
- **Preliminary Findings Note:** typically in the form of a powerpoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for review and comment.
- **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a stand-alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.
- An **Evaluation Brief** (a 2-page overview of the evaluand and evaluation findings) for wider dissemination through the UNEP website may be required. This will be discussed with the Evaluation Manager no later than during the finalization of the Inception Report.

Review of the draft evaluation report. The evaluation consultant will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Task Manager and Project Manager, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the evaluation consultant(s) where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the evaluation consultant(s) for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

Based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

The Evaluation Manager will prepare a **quality assessment** of the first draft of the main evaluation report, which acts as a tool for providing structured feedback to the evaluation consultants. The quality of the final report will be assessed and rated against the criteria specified in template listed in Annex 1 and this assessment will be appended to the Final Evaluation Report.

At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Task Manager. The Evaluation Office will track compliance against this plan on a six-monthly basis.

2. The Evaluation Consultant(s)

The evaluation consultant(s) will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager, Natalia Acosta, in consultation with the UNEP Task Manager -Robert Erath (based in the UNEPs Regional Office for Latin America and the Caribbean in Panama - ROLAC), the Project Manager – Anna Fanzeres from the UNEP Brazil Office, Fund Management Officer- Martin Ocun and Financial Assistant- Lilian Musyoka. The consultant(s) will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, each consultant's individual responsibility to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UNEP Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

The Evaluation Consultant will be hired for 8 months spread over the period February 2020 to September 2020 and should have: an advanced university degree in environmental sciences, international development or other relevant political or social sciences area; a minimum of 8 years of technical / evaluation experience, including of evaluating large, regional or global programmes and using a Theory of Change approach; a good understanding of biodiversity conservation, ecosystem services and/or information systems. For this consultancy, fluency in oral and written English and Portuguese is a requirement. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. The work will be home-based with possible field visits.

In close consultation with the Evaluation Manager, the evaluation consultant will be responsible for the overall management of the evaluation and timely provision of its outputs, data collection and analysis and report-writing. More specifically:

Inception phase of the evaluation, including:

- preliminary desk review and introductory interviews with project staff;
- draft the reconstructed Theory of Change of the project(s);
- prepare the evaluation framework;
- develop the desk review and interview protocols;
- draft the survey protocols (if relevant);
- develop and present criteria for country and/or site selection for the evaluation mission;
- plan the evaluation schedule;
- prepare the Inception Report, incorporating comments until approved by the Evaluation Manager

Data collection and analysis phase of the evaluation, including:

- conduct further desk review and in-depth interviews with project implementing and executing agencies, project partners and project stakeholders;
- (where appropriate and agreed) conduct an evaluation mission(s) to selected countries, visit the project locations, interview project partners and stakeholders, including a good representation of local communities. Ensure independence of the evaluation and confidentiality of evaluation interviews.

- regularly report back to the Evaluation Manager on progress and inform of any possible problems or issues encountered and;
- keep the Project/ Task Manager informed of the evaluation progress.

Reporting phase, including:
- draft the Main Evaluation Report, ensuring that the evaluation report is complete, coherent and consistent with the Evaluation Manager guidelines both in substance and style;
- liaise with the Evaluation Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Evaluation Manager
- prepare a Response to Comments annex for the main report, listing those comments not accepted by the Evaluation Consultant and indicating the reason for the rejection; and
- (where agreed with the Evaluation Manager) prepare an Evaluation Brief (2-page summary of the evaluand and the key evaluation findings and lessons).

Managing relations, including:
- maintain a positive relationship with evaluation stakeholders, ensuring that the evaluation process is as participatory as possible but at the same time maintains its independence;
- communicate in a timely manner with the Evaluation Manager on any issues requiring its attention and intervention.

3. Schedule of the evaluation

The table below presents the tentative schedule for the evaluation. The final schedule will be defined during the inception phase of the evaluation.

Table 3. Tentative schedule for the evaluation

Milestone	Tentative Dates (2020)
Inception Phase	
Evaluation Initiation Meeting	March
Inception Interviews	April – May
Inception Report	End of May
Data collection and Analysis Phase	
Evaluation Mission	June
Telephone interviews, surveys etc.	June
Powerpoint/presentation on preliminary findings and recommendations	June
Reporting phase	
Draft report to Evaluation Manager (and Peer Reviewer)	July
Draft Report shared with UNEP Project Manager and team	August
Draft Report shared with wider group of stakeholders	August
Final Report	September
Final Report shared with all respondents	September

ANNEX VI. QUALITY ASSESSMENT OF THE EVALUATION REPORT

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
Quality of the Executive Summary: The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.	Final report: Executive summary covers all the necessary elements and could be a stand alone document.	6
I. Introduction A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.) Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?	Final report: Introduction section is complete	5
II. Evaluation Methods A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/ quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.). Methods to ensure that potentially excluded groups (excluded by gender, vulnerability or marginalisation) are reached and their experiences captured effectively, should be made explicit in this section. The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described. It should also address evaluation limitations such as: low or imbalanced response rates across different groups; gaps in documentation; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome. Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies	Final report: Section is comprehensive and provides a structured presentation of the eval process, approaches and tools used	6

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
used to include the views of marginalised or potentially disadvantaged groups and/or divergent views. Is there an ethics statement?		
III. The Project This section should include: • *Context:* Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses). • *Results framework*:: Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • *Stakeholders:* Description of groups of targeted stakeholders organised according to relevant common characteristics • *Project implementation structure and partners:* A description of the implementation structure with diagram and a list of key project partners • *Changes in design during implementation:* Any key events that affected the project's scope or parameters should be described in brief in chronological order • *Project financing:* Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing	Final report: Context section was improved based on EOU feedback – all elements are covered.	5
IV. Theory of Change The *TOC at Evaluation* should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors. This section should include a description of how the *TOC at Evaluation*[71] was designed (who was involved etc.) and applied to the context of the project? Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do not follow UNEP's definitions of different results levels, project results may need to be re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/revised Prodoc logframe/TOC and b) as formulated in the *TOC at Evaluation*. *The two results hierarchies should be presented as a two-column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.*	Final report: Theory of change section is well formulated and comprehensive. It clearly presents how the ToC at inception and at Evaluation where developed and used in the evaluation. Justifications for the reformulation of results statements, and the causal pathways are clearly justified or described.	6

[71] During the Inception Phase of the evaluation process a *TOC at Evaluation Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
V. Key Findings **A. Strategic relevance:** This section should include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. An assessment of the complementarity of the project at design (or during inception/mobilisation[72]), with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed: 1. Alignment to the UNEP Medium Term Strategy (MTS) and Programme of Work (POW) 2. Alignment to Donor/GEF Strategic Priorities 3. Relevance to Regional, Sub-regional and National Environmental Priorities 4. Complementarity with Existing Interventions	Final report: Section included missing elements as per request from EM. All four sub-criteria were assessed adequately.	5
B. Quality of Project Design To what extent are the strength and weaknesses of the project design effectively summarized?	Final report: Section was substantively improved by integrating the project design weaknesses.	6
C. Nature of the External Context For projects where this is appropriate, key external features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval[73]), and how they affected performance, should be described.	Final report: No changes were needed from the draft. All elements were included in the assessment.	6
D. Effectiveness **(i) Outputs and Project Outcomes:** How well does the report present a well-reasoned, complete and evidence-based assessment of the a) availability of outputs, and b) achievement of project outcomes? How convincing is the discussion of attribution and contribution, as well as the constraints to attributing effects to the intervention. The effects of the intervention on differentiated groups, including those with specific needs due to gender, vulnerability or marginalisation, should be discussed explicitly.	Final report: Section presents comprehensive and structured evidence to substantiate the rating and is well structured. Requested clarifications and revisions were addressed.	6
(ii) Likelihood of Impact: How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact? How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed? Any unintended negative effects of the project should be discussed under Effectiveness, especially negative effects on disadvantaged groups.	Final report: Section presents a satisfactory analysis on likelihood of impact. Requested clarifications in the narrative were addressed.	6

[72] A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

[73] Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
E. Financial Management This section should contain an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table. Consider how well the report addresses the following: • *Adherence* to UNEP's financial policies and procedures • *completeness* of financial information, including the actual project costs (total and per activity) and actual co-financing used • *communication* between financial and project management staff	Final report: Presentation of evidence was re-organized and strengthened under two of the sub-criteria. Insufficient evidence was available to rate the communication between financial and project management staff.	5
F. Efficiency To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including: • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of making use during project implementation of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • The extent to which the management of the project minimised UNEP's environmental footprint.	Final report: Section was substantively improved based on feedback raised during the review stage. The revised assessment was better structured and covered most of the elements in the EOU rating description matrix.	5
G. Monitoring and Reporting How well does the report assess: • Monitoring design and budgeting *(including SMART results with measurable indicators, resources for MTE/R etc.)* • Monitoring of project implementation *(including use of monitoring data for adaptive management)* • Project reporting *(e.g. PIMS and donor reports)*	Final report: The sub-criteria are well assessed, with sufficient evidence in the narrative to substantiate the rating. No major changes needed.	5
H. Sustainability How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved project outcomes including: • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability	Final report: Section presents a satisfactory assessment of conditions and factors that could undermine the sustainability of outcomes. Slight revisions made to text to enhance its clarity.	5
I. Factors Affecting Performance These factors are <u>not</u> discussed in stand-alone sections but are **integrated in criteria A-H as appropriate**. Note that these are described in the Evaluation Criteria Ratings Matrix. To what extent, and how well, does the evaluation report cover the following cross-cutting themes: • Preparation and readiness • Quality of project management and supervision[74]	Revisions and improvements were made to those sections that required it (quality of project management and supervision, stakeholder participation and cooperation, responsiveness to HR and gender, and country	5

[74] In some cases 'project management and supervision' will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP.

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
• Stakeholder participation and co-operation • Responsiveness to human rights and gender equity • Environmental and social safeguards • Country ownership and driven-ness • Communication and public awareness	ownership and driven-ness) presenting a more comprehensive analysis.	
VI. Conclusions and Recommendations **i. Quality of the conclusions:** The key strategic questions should be clearly and succinctly addressed within the conclusions section. It is expected that the conclusions will highlight the main strengths and weaknesses of the project and connect them in a compelling story line. Human rights and gender dimensions of the intervention (e.g. how these dimensions were considered, addressed or impacted on) should be discussed explicitly. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.	Final report: Conclusions clearly presented the main report messages, based on findings. These covered the strategic questions and were consistent with the evidence presented.	6
ii) Quality and utility of the lessons: Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons are intended to be adopted any time they are deemed to be relevant in the future and must have the potential for wider application (replication and generalization) and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.	Final report: Lessons covered both negative and positive aspects from project design to implementation. They were revised to ensure they were generalizable and applicable to other projects.	5
iii) Quality and utility of the recommendations: To what extent are the recommendations proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? (i.e. points of corrective action). They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when. At least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions, should be given. Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations. In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance. Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.	Final report: Recommendations touched upon the main weaknesses and areas for improvement by the project. The narrative and main recommendation text was improved following suggestions by the EM/PR.	6

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
VII. Report Structure and Presentation Quality		
i) Structure and completeness of the report: To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete?	Final report: Final report followed the required structure and all annexes were included.	6
ii) **Quality of writing and formatting:** Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow Evaluation Office formatting guidelines?	Final report: Clarity in writing for some sections was significantly improved following the first review.	5
OVERALL REPORT QUALITY RATING		**5.5**

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

ANNEX VII. SIBBR TERMINAL EVALUATION STAKEHOLDER MATRIX

Type of Stakeholders	Data Provider / User	Information Manager	End User
Ministries and federal governmental bodies	**MMA Secretariat of Biodiversity*** MAPA Brazilian Forest Service (SFB)* MDR Superintendence for Amazon Development (SUDAM)* Ministry of Defense System for the Protection of Amazonia (SIPAM) **MCTIC*** **Ministry of Economy*** Ministry of Health* Ministry of Education*	**MCTIC National Education and Research Network (RNP)** **MMA General Coordinator of Information Technology and Informatics (CGTI) – BCDAM (Amazonian Database Sharing System) tools – i3Geo and SIGEPRO / PNLA (National Portal for Environmental Licensing)***	Ministry of Mines and Energy (MME)* IPEA Institute of Applied Economic Research* INCRA National Institute of Colonization and Agricultural Reform* DNIT National Department of Transport Federal Senate* Chamber of Deputies*
State and municipal governments	**Biota/FAPESP - Research programme in conservation and sustainable use of biodiversity of São Paulo State*** **State and Municipal Secretariats of the Environment***	**Biota/FAPESP***	**State and Municipal Secretariats of Agriculture, Tourism, Science and Technology, and Development*** State level Legislative Assemblies
Universities	•**University of São Paulo*** •**UNICAMP*** •**Federal University of Rio de Janeiro / National Museum of Rio de Janeiro*** •**Federal University of Rio Grande do Sul *** •**University of Brasilia*** •**University of the Sinos Valley (Private) / Anchietano Research Institute*** •**State University of Feira de Santana*** •Federal University of Pernambuco* •**Federal University of Minas Gerais*** •Federal University of Goiás* •**Federal University of Paraná***		
Research Institutions	MCTIC: • **National Institute for Amazonian (INPA)*** • **Emilio Goeldi Museum (MPEG)*** • National Institute for Space Science (INPE)* • **Brazilian Institute for Information on Science and Technology (IBICT)*** • **National Institute for Atlantic Rain Forest (INMA)*** MMA: • **Botanic Garden of Rio de Janeiro (JBRJ)*** • **Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA)*** • **Chico Mendes Institute for the Conservation of Biodiversity (ICMBio). Responsible for CEMAVE (National research Center for Conservation of Wild Birds) and Project TAMAR (Conservation of Marine Turtles) *** MAPA: • **EMBRAPAs*** • National Agricultural Library (BINAGRI)		

Type of Stakeholders	Data Provider / User	Information Manager	End User
	• Cocoa Research Center Ministry of Economy: • **Brazilian Institute of Geography and Statistics (IBGE)*** Ministry of Health: • **Oswaldo Cruz Institute (FIOCRUZ)*** • Adolfo Lutz Institute Butantan Institute (Secretary of Health - SP) Institute of Botany (Secretary of Env. - SP)* Curitiba Botanic Museum Zoobotanic Foundation of Rio Grande do Sul **RI with significative information/data on Brazilian biodiversity (to be repatriated)*:** • New York Botanical Garden • Missouri Botanical Garden • Smithsonian Institute • University of California's Museum of Vertebrate Zoology • Natural History Museum of Paris • UK's Royal Botanic Gardens		
NGOs	• **Reference Centre for Environmental Information (CRIA)*** • **Conservation International (CI)*** • **The Nature Conservancy (TNC)*** • **WWF*** • NatureServe* • Forest Stewardship Council (FSC)* • **Mamirauá Sustainable Development Institute*** • **SOS Atlantic Forest Foundation***	**CRIA***	
Private Sector*	Fundação Renova ProDoc considers private sector also as data providers. EC note: Private sector can actually be a data provider (i.e. through the environment impact assessments), but at SIBBr its major role was as users. ProDoc appendix 7 indicates private sector as "a major beneficiary for better access to reliable information on biodiversity", but they were not actually identified/named.		National Confederation of Industry (CNI)* São Paulo State Federation of Industries (FIESP)* **National Confederation of Agriculture and Livestock (CNA)***
International organizations and initiatives	**Global Biodiversity Information Facility (GBIF)*** **Catalogue of Life (CoL) *** **Encyclopedia of Life (EoL) *** **Global Taxonomy Initiative (GTI)*** Pollinators Initiative	**GBIF***	
CSOs	**Botanical Society of Brazil*** **Brazilian Society of Microbiology*** **Brazilian Society of Zoology***		
General public	ProDoc considers general public also as data providers. EC note: General public can actually be a data provider (i.e. citizens science), but at SIBBr its major role was as users.*		General public interested in biodiversity conservation and sustainable use*
Enablers of the SiBBr project:			

Type of Stakeholders	Data Provider / User	Information Manager	End User
UNEP*, GEF*, Convention on Biological Diversity (CBD)*, MCTIC*, Brazilian Cooperation Agency of the Ministry of Foreign Affairs (ABC), National Council for Scientific and Technological Development (CNPq)*, Coordination of Improvement of Higher Education Personnel (CAPES)*, Research and Project Financing Agency (FINEP)* and State Research Foundations (FAPs)*			

Legend:
Bold – stakeholder with high level of influence power over the project's outcomes
** – stakeholder with high level of interest over the project's outcomes*

Description of the four Types of Stakeholders as per project design:

1. **Data providers** institutions and organizations in Brazil and abroad were expected to have a relevant role in collecting, collating, organizing and qualifying Brazilian biodiversity related data that would feed SiBBr. Among these stakeholder groups there were botanic gardens, nature museums, governmental agencies, research institutes, universities, NGOs, private companies and the general public. They were expected to have a high level of influence and interest in the project, majorly because the success of the project depended largely on their perception that it was relevant to make their data available through SiBBr. It should be noted that, to a large extent, data providers could also be considered, at the same time, as users of the information available in SiBBr (i.e. they would access the SiBBr information to further expand their research, teaching, advocacy). So, it is also possible to name them as data providers/users.
2. **Information managers** were the organizations with considerable expertise in the design and implementation of biodiversity information systems and communication networks. It included the Reference Centre for Environmental Information (CRIA), the National Education and Research Network (RNP) and the Global Biodiversity Information Facility (GBIF). Due to their experiences and accumulated knowledge on information systems and communication networks these institutions were expected to have a significant level of influence and interest in the SiBBr project.
3. **End users** corresponded to the stakeholders that would use biodiversity information derived from the SiBBr to make decisions about conservation, land-use, sustainable development and natural resources management. It included individuals and organizations from federal, state and municipal government, NGOs, international organizations, the private sector and general public. Decision-makers involved in developing and drafting environmental legislation and policy, such as legislators, were also identified by ProDoc as end users. Increased access to data generated by SiBBr would be also useful to lecturers teaching undergraduate and postgraduate researchers in universities, as well as research institutes. End users were expected to have a high level of influence in the project, especially regarding Outcome 3. It was expected that the project would adopt strategies (i.e. Communication Strategy,

Stakeholder Engagement Strategy, consultations) to increase end users' interest in the results of the project and to tailor SiBBr products to their needs. They were considered key stakeholders for the sustainability of the project.

4. This TE also considered a fourth group of stakeholders: the **enablers** of the SiBBr change process. These stakeholders might have some role as data providers or end users, but their major role in the SiBBr project would be to **contribute to the change process** aimed by the project. This category includes assorted institutions such as international organizations (GEF, CBD, and UNEP), and governmental institutions (ABC, CNPq, CAPES, FINEP, and FAPs). CNPq (National Council for Scientific and Technological Development), CAPES (Coordination of Improvement of Higher Education Personnel), FINEP (Research and Project Financing Agency) and FAPs (State Research Foundations – Brazil which has more than 20 State Research Foundations) are the major **funding institutions in Brazilian Research and Development** and the ProDoc attributed several roles for them in the project. They were expected to continue providing grants and fellowships that would directly, or indirectly, benefit institutional and technical capacities of the scientific community related to the project (i.e. improving biological collection infrastructure and research conditions).

ANNEX VIII. COMPLEMENTARY INFORMATION ON RECOMMENDATION #1

Recommendation #1 - UNEP should improve guidance on the design and implementation of future GEF projects of this nature

The SiBBr faced several obstacles in its design and implementation. In order improve the likelihood of impact of future GEF UNEP projects, this TE recommends for UNEP to improve its guidance on the design and the implementation of GEF projects of this nature. The ET considers that these 10 topics below should be strengthened to improve results:

i) Capacity of the executing agency for GEF project management: the project at design should assess the capacity of the executing agency (and major stakeholders) with active roles in the project, and determine the necessary measures to ensure adequate capacities are developed and support provided. For instance, both UNEP CO and MCTI did not have previous experience executing a GEF Full Size Project

ii) Inception phase: the inception phase should be used to address any weaknesses of project design and develop, in a comprehensive manner, the tools, strategies and aspects that require attention for a successful project implementation. Not addressing these limitations at project inception contributed to delays and shortcomings that happened during the implementation phase.

iii) Implementation plan: the strategies that will be used on at the start of project implementation should be clearly outlined during project conceptualization, indicating the development of the Project Implementation Plan as one of the first activities to be done by the Project Management Unit.

iv) Training and capacity building of project staff: It should not be assumed that actors engaged in the project already have all capacities, knowledge and ability to conduct a GEF project. Therefore, capacity building and training for the management should be provided to the PMU staff and key EA personal. This training/capacity building is especially relevant at the start-up phase, but it should be done every time there is a turnover of staff (which happened to be frequent for this project).

v) Communication strategy: ProDoc did not present a Communication Strategy for the project. The project communication strategy used was developed late and interrupted. Moreover, it only focused on a part of the project audience. It is recommended for communication initiatives to start at the project onset. A solid communication strategy should describe the communication activities and tools that will be used to reach the diverse target audience and therefore the project objectives. It should be designed and implemented as an integral part of the project, not as a separate element.

vi) M&E Plan: the ProDoc included a M&E plan which was not properly implemented. Several monitoring initiatives did not take place (such as the annual audits) and hiring the M&E specialist only happened in 2014. It is recommended that thorough M&E plans are finalized during the project's inception phase, with sufficient funds for the planned activities, and carried out as planned.

vii) Stakeholder engagement plan: the ProDoc set out optimistic assumptions, such as the lack of competition among stakeholders, willingness to share information, and generalized interest. These were identified as factors that contributed to the slow start of the project. There was no stakeholder engagement plan or stakeholder capacity assessment. It is recommendable to develop a robust Stakeholders Engagement Plan understanding and recognizing its relevance, and allocating sufficient funds for the design and actual implementation. To properly do it, key stakeholders beyond IA, EA and governmental institutions, should be included in the

consultations for the PIF, and be engaged on the design of the ProDoc. Cooperation agreements/ mechanisms should be established since the startup of the project.

viii) Partnership management: the SiBBr had ups and downs with some partnerships that affected the project results. It is recommendable that partnership management take place full time and not only when partners are necessary. It is an important tool to build trust and organize allies that might make a difference when negotiating the project sustainability.

ix) Risk management: such complex, and long, project involved more risks than the ProDoc could list. The recommendation is to consider risk management as a core element for the success of the intervention, embraced in the day-to-day management of project, and not only as an issue that has to be reported in the PIRs. It should include, at least, the identification of major hazards, the assessment of vulnerability and exposure, and a solid mitigation plan which is implemented.

x) Information and Knowledge Management: The project did not adopt a Knowledge Management plan to deal with the significant amount of information produced during its implementation. Many documents, such as repots, agreements, and studies, were not available nor organized, affecting both the work of the ET, the implementation of the project and its legacy. It is recommended to develop and implement adequate KM strategies since project conceptualization until its closure.