



“Mainstreaming Biodiversity Conservation into River Management” Project

UNDP PIMS ID: 5281 / GEF Project ID: 5692

Terminal Evaluation 1st October 2021 – 28th February 2022

FINAL REPORT 21st February 2022

Country: Malaysia
Region: Asia and Pacific Region
Focal Area: Biodiversity 2: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/ Seascapes and Sectors

GEF Operational Programme or Strategic Priorities/Objectives:
Program 9: Managing the Human- Biodiversity Interface

Implementing Agency: United Nations Development Programme

Implementing Partner (GEF Executing Entity):
Ministry of Water and Environment Malaysia, Department of Irrigation and Drainage

Implementing Partners: Global Environment Centre, Forever Sabah

Evaluation Team Members: Francis Hurst and Muthusamy Suppiah

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ii. Acronyms and Abbreviations

List of Acronyms

AIS:	Alien Invasive Species
CDR:	Combined Delivery Report
CPAP:	Country Programme Action Plan
CSO:	Civil Society Organization
DID:	Department of Irrigation and Drainage
EU:	European Union
GEC:	Global Environment Center
GEF:	Global Environment Facility
IC:	International Consultant
IRR:	Independent Rapid Review
JICA:	Japan International Cooperation Agency
LUAS:	<i>Lembaga Urus Air Selangor</i>
KASA:	<i>Kementerian Alam Sekitar & Air</i> Ministry of Environment & Water
MBCRM:	Mainstreaming Biodiversity Conservation into River Basin Management
METT:	Management Effectiveness Tracking Tool
M&E:	Monitoring & Evaluation
MSP:	Medium Size Project
NC:	National Consultant
NGO:	Non-Governmental Organization
NIM:	National Implementation Modality
NSC:	National Steering Committee
PA:	Project Assistant
PIF:	Project Information Form
PIR:	Project Implementation Review
PM:	Project Manager
PMU:	Project Management Unit
PSC:	Project Steering Committee
REDD:	Reducing Emission from Deforestation & Forest Degradation
RTA:	Regional Technical Advisor
SDG:	Sustainable Development Goals
SRF:	Strategic Results Framework
TE:	Terminal Evaluation
TOC:	Theory of Change
TOR:	Terms of Reference
UN:	United Nations
UNDP:	United Nations Development Programme
UNDP CO:	UNDP Country Office
WHO:	World Health Organization

“Mainstreaming Biodiversity Conservation into River Management”; *“The Riverine Project”*
PIMS 5281, UNDP-GEF & Ministry of Environment and Water (KASA) Malaysia.
Terminal Evaluation, Final Report, 25th February 2022

Executive Summary

Project Information Table

Project Details		Project Milestones	
Project Title	Mainstreaming of Biodiversity Conservation into River Management	PIF Approval Date:	20/05/2014
UNDP Project ID (PIMS #):	5281	CEO Endorsement Date (FSP) / Approval date (MSP):	27/07/2015
GEF Project ID:	5692	ProDoc Signature Date:	10/11/2016
UNDP Atlas Business Unit, Award ID, Project ID:	00087899 / 00094781	Date Project Manager hired:	Short-Term (5/12/2019 to 31/5/2020) Long-term (16/10/2020 to 15/10/2021)
Country/Countries:	Malaysia	Inception Workshop:	18/10/2016
Region:	Asia and Pacific	Mid-Term Review Completion Date:	Not applicable for MSP ¹
Focal Area:	BD2: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/ Seascapes and Sectors	Terminal Evaluation Completion date:	28/02/2022
GEF Operational Programme or Strategic Priorities/Objectives:	Program 9: Managing the Human-Biodiversity Interface	Planned Operational Closure Date:	10/11/2020 extended to 9/5/2022
Trust Fund:	GEF Trust fund		
Implementing Partner (GEF Executing Agency):	Department of Irrigation and Drainage (DID), Ministry of Environment and Water (KASA) Malaysia		
NGOs/CBOs involvement:	1. Global Environment Centre (GEC) 2. Forever Sabah (FS)		
Private sector involvement:	RBM Engineering Consultant (Appointed Consultant), IOI, HSBC, Yayasan Hasanah, Yayasan PETRONAS		
Geospatial coordinates of project sites:	Sabah Segama River (from Kg. Upak (5° 7'48.88"N 118° 9'26.80"E) to Kg. Dagat (5°22'22.69"N 118°46'25.45"E)) Perak Kinta River (upstream of Kg. Pawong (4°33'19.07"N 101°17'55.94"E)) Klang Valley Klang River (from Taman Melawati (3°12'59.90"N 101°45'3.40"E) to Taman Pengkalan Kampar (3° 2'44.49"N 101°26'45.48"E))		

¹ Independent Rapid Review (IRR) for a GEF Project conducted 12/11/2019

PDF/PPG	at approval (US\$M)	at PDF/PPG completion (US\$M)
GEF PDF/PPG grants for project preparation	1.464	1.404 (PDF)/.060 (PPG)
Co-financing for project preparation		
Project	at CEO Endorsement	at TE (US\$M)
[1] UNDP contribution:	0.26	0.368 ²
[2] Government:	6.6	6.116
[3] Other multi-/bi-laterals:	0	0
[4] Private Sector:	0	0
[5] NGOs:	0.72	1.842
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	7.58	8.326 ³
[7] Total GEF funding:	1.404	1.404
[8] Total Project Funding [6 + 7]	8.984	9.730 ⁴

Project description

1. The project Mainstreaming Biodiversity Conservation into River Management in Malaysia focuses on integrating riverine biodiversity into stakeholder’s policies, planning operational procedures and budgeting to create an enabling environment to prevent the loss of biodiversity from Malaysia’s riverine ecosystems. This process would raise the profile of riverine biodiversity and remove the barriers to effective conservation. Three demonstration sites would pilot interventions to provide a demonstration of effective riverine biodiversity management in three separate river systems, an urban setting, a river basin catchment and an agricultural production landscape.
2. It addressed a number of weaknesses and barriers to effective conservation of riverine biodiversity by addressing five key threats: (i) habitat modification and clearance of riparian corridors, (ii) pollution, (iii) alien invasive species, (iv) overexploitation and deleterious fishing practices and, (v) climate change, and two barriers: (i) sub-optimal enabling framework and capacity for riverine biodiversity management and, (ii) an absence of successfully demonstrated experiences in integrated river management.
3. The project demonstration sites were located in three river basins reflecting the various jurisdictions and situations: federal and state, urban and rural - the Upper Kinta River Basin (Perak), the Klang River Basin (Selangor and Federal Territory) and, the Segama River Basin (Sabah).

Box 1 Summary of project components / outcomes, outputs and indicators

Objective: To commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia.	Indicators: - Objective Indicator 1: Riverine biodiversity conservation is mainstreamed into river management policies, regulations and plans involving related sectors, as indicated in the GEF Biodiversity 2 Tracking Tool.
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² \$368,536

³ \$8,326,536

⁴ \$9,730,536

	- Objective indicator 2: A multi-stakeholder strategy for mainstreaming biodiversity in river management, developed through a participatory process.
<p>Outcome 1: An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes.</p> <ul style="list-style-type: none"> - Inter-agency strategy, national action plan and financing plan to mainstream biodiversity into river management developed and adopted. - Best Management Practice guidelines developed and adopted. - Institutional capacity of Ministry of Environment and Water (KASA), DID and other related Federal and state agencies and key non-governmental stakeholders enhanced for riverine biodiversity management. - Awareness programmes delivered targeting policy makers and practitioners. 	<p>Indicators:</p> <ul style="list-style-type: none"> - Availability of guidelines on slope stabilization, pollution control and riparian zones that systematically address the management of riverine biodiversity in the Malaysian context. - Improved capacities at key departments of national and state responsible riverine biodiversity conservation as shown by an increase in the Riverine Biodiversity Capacity Development Scorecard.
<p>Outcome 2: Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats.</p> <ul style="list-style-type: none"> - Biodiversity management strengthened and habitat enhanced through improved water reservoir catchment management in Upper Kinta River Basin (Perak). - Riverine biodiversity and habitat management integrated into planning and implementation of urban river management programmes in the Klang River Basin (Selangor and Federal Territory). - Riparian habitat protected and enhanced in partnership with the private sector and local communities in the Segama River Basin (Sabah). 	<p>Indicators:</p> <ul style="list-style-type: none"> - Pilot demonstration 1 in upper Kinta Basin improves status of riverine biodiversity through strengthened watershed management, indicated by: <ul style="list-style-type: none"> (i) demonstrating at least 1 site of erosion mitigation through a bioengineering approach (bamboo or enrichment planting). (ii) at least 5-10 communities actively monitoring and participating in related events. - Pilot demonstration site 2: Riverine biodiversity management integrated into planning and implementation of the Klang River of Life Programme, indicated by: <ul style="list-style-type: none"> (i) physical enhancement of riverine and riparian habitats in the Klang River are benefiting riverine biodiversity (ii) awareness levels concerning the risks posed by aquatic alien invasive species (AIS) - Pilot demonstration 3 in Sabah enhances: <ul style="list-style-type: none"> (i) Length of riparian zone conserved along Segama River (ii) Engagement of local communities in river monitoring and conservation - Four Community involvement at the demonstration sites provides socio-economic benefits to local communities and proactively engages women in the communities, indicated by: <ul style="list-style-type: none"> (i) number of households in target communities involved in implementing project activities (such as tree planting) on a paid basis; (ii) proportion of women participating and benefiting from sustainable livelihood groups supported and facilitated by the project

4. The GEF global benefits included the conservation of globally significant biodiversity, the sustainable use of the components of globally significant biodiversity including within a production landscape and the development of coherent national pro-biodiversity policy frameworks.

Findings

5. The project officially started in November 2016. However, delays were experienced, and the first Project Manager (PM) was only appointed in December 2019. The first National Steering

Committee meeting took place in February 2020. For the first three years the project underperformed. It was subjected to an Independent Rapid Review (IRR) at the end of 2019 which found serious shortcomings in project management and oversight. Following the IRR the management response put in place a number of measures including direct support to the PMU by the Executing Agency and meeting a number of triggers justifying an extension. As a result of institutional reorganisation, the project main Implementing Partner Department of Irrigation and Drainage (DID) was moved from the Ministry of Water, Land and Natural Resources (KATS), to the newly created Ministry of Environment and Water (KASA). A no-cost extension was awarded for 18 months in August 2020 and the project will now end in May 2022.

6. In the original *design*, the Project Document was over ambitious and there were weaknesses and inconsistencies in the project’s strategy. This has created a dissonance between project outcomes and activities and the main objective as well as a confusing implementation landscape and a mismatch between the objective and the purpose and capacities of the main Implementing Partner resulting in weak ownership and understanding of the project.
7. A review of the project’s *strategic results framework (SRF)* shows that the original SRF (Project Document) was unnecessarily complicated with very high expectations and weak indicators. Following the IRR a revision of the SRF adjusted the Objective and Outcome 1 to reduce expectations and revised the indicators throughout. However, the revised SRF still lacked the utility of indicators and objective, outcomes and indicators were poorly worded. Monitoring and evaluation have at times been weak and slow to react. The merging of the original (non-mainstreaming) concept embodied in Outcome 2, with the project Objective which was mainly addressed in Outcome 1 has weakened the project’s chances to achieve the objective. The demonstration project in Sabah (Outcome 2) was completely redesigned following the IRR and as a result aligns more closely with, is more relevant to, the project’s objective.
8. The project’s *monitoring and evaluation* has been weak. While realistic in its evaluation it has been slow to react. Following the IRR, the project has “moved up a gear” however, this has only been achieved by substantive support to the PMU by the UNDP and DID with a focus on outputs. Despite this, the project has been running without an effective Project Manager in charge.
9. There have been a number of *inefficiencies* in means to achieve the project objective and including in procurement. This has resulted in a low *effectiveness* of the measures to achieve the objective and the project has only managed to establish the *inter-institutional linkages* necessary through GEF project working groups to achieve integration of riverine biodiversity within large field of institutional stakeholders and a broader development agenda.

Project’s main achievements

10. The project will likely have a number of very modest achievements. However, the most important of these are unlikely to be completed until 2022.
11. Under Outcome 1, an operational institutional framework and capacity and the main likely achievements will be: the development of an inter-agency strategy and financing plan for mainstreaming, the preparation of best management practices (BMP), and a summary framework for guidelines. However, these will need to be supported in the future if they are not to be “forgotten” as time moves on.
12. Under Outcome 2, best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats; the beginnings of a systemic mainstreaming approach which can be built on in the future has been put in place in Sabah. It too will need further supporting but would provide valuable opportunities to focus attention on the challenges of working across different jurisdictions and creating coalitions of interest. The

demonstration site in the Klang River has raised awareness at the local level and raised the profile of biodiversity in the existing River of Life Outreach Programme (ROLPOP) and has implemented a large number of activities at the local level including the River Walks, community measures to clean sections of the river, awareness and the friends of Klang River (FoKRB Network), to name a few. Amongst a number of activities, the Upper Kinta site has Upper Kinta [Basin Management Strategy \(UKBMS\)](#) including a section on biodiversity, the Upper Kinta Basin (UKB) Riverine Biodiversity Study developed, slope stabilisation using bio-engineering and brought together a large number of agencies (29) in an inter-agency Project Working Group (PWG) reflecting the complexity of river basin management.

13. The weaknesses in the original project design (e.g. sequencing) and the truncated implementation period (since 2020) and the utility of the indicators in the project’s Strategic Results Framework (SRF) mean that all three demonstration sites will need further time to demonstrate their efficacy⁵ in achieving the outcome and objective.

Evaluation Ratings Table

1. Monitoring & Evaluation (M&E)	Rating
M&E design at entry	MU
M&E Plan Implementation	MU
Overall Quality of M&E	MU
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	Rating
Quality of UNDP Implementation/Oversight	MU
Quality of Implementing Partner Execution	MU
Overall quality of Implementation/Execution	MU
3. Assessment of Outcomes	Rating
Relevance	S
Effectiveness	MU
Efficiency	MU
Overall Project Outcome Rating	MU
4. Sustainability	Rating
Financial sustainability	MU
Socio-political sustainability	MU
Institutional framework and governance sustainability	MU
Environmental sustainability	ML
Overall Likelihood of Sustainability	MU

⁵ Using the Theory of Change (ToC) developed during the IRR.

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Summary of conclusions, recommendations and lessons learned

Conclusions

14. The project has struggled with implementation challenges, especially in the first three years as a result of design weaknesses, a miss-match in the purpose of the project and the *raison d'être* of the principle Implementing Partner as well as two instances of institutional reorganisation.
15. Carrying out an independent rapid review as part of the UNDP oversight and project assurance responsibilities was effective in establishing the weaknesses and challenges in the project and had a positive effect on the performance of the project. However, following the IRR there was continued uncertainty and there has been insufficient time left to establish the inter-institutional linkages and coalitions of stakeholders in time. Neither has there been time to successfully demonstrate biodiversity conservation in river management to any great extent.
16. There has been a natural tendency to resort to outputs and activities⁶ at the expense of the processes necessary for building inter-agency linkages and a “joined-up” approach (outputs, outcomes, objective) to river management that includes biodiversity conservation.
17. There will likely be a small number of useful project products on which a more long-term mainstreaming programme could be built on, but these in themselves do not amount to the project objective.
18. However, there is not a clear overall responsibility and authority for the management of river systems in relation to biodiversity. But, it is not clear whether it is possible for a GEF-funded project to influence this unless there is clear institutional ownership of the project outputs, outcomes and objective. Something which does not appear to exist in the project.
19. Water issues and river management will likely gain in importance given the growing awareness of underpinning social and economic development on a resilient ecosystem in the face of climate change. Biodiversity needs to be regarded as part of a much wider suite of issues facing water management in Malaysia *per se*. Water security means clean and resilient rivers. Biodiversity needs clean and resilient rivers, but clean and resilient rivers need biodiversity. Mainstreaming

⁶ This was recognised by a broad cross-section of informants including representatives from the PMU and was also raised as a risk during the IRR.

needs to be addressed at a much higher level in the governance hierarchy with an institutional separation between policy-regulation and the management of rivers and the activities and ownership issues which affect their health.

20. The following is recommended:

Recommendations table

Rec #	TE Recommendation	Entity Responsible	Time frame
A	Category 1: Project closure		
A.1	Audit the project prior to its closure. While there is no evidence to suggest this risk has occurred, it is recommended that the project should be scrutinised by an independent auditor in the interests of transparency and visibility of process.	UNDP - DID	02-2022
A.2	Extend the deadline for the deliverable of Outcome 1 Outputs to provide the Contractor with sufficient time to deliver the best quality products such as the institutional stakeholder strategy and the BMP and guidelines. A reasonable delivery date would be February 2022.	DID/PMU	02-2022
A.3	Complete the Biodiversity tracking Tool before the closure of the project. There is little point in doing the Capacity Score cards due to the short time elapsed since the baseline.	PMU	02-2022
B	Category 2: Follow-up		
B.1	Organise a workshop to develop an exit strategy or legacy plan – the products of the project are not secure and if they are not correctly managed as the project closes they will be lost. These include the inter-agency strategy, national action plan and financing plan. The responsibility to ensure that these are followed and implemented should sit within a level of government which has the mandate and authority to ensure that the strategy and action plan is implemented across a range of different state bodies.	MEW	03-2022
C	Category 3: Consolidation		
C.1	In Sabah, consolidate resources to the demonstration site showing most promise for mainstreaming.	MEW & DID Sabah	02-2022 onwards
D	Category 4: Project planning		
D.1	UNDP should realistically review the co-financing commitments during the design phase of GEF projects against a range of criteria including realism and relevance to the project’s objective and develop a clear format for reporting co-financing. In-kind co-financing should not be earmarked to foundational components of any project, especially those poised for demonstration value; these should be adequately resourced through the core GEF grant	UNDP	2022 onwards
E	Category 5: Future programming		

E.1	Future programming should closely align GEF biodiversity projects with other programme areas to take advantage of synergies, a common purposes and resources ⁷ . Possible actions could include Programme Analysts meeting regularly to share experiences and having input to the project development process. Mainstreaming has a much longer time horizon than a single project cycle and project results need to be nested in continuous reform processes and mutually supporting other mainstreaming agendas (see Lesson C.2).	UNDP	2022 onwards
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Lessons learned table

21. The TE is cautious in drawing lessons from the project because it has had such a short time of effective implementation. The following lessons should be considered in future interventions:

Lessons learned #	TE Lessons learned
A	Category 1: Project design
A.1	During their design, there needs to be a degree of reality in what can be achieved by a medium-sized project within the available resource envelope and the time allowed for project completion. Trying to fix all of a system is probably not possible and expectations should be managed to reflect what is practicable.
A.2	Designing a mainstreaming project requires a greater understanding of how governments work because they require expert thinking in multiple fields but underpinning this should be a clear understating of the nature of governments and institutions.
B	Category 2: Implementation
B.1	Projects when under-performing can benefit considerably from an ad hoc exercise such as the IRR. Considering where the project was in early 2019 the IRR had a profound effect on its performance
B.2	In a complex project, a substantive Project Manager with technical experience as well as management experience is critical. Furthermore, they should have sufficient authority to guide the project as part of the adaptive management process.
B.3	There needs to be continuity between key stages of GEF project incubation to maximise institutional memory, preserve rationale for the underlying intervention logic and implementation arrangements, and ensure action items are undertaken in a timely manner.
C	Category 3: Future engagement
C.1	Projects addressing complex, multi-stakeholder, adaptive challenges should have a specific tool to assist stakeholders with the cognitive process of engaging with system complexity, uncertainty and scale.
C.2	Linking biodiversity management and gender equality provides synergies which can drive mainstreaming and result in building considerable social capital ⁸ (see recommendation E.1).

⁷ A number of key informants stated that this was the first mainstreaming project by UNDP and it is repeated in the IRR. At the time of design this was the case however, now this is not the first mainstreaming project implemented. UNDP has implemented a separate mainstreaming project with Ministry of Women.

⁸ The networks of relationships among people who live and work in a particular society, enabling that society to function effectively.

1 Introduction

1.1 Purpose and objective of the Terminal Evaluation

22. The UNDP and GEF monitoring and evaluation (M&E) policies and procedures require all UNDP-implemented and GEF-funded projects to undergo a terminal evaluation (TE) upon completion of implementation. Therefore, UNDP has commissioned this terminal evaluation by contracting an independent evaluation team consisting of a National Consultant (NC) and an International Consultant (IC). The TE was conducted following the UNDP-GEF Monitoring and Evaluation Policy and facilitated by the UNDP Country Office, Malaysia.
23. The purpose of the Mainstreaming Biodiversity Conservation into River Management (MBCRM) in Malaysia project terminal evaluation as per TORs (Annex 1) is to assess the achievement of project results and to draw lessons that can both improve the sustainability of the benefits from this project, and aid in the overall enhancement of UNDP and Government programming.

Box 2 Implementation and Execution Terminology

The terminology describing the project structure in a GEF project can be confusing given that different GEF Agencies - agencies accredited to implement GEF-funded projects - use different terminology which broadly uses the same terms such as implementation, execution, partners, etc. For the avoidance of doubt; the Terminal Evaluation (TE) will use the term Implementing Agency to describe the GEF Agency – UNDP. The Implementing Agency is responsible primarily for oversight (which GEF terms implementation support). The costs for performing these functions are covered by the GEF Agency Fee, which GEF provides. The Implementing Partner or Executing Agency – in this instance the Ministry of Environment and Water (KASA) (MNRE – when the project started) and the Department of Irrigation and Drainage, and state offices of DID are the lead implementing partners. The term project partners (written without capitals) are used to describe the other agencies and/or NGOs which have been appointed by the Implementing Partner to carry out implementation of specific project outputs (e.g. *inter alia*, the Global Environment Centre and Forever Sabah).

1.1.1 Scope of the Terminal Evaluation

24. The evaluation focuses primarily on assessing the performance of the project in light of the accomplished outcomes, objectives and effects using the evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported and GEF-financed Projects⁹. These are:

Relevance: assesses how the project relates to the development priorities at the local, regional and national levels for climate change and is coherent with the main objectives of GEF focal areas. It also assesses whether the project addressed the needs of targeted beneficiaries at the local, regional and national levels.

Effectiveness: measures the extent to which the project achieved the expected outcomes and objectives, how risks and risk mitigation were being managed, and what lessons can be drawn for other similar projects in the future.

Efficiency: the measure of how economically resources (funds, expertise, time, etc.) are converted to results. It also examines how efficient were partnership arrangements (linkages between institutions / organizations) for the project.

⁹ http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf

Impact: examines the positive and negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended. It looks at whether the project has achieved the intended changes or improvements (technical, economic, social, cultural, political, and ecological). In GEF terms, impact / results include direct project outputs, short to medium-term outcomes, and longer-term impact including global environmental benefits, replication effects and other local effects including on communities.

Sustainability: is the ability of the project interventions to continue delivering benefits for an extended time after completion; it examines the project’s sustainability in financial, institutional, social and environmental terms.

25. Using these evaluation criteria, the terminal evaluation covers all activities supported by UNDP and completed by the project management unit (PMU) and Government agencies as well as activities that other collaborating partners including beneficiaries, participated in.

The temporal scope of the TE covers all activities of the project beginning with the Project Identification Form (PIF) dated May 2014 through to the current final period of implementation evaluation in late 2021 (6 months before project closure).

26. The evaluation has been conducted in an ethical and participatory manner and in order to provide evidence-based information that is credible, reliable and useful.

1.1.2 Methodology of the Terminal Evaluation

27. As stated above, the Evaluation adopted a participatory and consultative approach ensuring close engagement with government counterparts, UNDP Office, the PMU, and key stakeholders based at the local level (state, local communities, NGOs, private sector).

28. Key aspects of the evaluation approach included:

Defining the scope of the Evaluation’s focus: through discussions with the PMU and UNDP and partner agencies, the areas and extent of inquiry to be defined.

Emphasis on constructive analytical dialogue: with the project partners; providing the project participants with an opportunity to explain the strategies applied to date, the challenges that have been faced and the inevitable nuances that affect a project. In this way the Evaluation was able to deepen the partner’s conceptual understanding of the key issues underlying the project and the driving forces that have shaped, and continue, shaping events.

Critical analysis of the project design: the original design and strategic approach was challenged against best practices and in light of the project’s experience to consider whether there were flaws in its logic and approach or whether there were assumptions, known or unknown, that have not proven correct.

Critical reflection on the measures of project success: measuring progress and performance against the indicators provided in the project’s SRF with the participation of the project partners and reflecting on their relevance and adequacy.

Assessment of the project’s performance and impact to date: analysing the performance and progress against the indicators and reasonably expected impacts of the project’s implementation.

An examination of process: critically examining the project’s actions and activities to ensure that there was sufficient effort in ensuring that elements of capacity building and participation, establishing processes and mechanisms, that would enable the targets to be achieved in the longer term rather than being *expedient*.

Synthesizing plausible future impacts: using analytical methods to identify plausible future outcomes resulting from the impact of the project in the future and how these might affect the project’s Theory of Change (ToC).

Jointly defining the conclusions and recommendations with the PMU and UNDP: ensuring that there is a common understanding of any weaknesses or shortcomings in the project’s implementation and an understanding of the reasons for, and the appropriate detail of, any recommended actions that might be necessary.

29. The methodology used is detailed in Annex 12.
30. Gender was considered through participation and inclusion by incorporating gender and women’s rights dimensions into the evaluation approach, method and analysis to determine how the project affected men and women differently.
31. As directed in the 2020 GEF Terminal Evaluation guidelines, specific Evaluation Rating Criteria were used for the following aspects of the project’s implementation and results:

Project Implementation

Monitoring and Evaluation: design at entry, implementation, and overall assessment of M&E. Implementing Agency (UNDP) and Executing Agency, overall project oversight / implementation and execution.

Project Results (outcomes)

Relevance, Effectiveness, Efficiency and overall project outcome.

Sustainability: financial, socio-political, institutional framework and governance, environmental, overall likelihood of sustainability.

32. These are outcomes, quality of monitoring and evaluation (M&E), quality of implementation and execution, and sustainability (environmental, social, financial and institutional).
33. Project performance was evaluated and rated using the criteria of relevance, effectiveness, efficiency and impact using the standard rating scales (Table 1). The primary reference points for assessing the performance were the indicators and targets set in the Strategic Results Framework, with consideration given to contextual factors.
34. The 2019 IRR made a number of important revisions to the project’s SRF. These alterations to the SRF were agreed with the projects Steering Committee and the GEF. The TE will use the objective, outcomes and indicators provided in the revised SRF to assess performance and achievement of the project.

1.1.3 Data Collection and Analysis

35. Due to the global Covid-19 pandemic restrictions the evaluation was carried out through a mix of remote interviews (International and national Evaluators) and face to face interviews with remote participation by the International Consultant. Field visits were carried out entirely by the National Consultant where covid-19 restrictions permitted¹⁰.
36. The data collection tools included semi-structured questionnaires for key informants and interview guides for discussions with beneficiaries. These were structured according to different stakeholder groups. The tools were developed by the evaluators focusing on the evaluation criteria and major outcomes planned and adjusted after a scoping exercise carried out during the inception phase. The interview guides and semi-structured questionnaires are presented in Annexe 7.
37. Generally, information obtained from interviews was cross-checked against more than one source and field observations¹¹ and project documents were possible¹².

¹⁰ 41 project related documents as well as Excel tables, minutes, peripheral documents, etc.

¹¹ 63 stakeholders were interviewed and 10 site visits.

¹² Additional documents were provided by some stakeholder after the first draft was reviewed and were subsequently included in the final draft.

Table 1 Terminal Evaluation Rating Scales

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
<p>6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings</p> <p>5 = Satisfactory (S): meets expectations and/or no or minor shortcomings</p> <p>4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings</p> <p>3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings</p> <p>2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings</p> <p>1 = Highly Unsatisfactory (HU): severe shortcomings</p> <p>Unable to Assess (U/A): available information does not allow an assessment</p>	<p>4 = Likely (L): negligible risks to sustainability</p> <p>3 = Moderately Likely (ML): moderate risks to sustainability</p> <p>2 = Moderately Unlikely (MU): significant risks to sustainability</p> <p>1 = Unlikely (U): severe risks to sustainability</p> <p>Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability</p>

1.1.4 Ethics

38. The evaluation was conducted following the UNEG Ethical Guidelines for Evaluators (Evaluation Consultant Code of Conduct Agreement - attached Annex 10).
39. The rights and dignity of all stakeholders were respected, including interviewees, project participants (project, UNDP, Government staff), beneficiaries (beneficiary institutions and communities) and other evaluation stakeholders including co-financing partners. The evaluators explained and preserved the confidentiality and anonymity of the participants so that those who participate in the evaluation are free from external pressure and that their involvement in no way disadvantages them.
40. The final report of the evaluation does not indicate a specific source of citations or qualitative data to preserve this confidentiality. The confidentiality of stakeholders was ensured throughout and consultation processes were appropriately contextualised and culturally sensitive, with attention given to issues such as gender empowerment and fair representation for vulnerable groups, wherever possible.
41. Whilst every effort was made to reflect the inputs of stakeholders fairly and accurately in the report, the evaluation ratings, conclusions and key recommendations are those of the evaluators, they do not necessarily reflect the opinions and views of the Implementing and Executing Agencies or other project partners. As such they are not binding on any individual or institutional stakeholder.

1.1.5 Limitations and constraints of the Terminal Evaluation

42. Due to the Covid-19 pandemic the TE faced considerable challenges which in some cases impeded travel and resulted in delays. In order to reduce the impacts of these delays and meet the wider GEF milestones the TE team began detailed analysis of the components of the project which did not need primary information from stakeholders and project sites. In particular this entailed discussions with the PMU and service providers to develop a collective understanding of the emergent complexities and emerging issues related to the freshwater biodiversity conservation, river and water body management and mainstreaming *per se*; the system-related as opposed to

the operational issues. Furthermore, interviews with stakeholder in the field necessitating a field visit and those who could be interviewed using remote means by internet took place concurrently. A Covid-19 security plan was developed during the inception phase (Annex 16).

43. Remote interviews were, at times, challenging due to internet connectivity and the need to wear masks during group interviews.
44. The specific circumstances of the project, the poor performance at start up to 2019 and the changes implemented following the IRR presented a number of challenges to the evaluation, in particular; a loss of project memory during the early years and forecasting the likely outcomes of the project given the increased effort post the IRR when the evaluation was carried out six months prior to project closure.

1.1.6 Structure of the Terminal Evaluation Report

45. This report is structured in line with the guidance given on conducting TEs of UNDP-GEF projects and in accordance with the TE Terms of Reference (ToR):

Section 1 provides an executive summary which gives basic information on the project, a brief description of the project and its progress to date, the TE ratings and achievement table, summary of conclusions and recommendations.

Section 2 provides a description of the review process and methodology.

Section 3 describes the background and context of the MBCRM project including the problems that the project sought to address, the objectives, outcomes and means of monitoring and evaluation, the implementation arrangements, a timeline and key milestones as well as a summary of project stakeholders.

Section 4 presents the main findings of the TE on all aspects including the project’s strategy, its progress towards results, the performance of its implementation and efficiency of adaptive management as well as assessing the sustainability of the project outcomes.

Section 5 provides the TE conclusions and recommendations.

2 Project Description

2.1 Project start and duration, including milestones

46. The Mainstreaming Biodiversity Conservation into River Management in Malaysia project PIF was approved in 14 May 2014 under the GEF-5 cycle. There then followed a period of stakeholder consultation and design culminating in the Chief Executive Officer (CEO) GEF approval (CEO Approval) on 27 July 2015 and the Project Document signature on the 10th November 2016 signalling the official start date of the project.
47. UNDP, acting as the Implementing Agency, and the Ministry of Natural Resources and Environment (MNRE) acting as the Executing Agency, only fully executed the document after formalizing the five-year Country Programme Action Plan (CPAP 2016 - 2020) designed to achieve Vision 2020 and high-income status. This culminated with the Malaysian counterpart officially signing the Project Document on 10 November 2016 with the disbursement only taking effect on 24 January 2018 in advance of a pre-inception introductory workshop¹³.

¹³ p. 24, Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. 12 November 2019.

Table 2 Project timeline key dates

Preparation	
Received by GEF	30 January 2014
PIF approved	20 May 2014
STAP review	June 2015
CEO approval of Project Document	July 2016
Implementation	
Project Document signature & official start-up	10 November 2016
Independent Rapid Review	August - October 2019
Inception workshop	October 2016
1 st Appointment of National Project Manager	5 December 2019
Ministry of Environment and Water (KASA) assumed the role as Execution Agency	February 2020
1 st meeting of project board	6 February 2020
COVID pandemic lockdown	18 March 2020
Planned project end	April 2020
2 nd Appointment of National Project Manager	16 October 2020
Planned Terminal Review	November 2020
18 months no-cost extension approval	21 August 2021
Actual Terminal Evaluation	October 2021 – January 2022

48. The project was developed by the Ministry of Natural Resources and Environment (MNRE), the UNDP Country Office and the Global Environment Centre (GEC) with the Project Document being developed with a US\$60,000 Project Preparation Grant (PPG) and led by an International Consultant.
49. The project had a four-year timeframe with an expected end date of 10 November 2020. The Project Management Unit was under Department of Irrigation and Drainage (DID) and the oversight role was played by Drainage and Irrigation Division in MNRE. In 2018, following federal ministries restructuring DID was placed under the newly created Ministry of Water, Land and Natural Resources. In early 2020, as a result of another restructuring exercise, DID is currently placed under Ministry of Environment and Water (MEW).
50. As a medium-sized project (MSP) there was no GEF requirement for a Mid-term Review (MTR). However, due to a very low rate of execution in the first three years an Independent Rapid Review (IRR) was commissioned by the UNDP in late 2019. The IRR recommended significant adaptations to the project and a conditional no-cost 18-month extension. The project extension was agreed by the NSC and approved by UNDP and a revised end date of the project was set for 9 May 2022. A project Inception Report was developed 29 April 2020.

2.2 Development context

51. Malaysia has only 0.2% of the land mass of the world but has extremely high levels of biodiversity and endemism. It has one of the richest fauna and flora globally. It is also recognized as one of the 17 mega-diversity countries in the world, hosting more than 170,000 species.
52. Representing several Global 200 Ecoregions, Malaysia has a variety of tropical wetlands, forests and marine ecosystems that are priorities for conservation. Its river systems as well as riparian and catchment forests support an immense diversity of both aquatic and terrestrial biodiversity.
53. Riverine biodiversity, in particular, is of global significance as the country has an estimated 500 species of freshwater fish, of which 300 occur in Peninsular Malaysia, 250 in Sarawak and 130 (40% of which are endemic) in Sabah. Other riverine biodiversity includes: 158 species of

amphibians (of which 57 are endemic), 88 species of freshwater crab and 55 freshwater shrimps. At least 20 new species of fish and crabs have been described in the last 15 years suggesting that the total diversity is higher. In addition to aquatic biodiversity, riverine biodiversity in Malaysia includes a multitude of species of plants, birds and mammals which occur along river corridors and within its catchment areas.

54. Malaysia has some 157 river systems and a broad range of aquatic ecosystems including rivers, lakes, swamps and man-made wetland habitats such as reservoirs and rice-fields, which together cover between 12-15% of the country's land area. River and floodplain wetland systems, alone, comprise some 3.9 million hectares (10% of the country's land area).
55. The river systems in Malaysia also provide ecosystem services benefiting both rural communities and urban societies, including water supply, artisanal fisheries, the aquarium fish industry, transport routes, tourism and recreation. However, Malaysia's rivers face many threats and a wide range of pressures that undermine their biodiversity and ecological integrity, with ongoing loss of genetic resources, ecosystem services and national and local socio-economic benefits.
56. Most river sections and associated biodiversity are found outside the protected area system in Malaysia with no overarching strategies and plans in place, nor any one authority, to conserve riverine biodiversity in productive landscapes covering more than 80% of Malaysia's land area.
57. The government agencies and other stakeholders responsible for management of these areas do not normally have biodiversity conservation, integrated river basin and ecosystem-based approaches as their management objectives. Their principal foci being flood mitigation, water supply and pollution control with little consideration for riverine biodiversity and overall habitat management. Furthermore, there is a lack of awareness of the cost-effective utility of ecological-based solutions to catastrophic events such as floods, droughts, landslides, etc.
58. The uncoordinated management of riverine areas puts increasing pressure on the biodiversity from habitat conversion, degradation, and pollution. A lack of inter-agency coordination, strategy, capacity and resources has created threats to riverine biodiversity which lead to further fragmentation and destruction¹⁴ and loss of ecosystem components and function as well as tangible economic values.

2.3 Problems that the project sought to address

59. The Project Document lists five key threats to riverine biodiversity. These are:
 - Habitat modification and clearance of riparian corridors: despite the existence of guidelines and regulations aimed at preventing the loss of riverine habitat and corridors studies show that a large proportion of plantations, smallholder agriculture and urban development extend into these riparian habitats in both rural and urban settings. Furthermore, dams and other large infrastructure projects have drastically altered river flows threatening fish migrations and leading to dramatic changes in the river ecology.
 - Pollution: More than 40% of the river systems in Malaysia are classified as slightly or heavily polluted from a range of point source and non-source point pollution and chronic and acute incidences. Agricultural run-off, industrial solution and siltation have resulted in chronic heavy-metal and other toxin loads in fish as well as mass fish die-offs and eutrophication, silting of river beds and other harm to the river system as well as human health concerns.
 - Alien invasive species: The introduction of alien fish species through commercial aquaculture and the aquarium trade have had dramatic impacts on native fish species. Some recent studies indicated that in some areas alien species have replaced 100% of the native species and there is little awareness of the harm caused by these introductions.

¹⁴ Source: Independent Rapid Review and Project Document.

Alien plants accidentally introduced or used in river bank stabilisation are also a serious cause for concern.

- Overexploitation and deleterious fishing practices: Over-exploitation and poor fishing practices, including the use of chemicals and fish traps, threaten fish stocks and artisanal fishing communities’ livelihoods although hard data on the intensity and impact of over-exploitation and a lack of conservation practices is a serious knowledge gap in the conservation management.
- Climate change: This presents a range of very serious threats to riverine biodiversity from increasing water temperatures, increasing intensity of catastrophic weather events, sea level rise and salt water intrusion amongst many. Furthermore, climate change acts as a multiplier increasing the urgency, intensity and magnitude of other challenges and threats.

60. The Project Document identifies two key barriers to the successful conservation of riverine biodiversity:

- Sub-optimal enabling framework and capacity for riverine biodiversity management: The Project Document identified that there is no clear authority and responsibility for riverine biodiversity in Malaysia. No single authority has the mandate or powers to sustainably manage the rivers system. Various agencies have different and narrow institutional agendas and powers, for instance flood mitigation and irrigation (DID), commercial fish production (Department of Fisheries), management of forest resources (Forestry Department), industrial pollution (Department of the Environment), soil erosion and solid waste (local government), and so on, resulting in a lack of policy cohesion, conflicting agendas and a chronic lack of coordination. There is no overarching policy framework and there are not the institutional linkages necessary to provide a holistic approach to river management. As a result, the Malaysian Government’s principal focus in river management remains flood mitigation, water supply and pollution control with little understanding or consideration of riverine ecosystem services, biodiversity and habitat management.
- An absence of successfully demonstrated experiences in integrated river management: There is little holistic river management experience to build upon. The dearth of national examples of best practice cuts across all aspects of river management from a lack of tried and tested approaches, practices and technologies, through to inter-agency collaboration and policy, an absence of collaborative governance to ensure that there is policy conformity towards an agreed and obvious mutually beneficial goal.

2.4 Immediate and development objectives of the project and expected results

61. Following the IRR in 2019 the project’s objective and one outcome were adjusted. The new SRF gave the project objective as “*to commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia*”. It had two outcomes

Outcome 1: *An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes.*

Outcome 2: *Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats.*

62. The global (GEF) benefits included Strategic Objective 2, *To mainstream biodiversity conservation and sustainable use into production landscapes, seascapes and sectors*, mainly through Outcome 2.1: *Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation*, and Outcome 2.2: *Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks*.

2.4.1 Expected results

63. The expected results were adjusted as part of the management response to the IRR recommendations (Annex 17). Essentially these adjustments reflected a more realistic expectation of what they project might achieve and a simplification of the SRF for more effective monitoring. For the avoidance of doubt, the TE will measure achievements against the revised IRR indicators.

Box 3 Project components, outcomes, outputs and indicators

<p>Objective: To commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia.</p>	<p><u>Objective indicator 1:</u> Riverine biodiversity conservation is mainstreamed into river management policies, regulations and plans involving related sectors, as indicated in the GEF Biodiversity 2 Tracking Tool.</p> <p><u>Objective indicator 2:</u> A multi-stakeholder strategy for mainstreaming biodiversity in river management, developed through a participatory process.</p>
<p>Outcome 1: An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes.</p> <p><u>Output 1.1:</u> Inter-agency strategy, national action plan and financing plan to mainstream biodiversity into river management developed and adopted.</p> <p><u>Output 1.2:</u> Best Management Practice guidelines developed and adopted.</p> <p><u>Output 1.3:</u> Institutional capacity of Ministry of Environment and Water (KASA), DID and other related Federal and state agencies and key non-governmental stakeholders enhanced for riverine biodiversity management.</p> <p><u>Output 1.4:</u> Awareness programmes delivered targeting policy makers and practitioners.</p>	<p><u>Indicator 1.1:</u> Availability of guidelines on slope stabilization, pollution control and riparian zones that systematically address the management of riverine biodiversity in the Malaysian context.</p> <p><u>Indicator 1.2:</u> Improved capacities at key departments of national and state responsible riverine biodiversity conservation as shown by an increase in the Riverine Biodiversity Capacity Development Scorecard.</p>
<p>Outcome 2: Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats.</p> <p><u>Output 2.1:</u> Biodiversity management strengthened and habitat enhanced through improved water reservoir catchment management in Upper Kinta River Basin (Perak).</p> <p><u>Output 2.2:</u> Riverine biodiversity and habitat management integrated into planning and implementation of urban river management programmes in the Klang River Basin (Selangor and Federal Territory).</p> <p><u>Output 2.3:</u> Riparian habitat protected and enhanced in partnership with the private sector and local communities in the Segama River Basin (Sabah).</p>	<p><u>Indicator 2.1:</u> Pilot demonstration 1 in upper Kinta Basin improves status of riverine biodiversity through strengthened watershed management, indicated by:</p> <p>(i) demonstrating at least 1 site of erosion mitigation through a bioengineering approach (bamboo or enrichment planting).</p> <p>(ii) at least 5-10 communities actively monitoring and participating in related events.</p> <p><u>Indicator 2.2:</u> Riverine biodiversity management integrated into planning and implementation of the Klang River of Life Programme, indicated by:</p> <p>(i) physical enhancement of riverine and riparian habitats in the Klang River are benefiting riverine biodiversity</p> <p>(ii) awareness levels concerning the risks posed by aquatic alien invasive species (AIS)</p> <p><u>Indicator 2.3:</u> Pilot demonstration 3 in Sabah enhances:</p> <p>(i) Length of riparian zone conserved along Segama River</p> <p>(ii) Engagement of local communities in river monitoring and conservation</p> <p><u>Indicator 2.4:</u> Four Community involvement at the demonstration sites provides socio-economic benefits to local communities and proactively engages women in the communities, indicated by:</p>

	<p><i>(i) number of households in target communities involved in implementing project activities (such as tree planting) on a paid basis;</i></p> <p><i>(ii) proportion of women participating and benefiting from sustainable livelihood groups supported and facilitated by the project</i></p>
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2.5 Main stakeholders

64. Implementation modality is through National Implementation Modality (NIM). The Ministry of Environment and Water ¹⁵ (KASA) is the designated Executing Agency with the Department of Irrigation and Drainage (DID) responsible for leading the project execution. UNDP is the Implementing Agency providing oversight and has a supervisory and facilitating role in project execution providing project assurance. However, following the IRR the implementation modality recommended and adopted by the project was a hybrid NIM-Direct Implementation Modality (DIM) with the UNDP providing significant inputs into the Project Management Unit (PMU)¹⁶.

65. The Project document provides a list of sixteen stakeholders with corresponding interests and involvement in the project. These are:

- Ministry of Natural Resources and Environment (NRE)
- Department of Irrigation and Drainage (DID)
- Global Environment Centre
- Economic Planning Unit (Federal/State)
- Forestry Department of Peninsular Malaysia
- Department of Fisheries Malaysia (DoFM)
- State Governments and agencies
- Ministry of Housing and Local Government
- Ministry of Agriculture and Agro-Based Industry
- Ministry of Plantation Industries and Commodities
- Ministry of Works
- Private Sector: Oil Palm
- Tourism business
- Civil society organizations & Local Communities
- Indigenous community organisations
- Universities and research organizations

2.6 Project Theory of Change

66. The original Project Document was written prior to GEF guidelines requiring a Theory of Change (ToC) as an integral part of developing the project intervention strategy. However, during the IRR a ToC was developed and this is assessed by the TE as being a very clear and concise representation of the project’s intentions and pathways.

67. The essential distinctive elements of ToC compared to other approaches in project planning and management¹⁷ are to:

- identify specific causal links among outputs and outcomes, with evidence;
- describe the causal pathways by which interventions are expected to have effect, and identify indicators to test their validity over time, and;
- be explicit about assumptions about these causal pathways, which includes an analysis of barriers and enablers as well as indicators of success.

¹⁵ The Ministry of Natural Resources and Environment (NRE) was initially the Executing Agency stated in the Project Document but due to institutional restructuring currently the DID is placed under KASA since Feb 2020.

¹⁶ As per the Project Document and extended by Letter of Agreement 06/10/2020.

¹⁷ Theory of Change Primer A STAP document, December 2019

68. The TOC is useful, in this sense, because it sets out the causal pathways from intervention through to the long-term impacts as well as identifying the key drivers shaping the system. A more detailed account of its use is given in the Scientific and Technical Advisory Panel (STAP) guidelines.
69. The TOC developed by the IRR was a robust and very accurate depiction of the overall system and helped to disaggregate a number of key drivers, impact pathways and intermediate stages which is also useful in developing a temporal perspective necessary to for a realistic forecasting of project impacts.
70. The IRR noted that:
- “With respect to the UNDP-GEF River Project, there is no visual depiction of its Theory of Change within the Project Document. Nevertheless, the document does lay out a straightforward intervention logic and the organization of the SRF is based on the general assumption that: if an operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes (i.e.: Component 1); and if best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats (i.e.: Component 2); then biodiversity conservation will be mainstreamed into riverine landscapes through improved river planning and management practises in Malaysia (Project Objective). This logic is based on the barrier and root-cause analysis carried out during the preparation phase”¹⁸.*
71. The TE broadly agrees with the IRR statement above and that:
- “Descriptions of the drivers of change, as well as risks and mitigation strategies are exceptionally poor within the Project Document. For example, the description of the TOC in the Project Document mentions that the logic is based on the root cause and barrier analysis carried out during the preparation stage but makes no mention of risks to the overall strategy. Also, within the SRF, the same all-encompassing risks are highlighted for both Outcomes with little thinking and tailoring of risks at the Output level. This is also the case for the risks highlighted in the Social and Environmental Screening Template”¹⁹.*
72. The TE notes that a root causes and barrier approach, of the Project Document, to a complex situation such as presented with mainstreaming biodiversity into river management is essentially a reductionist approach and would likely provide overly simplistic interventions and likely miss the institutional, regulatory and hierarchical drivers of the system within which the project was to be implemented. Furthermore, a deeper analysis of the drivers of change would be necessary, recognising that the systems failures (the inequalities and inefficiencies in river management leading to a loss of biodiversity) essentially present an *adaptive*²⁰, not a *technical*, challenge *per se*.
73. The likely outcome of this would be to overlook the complexity of the system, the time it would take to bring about institutional change as well as the sequencing, build capacities and embedding the changes within the working practices and institutional cultures as well as raising expectations of what could be achieved by a medium-sized project. In summary the IRR provided a coherent and logical TOC describing what the project needed to do and, when juxtaposed with the resources and time available for the project, it becomes apparent that achieving the objective was unrealistic.
74. The impact of this will be examined in the findings and conclusions of this report.

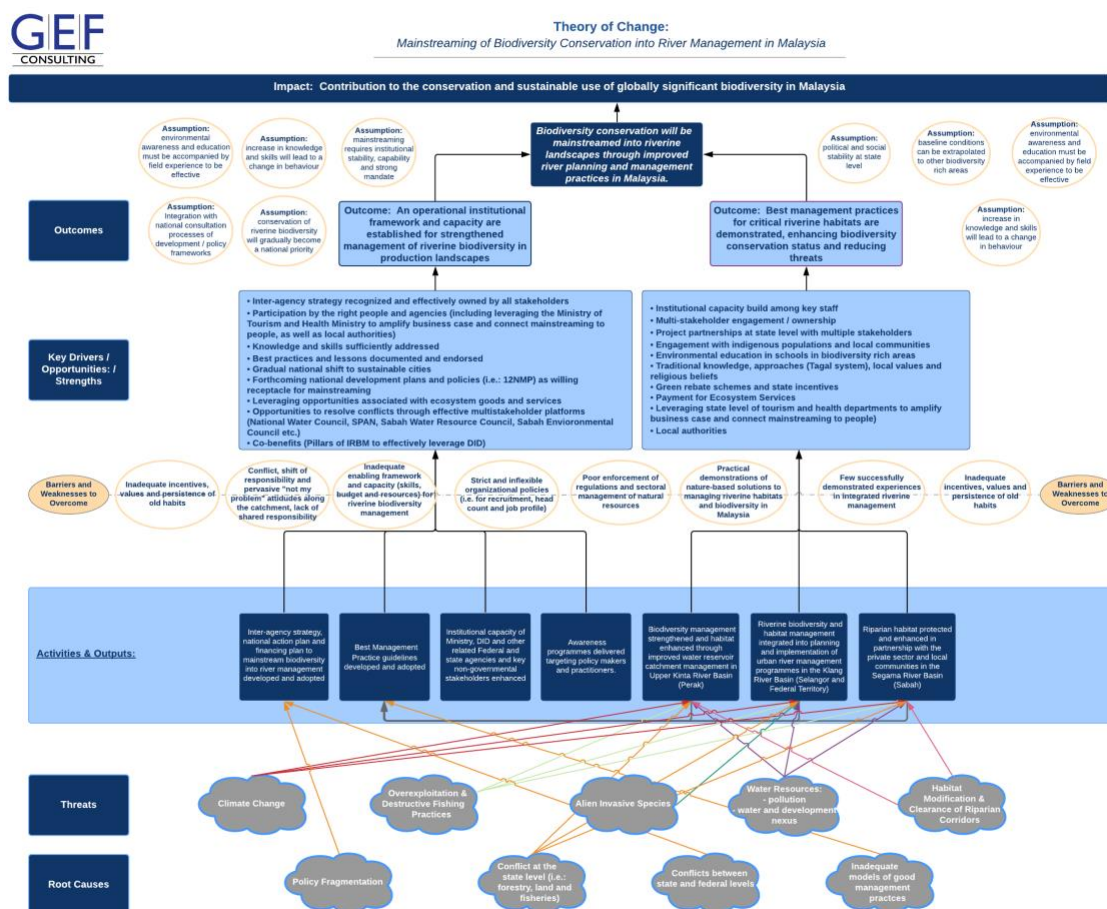
¹⁸ P. 41, para. 91, Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. 12 November 2019.

¹⁹ P. 42, para. 93, *Ibid*.

²⁰ See Annex 14 for a comparison between technical and adaptive challenges.

“Mainstreaming Biodiversity Conservation into River Management”; “The Riverine Project”
PIMS 5281, UNDP-GEF & Ministry of Environment and Water (KASA) Malaysia.
Terminal Evaluation, Final Report, 25th February 2022

Diagram 1 Independent Rapid Review Theory of Change



Source: Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. GEF Consulting Inc., 12 November 2019.

3 Findings

3.1 Project formulation and design

75. According to the 2019 IRR, *“the Project has had a long and complicated evolution having initially tried in 2013, albeit unsuccessfully, to secure GEF STAR Country Allocation for this initiative. The Project entered the GEF pipeline only when surplus funds from Malaysia’s STAR Allocation became available and a PIF was subsequently approved on 20 May 2014 under the GEF-5 replenishment. The Project secured a Project Preparatory Grant of USD 60,000.00 with the design phase lasting until 25 June 2015 to address the remaining issues preventing technical clearance. The Project was subsequently approved by the GEF CEO on 27 July 2015.*
76. *The impetus for the project was borne out of a desire by the former UNDP-CO Program Officer to undertake a project that was innovative, would benefit the country long-term and address a dimension of biodiversity that is under explored and not sufficiently appreciated. Mainstreaming of riverine biodiversity was ultimately selected as the theme after lengthy consultations and buy-in from senior-level counterparts within NRE and DID at the time.*
77. *The justification of the pilot demonstration initiatives was to move away from traditional standalone projects which are often disconnected from other activities, and ensure, by design, that any results would feed into and benefit a much larger and important process. The foundation for the site initiatives was the previous work and subject matter expertise of the GEC in raising awareness on riverine and riparian habitats, as well as the benefits to the biodiversity and water quality of managing these systems in a more holistic and integrated manner through nature-based solutions”²¹.*
78. The project design appears to have been based in a need to address an overlooked biodiversity issue (riverine biodiversity) through an innovative and integrated approach (mainstreaming). Given the socio-political/ administrative, economic and ecological complexities of river management in Malaysia giving rise to the objective of mainstreaming the conservation of riverine biodiversity into the mandates, skill sets, operational procedures and working practices of all interested parties. In this sense, it was responding to issues identified in the National Policy on Biodiversity²² (BSAP).
79. The project’s logic was that riverine biodiversity “fell between the gaps” to a large extent lacking an institutional home, regulatory framework and spatial protection and there was a lack of demonstrable and practical approaches to address the many conservation challenges of riverine biodiversity. As a result, and due to the interconnectedness of rivers to other land uses, and degradation; loss of riverine biodiversity was occurring by default.
80. The solution to this, proposed in the Project Document, was to mainstream biodiversity (specifically riverine) within the mandates, skill sets, operational procedures and working practices of all interested parties and to test approaches and technologies at three pilot sites.
81. It should be noted that at the time of the project’s design, there was not a body work to support the process of mainstreaming that exists today²³ to guide the theoretical development of the project strategy. Published analysis of mainstreaming approaches and evaluations of the experience up to this point in time would only be available after the project had started in 2016.

²¹ Pp. 23 – 24, para. 58 – 60, Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. GEF Consulting Inc., 12 November 2019.

²² Ministry of Science, Technology and Innovation, Malaysia, 1988

²³ *Inter alia*: the 2018 evaluation of GEF’s Support to Mainstreaming Biodiversity at:

https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C.55.inf_02_Biodiversity_Mainstreaming_Evaluation_Synthesis_Report%20Nov_2018.pdf

And; OECD (2018), Mainstreaming Biodiversity for Sustainable Development, OECD Publishing, Paris.

<https://doi.org/10.1787/9789264303201-en>

82. The resulting design has much in common with a number of other GEF-funded mainstreaming projects developed around the same time. That is, a component or outcome to address the national policy-regulatory and institutional framework to create a supportive enabling environment and another component to test the veracity of the project interventions and technologies at the field-level through pilot sites. However, unlike most of these other projects it did not include a third component for capacity building. Capacity building was instead imbedded in the strategic review of the institutional and policy landscape in Outcome 1 and the demonstration sites of Outcome 2.
83. The Project Document reasonably identified five threats (see section 2.3 this report) to riverine biodiversity and two barriers to addressing these. As stated in section 2.6 and the retrofitted (IRR) TOC and articulated in the Project Document (p. 48, section 2.1, para. 97 – 100) it was proposed that developing an inter-agency strategy would provide:
- The foundation for coordinated planning and management including enforcement and compliance monitoring mechanisms.
 - Build capacity of key institutions responsible for different aspects of river management to be strengthened.
 - Integrate and demonstrate riverine biodiversity management in three different settings in Peninsular Malaysia and Sabah.
 - Help to catalyse support from both private and public sectors as well as local communities towards conservation objectives in the project demonstration areas.
 - Provide a mechanism to use such support to generate sustained long-term improvements in riverine biodiversity.
84. While the Project Document correctly identified the weaknesses and inefficiencies in the institutional, policy and regulatory framework, it did this through a narrow focus on riverine biodiversity. This placed a considerable emphasis on a *multi-stakeholder strategy for mainstreaming biodiversity into river management*. Presumably, this would be a guiding map to achieve all the other things that the project needed to do. However, this one task, in itself, is a considerable undertaking and possibly goes to the very heart of *mainstreaming*, that is; it is not easy, it is complex and at times, even, complicated. Furthermore, it exposes the challenges of attempting a reform process through a time-bound project through the narrow lens of a single issue – riverine biodiversity – which is itself a component of a much larger and interconnected set of socio-political, economic and ecological drivers. The multi-stakeholder strategy would need to provide the road map for structural changes in governance as well as identifying capacity gaps and provide the enabling environment to both test reforms in the pilot projects and feedback experience into the reform process.
85. An unstated assumption in the design, and one common to a number of GEF-funded mainstreaming projects of this era was that a medium-sized project itself would be sufficient catalyst to drive what is essentially a reform process without a specific “tool” to provide the “interstitial” material which would glue these discrete activities together. Without explicitly providing a process tool to coordinate this, there was likely to be a considerable coordination and facilitation burden on the PMU and most likely, on the Project Manager.
86. Project execution was to be through national implementation modality (NIM). However, following the IRR the UNDP has provided considerable support to the PMU with the PM and Project Assistant (PA) being directly contracted by the UNDP and with assistance to some areas of procurement.

3.2 Analysis of Results Framework

87. The overall objective defined in the Project document was reasonably defined with biodiversity conservation and use through the institutional, policy and regulatory and organisational

framework for biodiversity management. These are well within the framework of GEF’s global benefits on biodiversity that include²⁴:

- Conservation of globally significant biodiversity;
- Sustainable use of the components of globally significant biodiversity.

88. The Outcomes and outputs have remained largely unchanged throughout the PIF stage to the Project Document.
89. Within the two outcomes there is a component for addressing the policy and regulatory framework (the enabling environment) and a component to test innovations at the field level through pilot projects. However, unlike most other GEF mainstreaming projects designed around this time, there was no outcome or component addressing the capacity building aspects of mainstreaming riverine biodiversity.
90. However, elements of the objective would have been better placed in an outcome, with separate, more objective-related indicators for the objective which reflect elements of outcome 1 and 2. giving the project a three-component arrangement (notwithstanding the time it would take to filter down to demonstration):
 - i. Enabling environment.
 - ii. Capacity building.
 - iii. Demonstration.

3.2.1 Indicators and Targets

91. As already stated, there was a significant revision of the project’s strategic results framework (SRF) with rewording of the project objective and outcome 1 and the removal of outcome 1 indicators 1.3, 1.4 and 1.5 and in outcome 2 indicator 2.2(i). The reduction in the number of indicators was a reasonable move, and one recommended by the IRR, given that the original SRF was extremely complicated²⁵.
92. Some of the indicators dropped included biological indicators which had little utility in a four-year project given that biological systems operate on much larger timeframes than projects and furthermore; correlating project interventions with biological changes on this scale has little utility and any correlations are likely to be spurious. Furthermore, there were cost implications related in data acquisition of the indicators²⁶.
93. However, many of the same weaknesses in the SRF are carried through to the revised SRF in a number of ways. For instance, the original objective “*to mainstream biodiversity conservation into riverine landscapes through improved river planning and management practices in Malaysia*” becomes “*to **commence a process** towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia*”. There is considerable ambiguity in the phrase “*to commence a process*” which makes the objective indistinct – both in defining a *process* and delimitating what it is to *commence*. Given that the IRR had provided a very credible TOC for the project which clearly illustrated the stages and pathways necessary for the project it would have been clearer, or more objective, to use the root causes identified there to phrase the overall project objective. “Commencing a process” has an element of prevarication or ambiguity about it which makes it a less decisive statement and much harder to define. Notwithstanding this, the changes to the SRF were approved by the GEF.

²⁴ <https://www.thegef.org/documents/global-environmental-benefits>

²⁵ There are limitations to the extent in which a SRF can be adjusted. Project governance bodies, and independent reviews (the IRR for this project or MTR for FSPs) have to adhere both to GEF Guidelines on project and programme cycle and corresponding policies, as well as UNDPs adaptive management guidelines and POPP for programmes and projects.

²⁶ the UNDP-CO Program Officer undertook some due diligence at the outset of the project to determine the cost of developing one indicator related to one species of fish to be in the range of US\$ 500,000.00; clearly unrealistic with the budget available and not a wise use of funds. IRR Report p. 44.

94. The original expectation was clearly not achievable, most likely even without the challenges that the project had faced and it was therefore quite reasonable to modify those expectations by adjusting the objective, the issue lies in the vagueness of “commencing” and “a process” which were already more clearly identified and described in the IRR TOC.
95. An analysis of the post-IRR SRF²⁷ shows similar weaknesses appear in wording of the indicators at outcome-level as well. Many indicators include adjectives (e.g. “increasing” or “decrease in...”) that insert a directional bias in the indicator statement which really belongs in the target, or not at all in a SRF. Additionally, the indicators, in many instances appear to either re-state the targets or describe the outputs or include the means to measure (e.g. the GEF Tracking Tool in the description of the indicator the tracking tool is a means to measure the indicator and the target should be the predicted score).
96. Therefore, most of the indicators lacked the utility for monitoring progress and achievement towards the project objective leaving the SRF more output-orientated than strategic in nature. For instance, the inclusion of multiple and largely unrelated targets for each indicator is confusing which is caused in large part by including elements of the target in the description of the indicator itself.
97. In summary, both the original Project Document and the revised SRF were weak monitoring and evaluation tools and would have provided little in the way of guidance to anyone trying to assess the progress and impact of the project in terms of the process.
98. The project design, as already noted sought to address the larger policy and institutional framework (component 1 and objective in the SRF) and test practices in the field at three sites (component 2). Unlike many other mainstreaming projects there was not a component expressly addressing the capacities of institutions and other stakeholders to manage riverine biodiversity in its broadest sense, although institutional capacity development appears to be an integral part of both components including capacity assessments of agencies directly or indirectly involved in riverine biodiversity. It is reasonable to surmise that this was a critical weakness of the project design, particularly as the Executing Agency, the DID, did not have biodiversity as part of its mandate. This was a critical oversight in the design which would be brought into sharp focus following the restructuring of the MNRE and MEW which led to the repositioning of the DID in the latter Ministry (with MEW only from early 2020 so it should be later part of the project). Capacities to manage riverine biodiversity were correctly identified as being very low to absent in some key agencies in the Project Document, however, there was no dedicated component and resources allocated to this task within the design. While capacity assessments were required of various agencies²⁸ this does not appear to have been given a high priority, both in terms of its strategic importance to the project, and in terms of resource allocation, leaving an impression that capacity building was either overlooked in importance or expected to be a passive process.
99. As is common to many of these project designs, perhaps in the febrile rush to produce a Project Document, the process of mainstreaming within the overall strategy of the project overlooked the logical sequencing of components. Simply put, the project timeframe and strategy as articulated in the SRF and contrasted with the Project Document narrative, suggests that, either this wasn't such a big problem or; the solution was easy. Neither of which appear to be true and suggests a degree of expedience between the project expectations, project strategy, level of resources available and timeframe.
100. The resulting project strategy while reasonably articulated in the narrative of the Project Document did not transcribe to the project's SRF – which is essentially the “nuts and bolts” of the project – because there was a disconnection between the enabling environment (outcome 1),

²⁷ The present SRF was not a product of the IRR which provided broad recommendations on reducing the number of indicators (Annex 12 IRR Report).

²⁸ These were not carried out until after the IRR in 2021

and the pilot projects (outcome 2), in terms of sequencing, capacities, and the timeframe, and what was expected of the project – a synergy in the way that different parts of government worked together for a common purpose – which was unlikely to be catalysed by a shared desire to conserve riverine biodiversity (critically important though it is). In short, too much was expected from the project.

3.2.2 Cross-cutting Issues

101. Cross-cutting issues which might reasonably be expected to be included in the project and also captured in the monitoring include:

- Gender responsiveness: The Project Document does not specifically identify women in the stakeholder analysis. However, the Social and Environmental Screening Procedure (SESP) does raise the issue of gender giving a project score of 2 as per the ATLAS gender marker. The SESP makes a much stronger case for the inclusion of gender (participation, representation) indicators and targets²⁹ in the project monitoring and evaluation framework than is actually carried through to the Project Document and post-IRR SRF.
- Poverty reduction and sustainable livelihoods: There is an assumption that addressing the ecological health of rivers and biodiversity will contribute to poverty reduction and sustainable livelihoods. The project’s most direct impact in this sphere would have been through the component 2 pilot projects several of which had elements of livelihood interventions. However, the SRF does not provide convincing indicators that this can be accurately assessed in terms of impacts. The Segama River pilot site (Sabah) appears to incorporate the project livelihoods activities in to the ongoing programmes of the responsible party providing a convincing case for achieving an impact, however, this had yet to be demonstrated at the time of the TE. The Klang River site has also established some tree nurseries and vegetable gardens. The establishment of a 13km river trail is expected to open up opportunities for the community for income development related to homestay, handicrafts as well as trekking and guiding³⁰. The Upper Kinta site has established tree nurseries within local communities with the expectation to provide material for future bioengineering³¹. However, one indicator includes the “*number of households in target communities involved in implementing project activities (such as tree planting) on a paid basis*” which raises questions about the long-term sustainability of any impact on livelihoods and the ecosystem.
- Preparation to cope with disasters or mitigate climate change risks, climate change mitigation and adaptation: Although the project is a medium-sized project the cross-cutting nature of mainstreaming, the “holistic” approach towards environmental management arguably provides opportunities to link with disaster risk management and larger initiatives addressing climate change. The project’s strategy, while in places alluding to these opportunities, does not make a convincing case for this. This may not necessarily be a design weakness but relates more to a conceptual weakness of focusing on a “single issue”, riverine biodiversity loss, through a mainstreaming process which is itself part of a

²⁹ “Project monitoring and evaluation includes targets and indicators relating to the participation of ILCs and gender representation, and these will be applied with particular attention to activities at the demonstration sites”. Project Document SESP.

³⁰ Based on the demonstrated skills for trail construction, camp set-up and guiding of the Orang Asli from Kg Makmur during the GEF financed biodiversity surveys in 2020, GEC secured funds from the Ministry of Finance/Yayasan Hasanah in 2020-2022 to support the community to develop a 13km long Eco trail to Gunung Korbu in the upper catchment of the UKB (in line with the recommendation of the UKBMaS). Source: GEC, feedback comments on the first draft TE Report.

³¹ In feedback on the first draft TE Report the GEC noted that “there were no dedicated livelihood enhancement funds included in the contract provided to GEC”.

much larger inter-connected systemic inefficiency. There are gender targeted indicators in Outcome 2 but no gender responsive targets in the SRF.

Table 3 Project Indicator Analysis

Indicator	End-of-Project Target	TE SMART Analysis					TE Comments
		S	M	A	R	T	
Objective Indicators: To commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia.							
Riverine biodiversity conservation is mainstreamed into river management policies, regulations and plans involving related sectors, as indicated in the GEF Biodiversity 2 Tracking Tool.	Proposed integration of biodiversity in the draft stage of any policy such as: a) National Agrofood Policy (will be reviewed in 2020); b) National Action Plan on Invasive Alien Species (IAS) (in preparation); c) National Environmental Plan (under review, to be completed in Dec 2019); d) National Policy on the Environment (in preparation); e) National Physical Plan (to be reviewed in 2020); f) National Forestry Policy (to be completed in 2020); g) National Water Resources Policy (under review, to be completed in 2020); and h) Sabah and Sarawak’s riverine-related policies	x	✓	✓ 32	✓	✓	Indicator remains vague with the issue of “mainstreaming” and includes means of measurement (GEF TT). Target is ill-defined in terms of description (e.g. “proposed integration”. Indicator re-states the objective although there is a conflict between “to commence..” (objective) and “is mainstreamed...” (indicator). Shared targets suggest that the target is not a good measure for the indicator or <i>vice versa</i> . Targets should be indicator specific. Indicator targets reflect specific policy instruments and not communication process. Targets do not imply full achievement of the indicator (e.g. a biodiversity chapter in each policy document does not imply a full strategy <i>per se</i>). Participation should be disconnected from the strategy and measured by a separate indicator.
A multi-stakeholder strategy for mainstreaming biodiversity in river management, developed through a participatory process.		✓	✓	✓ 33	✓	✓	
Outcome 1 Indicators: An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes							
1.1 Availability of guidelines on slope stabilization, pollution control and riparian zones that systematically	(i) guidelines for management of riverine biodiversity developed, adopted and made widely available for application by KATS and DID.	✓	✓	✓ 34	✓	✓	Indicator, target and output 1.2 <i>Best Management Practice guidelines</i>

³² The TE considers that this is achievable but questions whether it was possible within the timeframe of the project.

³³ The TE considers that this is achievable but questions whether it was possible within the timeframe of the project.

³⁴ The TE considers that this is achievable but questions whether it was possible within the timeframe of the project.

Indicator	End-of-Project Target	TE SMART Analysis					TE Comments
		S	M	A	R	T	
address the management of riverine biodiversity in the Malaysian context							<i>developed and adopted</i> are all the same. Wording of indicator is confusing (e.g. "in the Malaysian context")
1.2 Improved capacities at key departments of national and state responsible riverine biodiversity conservation as shown by an increase in the Riverine Biodiversity Capacity Development Scorecard	(i) Score on the Capacity Development Scorecard increases by 50% by end of project (ii) Agencies/section(s) responsible for riverine ecosystem/biodiversity management are clearly specified at national (level).	✓	✓	✓	✓	✓	Indicator has elements of a target and target (i) are the same. Target (ii) appears unrelated to indicator. Indicator includes adjective "improved..."
Outcome 2 Indicators: Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats							
2.1 Pilot demonstration 1 in upper Kinta Basin improves status of riverine biodiversity through strengthened watershed management, indicated by: (i) demonstrating at least 1 site of erosion mitigation through a bioengineering approach (bamboo or enrichment planting). (ii) at least 5-10 communities actively monitoring and participating in related events.	(i) At least 1 site established and demonstrated using bioengineering techniques. (ii) 5 communities actively monitoring on quarterly basis.	x	x	✓	✓	✓	Indicator restates targets as well as including specific targets in the indicator statement. The indicator is, in itself, too broad. Effectively it is representing the entire intervention (pilot) in the indicator. There is no measure of the number of best practices that are expected. Indicator is too confused – targets do not fit or partially fit the indicator.
2.2 Riverine biodiversity management integrated into planning and implementation of the Klang River of Life Programme, indicated by: (ii) physical enhancement of riverine and riparian habitats in the Klang River are benefiting riverine biodiversity (iii) awareness levels concerning the risks posed by aquatic alien invasive species (AIS).	(i) Riverine habitats will be enhanced at the following four sites: S1: Kampung Taman Warisan, S2: Bukit Kiara (Sg Penchala), S3: Sg Gombak (KRT Seri Terengganu), S4: Taman Melawati (ii) At least 50 percent awareness of Aquatic Alien Invasive Species (AIS) risk among targeted registered aquarium shops and angler's association/groups	x	x	✓	✓	✓	Indicator is either an output of a target. As above – indicator includes targets and terms such as "enhancement". These are not specific enough. Similarly, with the targets – "enhanced" and "awareness" – awareness is hard to measure but might be used as an indicator itself if there is a means to measure the indicator (e.g. a Knowledge, Attitudes and Practices (KAP) survey), otherwise

Indicator	End-of-Project Target	TE SMART Analysis					TE Comments
		S	M	A	R	T	
2.3: Pilot demonstration 3 in Sabah enhances: (i) Length of riparian zone conserved along Segama River (ii) Engagement of local communities in river monitoring and conservation	(i) at least an additional 20km of riparian habitat enhanced/ conserved by end of project period. (ii) At least 20 villagers from targeted village involved in river monitoring / conservation	x	x	x ³⁵	✓	✓	"awareness" lacks utility as a SMART indicator. Indicator is poorly worded. It refers to the entire pilot project and uses ambiguous term "enhances". Similar mix of targets and outputs in the indicator.
2.4 Four Community involvement at the demonstration sites provides socio-economic benefits to local communities and proactively engages women in the communities, indicated by: (i) number of households in target communities involved in implementing project activities (such as tree planting) on a paid basis; (ii) proportion of women participating and benefiting from sustainable livelihood groups supported and facilitated by the project	Site 1: Orang Asli from at least 20 households trained and receive income from tourism and slope protection and rehabilitation activities; Site 2: At least 20 households actively participate in community groups promoting river quality improvements Site 3: At least 20 households trained and receive income from tourism, handicraft and seafood processing activities At least gender equity achieved in all sustainable livelihood activities through engagement of female facilitators for community groups	✓	✓	✓	✓	✓	Parts (i) and (ii) are indicators but indicator statement is unnecessarily wordy. However, indicator has a serious problem in that it indicates that it measures project activities (on a paid basis). In this sense it is timebound and not necessarily sustainable. It does not measure an output/ outcome as such, but an activity.
SMART: Specific, Measurable, Achievable, Relevant, Time-Bound							
Green: SMART criteria compliant; Yellow: questionably compliant with SMART criteria; Red: not compliant with SMART criteria							
x Not SMART		✓ SMART					

³⁵ The TE considers that this is achievable but questions whether it was possible within the timeframe of the project.

102. Capacity development activities: Again, much is expected of a medium-sized project and has been already noted in this report, other mainstreaming projects of the same era tended to have component / outcome dedicated to capacity development (gap analysis³⁶ and capacity building activities). The Project Document makes provision for a capacity assessment study as part of outcome 1 although this does not seem to have been carried forwards following the IRR.

3.2.3 Assumptions and Risks

103. Eight risks were identified in the Project Document. These are presented in Annex 15. The TE has made minor comments on most. One risk related to protected areas was probably unnecessary for inclusion in the risk log. The weaknesses in the risk log identified by the TE mostly relate to the means of mitigation which either: indicated mitigation measures that were not within the projects allocated resources envelope and were subsequently not carried through to the implementation or, required project outputs and outcomes, which would only be realised at the end of the project’s implementation in order to mitigate them, that is, an end of project output / outcome was necessary to address and implementation risk.
104. A risk which was not identified was the institutional restructuring which saw the DID move between parent ministries from the from the NRE to KATS (2018) and then to the MEW (2020) which in itself altered the institutional mandate, capacities and powers within which the Executing Agency was nested as well as having a profound effect on the start-up. It would not be unreasonable to have identified, at least in some form that institutional restructuring might pose a risk (or an opportunity) to a mainstreaming project.
105. Given that this was a medium-sized project with very high expectations there was invariably going to be a high reliance on the co-financing. There are invariably delays in any project’s start up and when one is so dependent upon co-financing and ongoing projects and programmes, the risk of any delays affecting the availability of that co-financing should have been identified and given an operational medium to high risk with some form of mitigating back up plan in place.
106. There were three assumptions articulated in the SRF. In reality, a GEF project intervention conceals a much higher number of assumptions because they are dealing with complex socio-ecological systems. The three assumptions, objective, outcome 1 and outcome 2 were:
- Malaysia’s federal and state governments are committed to the conservation and sustainable use of the country’s riverine biodiversity resources and the introduction of a national framework for inter- sectoral collaboration.
 - Federal and state government support exists for the introduction of a national framework for mainstreaming biodiversity conservation into river management.
 - State government support exists for riverine biodiversity conservation and the engagement of other stakeholders.
107. These are surprising assumptions given that the project was through NIM modality and there was considerable co-financing commitment made by the government to the project. In reality there were other, more critical assumptions, in the project strategy such as the capacities of project partners (the Capacity Scorecards were to be completed once the project started so it is reasonable to state that capacity was something of an unknown), there were assumptions about the ability of the DID to drive the changes within other agencies and organisations – was it vested with sufficient authority and regulatory powers to drive the necessary change? the relationship between federal and states and, critically, there was an assumption that component 1 and 2 could take place concurrently when a more realistic sequencing would have put in place a strategy

³⁶ It should be noted that the Capacity Score Card is not a capacity gap analysis. It serves primarily as a monitoring tool and less as an analytical tool.

mapping out the subsequent steps necessary for changes which would provide an enabling environment and the effective implementation of the pilot projects.

108. At the time that the project was designed, the use of the SESP was relatively new for GEF projects and it is likely that the attention given to screening was less detailed than it ought to have been and what it might be expected to be today. Risks such as gender, human rights, social and indigenous people rights, were rated as low at the time but the SESP is now given much closer scrutiny (including revised guidance) which would have raised these risks to medium and likely required a more robust plan for gender and indigenous people including FPIC.
109. The Covid-19 pandemic was not foreseen at the time of the project’s design and could not have been expected to be included in the project’s risk assessment. But it was added to the risk register.
110. An assessment of the project’s risk ratings is provided in Annex 15.

3.2.4 Lessons from Other Projects Incorporated into Project Design

111. While the Project Document does appear to identify ongoing projects in riverine biodiversity management, these are mainly concerned with the component 2 pilot projects and it is not clear whether the lessons from these other interventions were utilised, although it is likely that their experience formed the basis of the three pilot projects under component 2. There does not appear to be much evidence of utilising other intervention experience in component 1. Whether this is because there was a dearth of projects regionally focusing on riverine biodiversity and, as has been previously noted, little in the way of mainstreaming activity at the time, is not entirely clear however, it is not unreasonable to surmise that this may point to component 1 being secondary to component 2 in terms of implementation understanding.

3.2.5 Planned stakeholder participation

112. The project document provides a stakeholder analysis³⁷ and a comprehensive stakeholder engagement plan³⁸. To what extent this was agreed and negotiated during the project design phase is not clear. With any mainstreaming project there are a large number of stakeholders and acceptance of the project objectives and outcomes by these stakeholders, the “buy-in”, is critical because the tasks, roles, responsibilities of a mainstreaming process may easily lie outside an organisation’s mandate, skills and experience and working practices. This would require clearly identifying which organisation would drive / lead the process, whether it had sufficient mandate, powers and capacity to drive changes as well as identifying those other sectors, institutions and organisations into which it would mainstream and understanding, *inter alia*, their institutional motivation and needs³⁹.
113. Mainstreaming is a multi-level governance issue encompassing policy and planning conformity with far-reaching implications on resource allocation, human resources and institutional mandates within government institutions which are, by their very nature, conservative and protective of their mandates, they have to be. To what extent this has impacted on the project because of the initial delays and to what extent it is a fundamental weakness in the design is debatable. However, in the allocation of resources within the project only 37% of the available budget was allocated to outcome 1 suggesting that the stakeholder analysis and engagement plan was inadequate for the process required to mainstream.

³⁷ Project Document pp. 37 - 39

³⁸ Project Document pp. 224 - 234

³⁹ For further reading see, *inter alia*: Evaluation of GEF’s Support to Mainstreaming Biodiversity, GEF/ME/C.55/Inf.02, GEF Independent Evaluation Office. November 26, 2018 *and*; OECD (2018), Mainstreaming Biodiversity for Sustainable Development, OECD Publishing, Paris *and*; The Nature of Policy Change and Implementation: A Review of Different Theoretical Approaches Lucie Cerna, Analyst, OECD 2013

114. Insufficient attention was given to the capacities of stakeholders in relation to biodiversity policy, planning and management although it is worth noting that the project preparation stage would have lacked the resources and time to carry out capacity assessment and gap analysis on the various stakeholders. Although this was one output, providing a third component which explicitly recognised the stakeholder capacity issues would undoubtedly have strengthened the stakeholder engagement and provided greater clarity and support for the developing the mainstreaming strategy (output 1.1 as well as 1.3 and 1.4).

Table 4 Stakeholder influence (Project Document)

	Low Influence	High Influence
High Impact	National Environmental NGOs (e.g. GEC, MNS, WWF-Malaysia, WildAsia, Wetlands International - Malaysia, etc) National Social NGOs (e.g. Eco-Melawati, COAC, JOAS, PACOS) Local Community Organisations (Village Development and Security Committees - JKKK)	Ministry of Natural Resources & Environment Ministry of Plantation Industries & Commodities Drainage & Irrigation Department Department of Wildlife and National Parks (State level) Department of Fisheries Department of Forestry Department of Environment State Government (Executive Council) Land Owners & Licence/Concession Holders Local Authorities (District Councils)
Low Influence	International NGOs Universities	Ministry of Housing & Local Government National Land Council National Physical Planning Council Media Donors

3.2.6 Linkages between project and other interventions within the sector

115. The Project Document indicated linkages with four planned or ongoing GEF-funded projects with coordination being through the MNRE and the EPU (State and Federal). These were:
- UNDP/GEF Improving Connectivity in the Central Forest Spine (IC-CFS)
 - UNDP/GEF National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan in Malaysia
 - UNDP-GEF Enhancing the management effectiveness and financial sustainability of protected areas
 - UNDP/GEF Biodiversity Conservation in Multiple Use Forest Landscapes in Sabah, Malaysia.
116. Other projects and programmes included a range of initiatives with linkages to Living River/1S1R Programme of DID (Kinta River) and the River of Life Initiative (Klang River) which were also included in the project’s co-financing forecast. In Sabah, the project was to be linked to the implementation of the Sabah Strategy and Action Plan for Enhancing Water Quality in selected rivers in Sabah as well as on-going work for the conservation of the lower Kinabatangan/ Segama Rivers coordinated by the Sabah Wildlife Department and Sabah Forestry Department.
117. Linkages were identified with the relevant multilateral/bilateral funded projects such as the European Union (EU) supported work to facilitate Community-based REDD+ activities in the Kinabatangan River Corridor and JICA supported activities at the Lower Kinabatangan-Segama Ramsar site and the work of GEC’s River Care Programme which was ongoing at the time of the design phase.
118. The upper catchment of the Segama River, the Stability of Altered Forest Ecosystems (SAFE) Project was researching the effects of different widths of riparian buffer strips of forest on waterways as part of its Watersheds component and a representative of SAFE was to be included in the project’s technical advisory committee.
119. However, the delays experienced by the project, in starting up and then the subsequent hiatus in implementation meant that many of these initiatives had ended by the time the project got

properly underway. Furthermore, in some instances their prominence most likely relied on a much larger involvement of the GEC in both components of the project.

3.2.7 Management arrangements

120. Implementation was intended to be through a national implementation modality (NIM). Originally in the Project Document the Implementing Agency is the UNDP Malaysia, the Executing Agency is the Department of Irrigation and Drainage (DID), under the Ministry of Natural Resources and Environment. However, in 2018 the MNRE was restructured creating two new ministries with environmental mandates, the *Ministry of Water, Land and Natural Resources* (KATS) and the *Ministry of Energy, Science, Technology and Climate Change*. The GEF Focal Point was placed in the Ministry of Energy, Science, Technology and Climate Change whereas the project went under the Ministry of Water, Land and Natural Resources primarily because the lead implementing partner, DID, was placed in this new ministry.
121. The uncertainty surrounding the re-structuring of the institutional framework in which the project was embedded resulted in a lack of ownership⁴⁰ in the early years of the project and likely added to a confusion and inertia experienced by the project.
122. As the project is placed under the ambit of the River Management Unit of the DID, the Director of the River Management was appointed as the NPD.
123. In the Project Document the GEC played a much greater role in the implementation, being cited as; “it will act as a co-implementer with DID⁴¹” and “Component 2 will be coordinated by site level Project Implementation Units (PIUs). In each case, the site PIU will be hosted by DID and technical assistance will be provided by the Global Environment Centre (GEC), a local leading non-profit organisation working on water resource and river management in Malaysia”. The activities of the PIU was to be overseen by a small technical committee chaired by the State Executive Committee Member responsible for environmental and water affairs.
124. When the current project was first developed by GEC, DID and NRE in early 2013, it was envisaged as a CSO-executed Medium-sized project⁴². However shortly before its formal endorsement and submission it was changed by UNDP to be a joint government-CSO executed project with NRE/DID to take the lead especially on policy issues and GEC to provide technical support and facilitate community and other stakeholder engagement particularly at demonstration sites⁴³. Following the start-up of the project the management arrangements were again changed and the GEC became a Contractor under Outcome 2 for two of the demonstration sites.
125. The management and governance arrangements for the project included the following structures:
 - i. A National Steering Committee (NSC) was to be established to serve as the project’s coordination and decision-making body and comprising of the relevant national and state agencies, NGOs and private sector. It would be chaired by the Secretary General of the MNRE. Membership included nine Federal agencies, representation from the

⁴⁰ p. 40, Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. 12 November 2019.

⁴¹ Project Document – stakeholder arrangements.

⁴² There appears to be confusion surrounding the management arrangement. The FSP/MSP Review Template shows a comment dated 03/05/2014: “The project mentions the participation of CSOs, however further details on how they will be involved in consultation/coordination mechanisms as well as how they will profit from on-the ground activities”. Two undated copies of the project’s Inception Report are slightly different with a statement “Under usual scenario, the project begins implementation after receiving the GEF CEO endorsement. However, the project signing by GEF focal points and implementing partner suffers from an extended delay of 1.5 years after the GEF endorsement. This is due, in part, to changes in implementation modality”. This statement is made in the Word copy and missing in the pdf copy.

⁴³ GEC comments on the first draft TE Report.

- demonstration sites in Sabah, Perak and Selangor, the UNDP and the GEC. The NCS had a wide range of responsibilities⁴⁴.
- ii. A Technical Working Group (TWG) which would be chaired by the PPD and advise the PMU and comprised of many of the same agencies and organisations included in the NSC⁴⁵.
 - iii. A Project Management Unit (PMU) housed in the DID comprising a national Project Manager (PM), a Project Assistant and support from additional DID staff. The PMU was responsible for the day to day management of the project⁴⁶.
126. The strategy appears to have been to have a small PMU (without specific technical positions) and facilitate the activities in other institutions and through the demonstration pilot projects.
127. However, this appears not to have worked and it overlooked the inertia in bringing about institutional change, the time-consuming nature of facilitation (coordination, coalition building, consensus-making, etc..). Furthermore, the DID had not been involved in implementing a GEF project before, especially one as complex as a mainstreaming project and it would appear that there was an under-estimation of the complex project cycle management procedures, the time involved in facilitation and the existing workload of DID staff.
128. Following the 2019 IRR substantive changes were made to the PMU with the UNDP engaging a substantive PM and Project Assistant. While the PMU still remained in the DID and the NSC remained the same.

⁴⁴ (i) overseeing project implementation; (ii) approving annual project work plans and budgets, at the proposal of the Project Manager (PM) and working with UNDP, for submission to EPU; (iii) approving any major changes in project plans or programmes; (iv) providing technical input and advice; (v) approving major project deliverables; (vi) ensuring commitment of resources to support project implementation; (vii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any parties beyond the scope of the project; (viii) overall project evaluation and (ix) ensuring that UNDP Social and Environmental Screening Procedure safeguards are applied to project implementation

⁴⁵ With representation from NRE, EPU, DID, Fisheries Department, Wildlife Department, Forestry Department, Environment Department, GEC, RSPO, other CSOs and technical experts engaged in riverine biodiversity conservation (e.g. university experts, SAFE project staff), and other relevant stakeholders to be determined by the NSC.

⁴⁶ (i) preparation/updates of project work and budget plans, record keeping, accounting and quarterly and annual progress reporting; (ii) drafting of terms of reference, technical specifications and other documents as necessary; (iii) identification, proposal of project consultants to be approved by the NSC, coordination and supervision of consultants and suppliers; (iv) organization of duty travel, seminars, public outreach activities and other project events; and (v) maintaining working contacts with project partners at the central and local levels.

Figure 1 Planned implementation arrangements

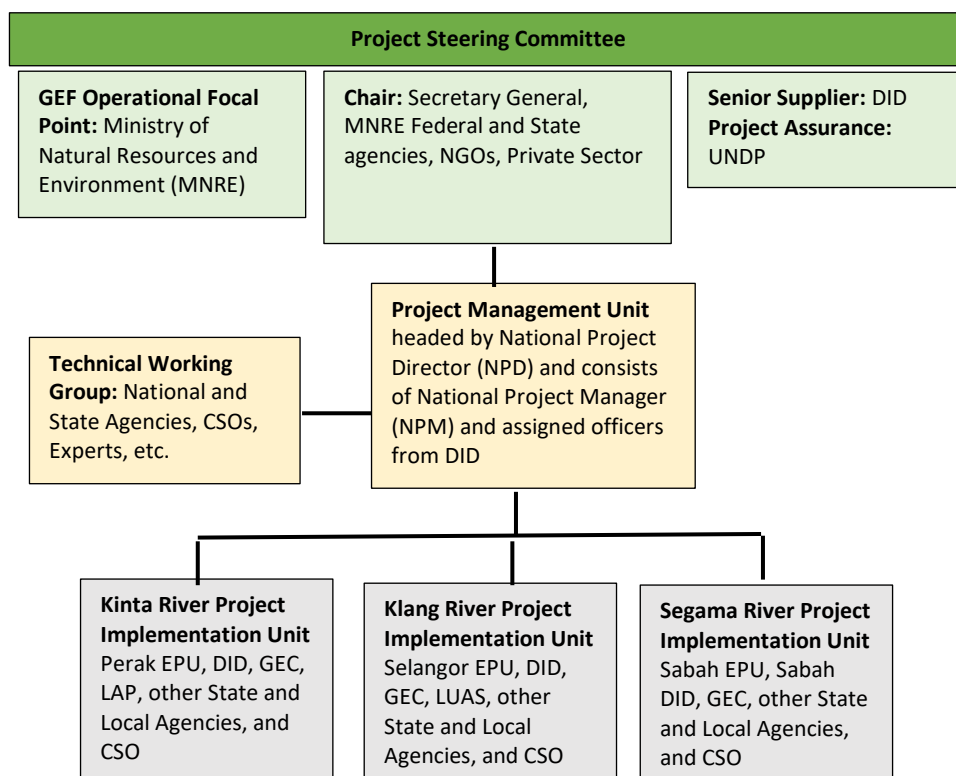
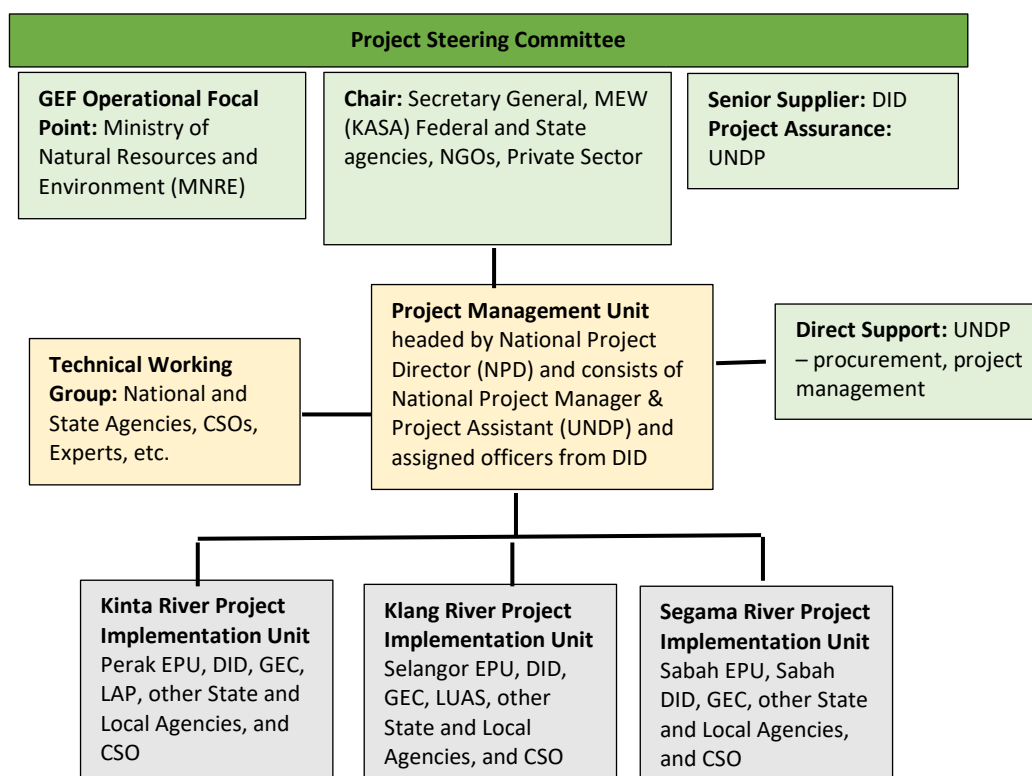


Figure 2 Actual implementation arrangements (post IRR)



3.3 Project Implementation

3.3.1 Adaptive management

129. Assessing the adaptive management within the project is challenging because the project has operated in two distinct phases; for the first three years of implementation it suffered an inertia in implementation with very little evidence of adaptive management and then, in 2019, the project appears to have switched gears and become very adaptive in its operation and approach.
130. It is very clear that, due to circumstances (e.g. the institutional restructuring and agreeing the new UNDP Country Programme, etc.) the project faced challenges immediately it had started and that these challenges persisted for some time (2016 to 2019). What is less clear is why there was the inertia within the project’s governance partners (Implementing and Executing Agencies) and an inaction to address or respond to these very real challenges. A number of critical opportunities in the project cycle, when substantive adaptive changes could have been made to the project, were missed. Most notably, the Inception Phase which, simply put; is the point in time that the expectations of the Project Document interface with the stark situational realities and changes in circumstance since the design phase. But there were also the annual Project Implementation Reports (PIR) and NSC meetings when these issues should not just have been raised, but also addressed.
131. It is only in 2019, nearly three quarters of the way through the project, that the UNDP makes some well-needed and well-thought through actions to address the problems the project is facing. The first action was to instigate an Independent Rapid Review (IRR), given that, as an MSP; an MTR is not mandatory. In this instance the IRR replaces the MTR on an *ad hoc* basis due to the problems identified.
132. The IRR was thorough and provided twelve recommendations (see Annex 17). The recommendations can be characterised as:
- Structural – relating to the project’s management framework and working practices.
 - Strategic – relating to the project’s strategic framework.
 - Targets / triggers – determining a step-wise process.
133. Structural changes were made in the PMU, a significant project partner (the GEC) was contractually engaged (although the nature of the original proposed arrangement was never very clear in the Project Document) as well as the NGO FS (to carry out the outcome 2 work in Sabah) and the human resources of the PMU strengthened by a substantive Project Manager and Project Assistant⁴⁷ embedded in the DID.
134. Strategically, the SRF was significantly revised. Although the original strategy remained the same (outcome 1 and outcome 2) the wording of the objective and outcome 1 were altered to reflect the reality of what the project might achieve in the remaining time available, and there were substantive changes to the indicators (number of indicators, wording and targets. See section 3.2.1).
135. Many of the recommendations made in the IRR related to project management activities (e.g. allocating an individual to monitor indicators, etc.) which were clearly needed because by the time of the IRR the project was drifting and there was very little in the way of implementation (e.g. 3.7% budget execution). The IRR triggers were directed at the project’s decision-making, namely, if the milestones indicated in the IRR recommendation 2 “go for green” Adaptive Management Action Plan had not been achieved by the end of 2019 then the project should be stopped. In the event there were rapid management responses from the UNDP, the DID appears to have switched gears and the changes were confirmed during a NSC meeting in February 2020 with a request to the GEF for an 18 month “no-cost” extension.

⁴⁷ Engaged through a UNDP Contract.

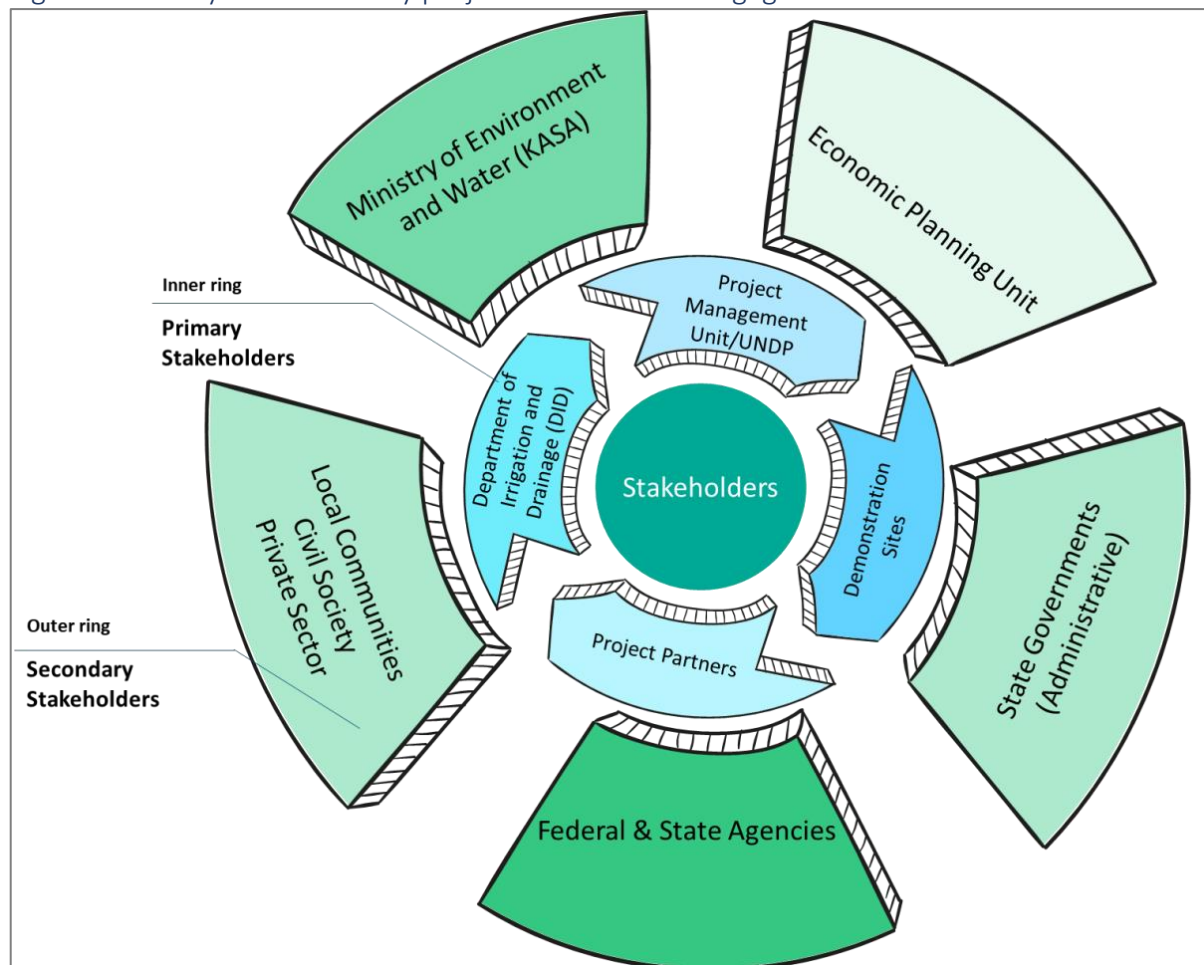
136. The extension was subsequently granted in August 2021, however, it is worth noting that the uncertainty of achieving the extension did constrain project-related decision making, for instance, an interim Consultant was hired to manage the project and then replaced by a Project Manager however, the initial length of Contract⁴⁸ could not be assured for the extension period until after it had been approved.
137. While a great deal is made of an adaptive management approach, there are very few things that a project can effectively change in relation to the project strategy and the SRF. In this instance, by GEF standards, significant changes were made; including changes to the wording of the objective and one outcome. These were approved by the GEF. The changes made, adjusted the expectations of what the project could achieve in the remaining time, but, in all likelihood, the new expectations were simply closer to the reality of what the project might have achieved had it performed from the beginning. They did not materially, nor could they have addressed, the assumption that the two components: *an operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes, and best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats were sufficient to commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia* could be implemented in such a short space of time to achieve the objective, more so if this was reduced from four years to two years.

3.3.2 Actual stakeholder participation and partnership arrangements

138. There are two groups of stakeholders—primary and secondary (Figure 3). Primary stakeholders are project beneficiaries who are likely to be directly affected by the Mainstreaming Biodiversity Conservation into River Management (MBCRM) project, and those who are directly involved in its implementation. Included in this group are stakeholders with direct managerial authority, which will be integral to determining the success of the project.
139. The secondary stakeholders are actors and institutions that may have the authority influencing the implementation of the project. They may for example function in roles in River basin management as regulators, policymakers, activists and opinion-formers. Some of these are members of the NSC while other may influence the project indirectly through their executive, bargaining and positional powers.

⁴⁸ All UNDP Service Contracts are annual Contracts, however, they are normally performance-based and a capable PM can be relatively certain of retaining a Contract for the duration of a project. In this instance the uncertainty surrounded the duration of the project and not the PM's Contract.

Figure 3 Primary and secondary project stakeholder’s engagement



140. Based on the TE team’s assessment, the Primary Stakeholders, who have been directly involved in the project implementation from an IA and EA perspective and stakeholders with direct managerial authority (the Department of Irrigation and Drainage; Project Management Unit; UNDP Country Office; demonstration sites; Project Partners and NSC members), which have been integral to determining the success of the project. Secondary Stakeholders include actors who have been/ will be instrumental to the long-term sustainability and replication of project results. This group wields considerable authority through policy levers, development frameworks, legislation and decision-making and can be considered enablers of the project (KASA, EPU, UPEN, State government entities, CSOs, participants at demonstration sites) and who have taken part in demonstration activities, awareness raising and capacity building through MCBRBM interventions. (The list of stakeholders interviewed is contained in Annex 3)
141. In the first three years of the project the stakeholder participation and partnership arrangements appear to have been confused and lacked a functional efficiency. The effect of the external (to the project) institutional restructuring of the former MNRE and the horizontal movement of the DID has also impacted on these arrangements.
142. The GEC, an NGO, which was scheduled in the Project Document to play a much more integral design in the implementation is now engaged on a Contractual basis.
143. In a mainstreaming project the stakeholder participation and arrangements are critical to the successful outcomes. To this end, the development of the Project Document rarely has time to develop the strong relationships and networks necessary for mainstreaming. The multi-

stakeholder strategy being developed in outcome 1 should identify these relationships and the means to work together more clearly. However, this will only be ready by the end of the project (even without the delays this should have been a priority but would still have taken a considerable time to identify, negotiate and develop).

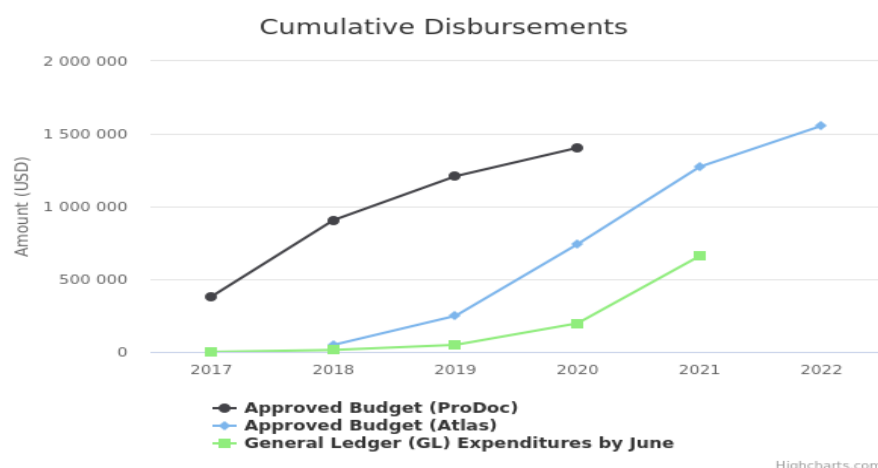
144. The Project Document exhaustively identified the project’s stakeholders and describe their mandates and their roles within the project. However, as the result of the general election’s outcome in mid-2018, the portfolio of two key agencies with executing power has been changed. The signatory to the Project, the Economic Planning Unit (EPU), and the executing agency, Ministry of Environment and Natural Resources (MENR), both were renamed as Ministry of Economic Affairs (MEA) and Ministry of Water, Land and Natural Resources, respectively. In early 2020, the federal administration was subjected to another restructuring, whereby MEA was reinstated as EPU, whilst the functions of water and river management was placed under a newly created ministry known as Ministry of Environment and Water (KASA).
145. The newly restructured administrative structure suggests a number of challenges in achieving the objective of the Project of mainstreaming biodiversity in river management, as the functions of managing biodiversity related matters and management of water resources were split into two separate ministries. These institutional complexities at federal level compounded further the issue of ownership, in which the project was lacking severely from the beginning and challenging any policy cohesion between federal agencies and related state departments.
146. Coordination of stakeholders in order to achieve mainstreaming is critical. However, the project, since its inception has not produced a credible stakeholder coordination plan. It does not appear to have built the coalitions and linkages between different partners whose statutory or organisational mandates impact on riverine biodiversity. An illustration of this is the weak linkages between Outcomes 1 and 2 where there is an apparent lack of cohesion between the two components. This might be attributed to a number of factors such as these components being under different Contractual entities and arrangements, a considerable amount of the co-financed activities taking place before these Contractual arrangements were in place and the short space of time for the Contractors to actually carry out the work.

3.3.3 Project finance and co-finance

147. The Project Preparatory Grant was US\$ 60,000. The GEF grant was US\$ 1,404,000 and US\$ 8,984,000 co-financing was committed by the Government of Malaysia, UNDP, Local Government and Civil Society Organisations (CSO) in the Project Document. Some parts of the co-financing were incorrectly recorded as *cash* co-financing when it was in fact, *in-kind* co-financing⁴⁹ (Tables 8 and 9). The ratio of co-financing was approximately 1:5.

Table 7 Combined delivery report

⁴⁹ Co-financing can only be recorded as cash co-financing if it is administered directly through the PMU and appears in the project’s budget. As the GEF grant was US\$ 1,404,000 and this is the same amount given in the project budget (pp. 100 – 101, Project Document) then there was no cash co-financing, only in-kind.



148. Based on the co-financing provided by the project it would appear that there has been a high rate of delivery. GEC started activities in UKB in 2018 utilising the co-financing for the work in Upper Kinta Basin for the period 2018-2020 including development of the UKB management Strategy and stakeholder engagement and capacity building. In the Klang Basin most of the Co-financing for the project was provided by DID through the River of Life (ROL) Initiative, in particular for the ROL Public Outreach programme (ROLPOP) – implemented by GEC and two other organisations. However, the delay in the release of the GEF funds until early 2020 reduced the time for integrated operation between ROLPOP and the GEF project. Nevertheless, in anticipation of the UNDP-GEF project GEC and DID started to include actions in the ROL to link Biodiversity with River management.
149. The co-financing allocated to the Segama River (Sabah) site was linked to the GEC’s involvement in Sabah which in the event did not take place. Forever Sabah have not recorded co-financing although additional resources have been leveraged both from existing programmes (e.g. the mapping) and from the private sector.
150. Some sources of co-financing (e.g. US\$ 260,000 from UNDP TRAC Funds) were not available by the time of the project start up.
151. Financial management appears to have been weak during the first three years of the project. Budget execution was extremely low (3.7% by September 2019) and charges being made to ATLAS Budget Codes that did not exist with a budget revision⁵⁰. There are indications that financial management was improved in 2020 with the appointment of a PMU and PM.
152. A Harmonized Approach to Cash Transfer (HACT) micro-assessment and assurance was not carried out for the key partners (DID and GEC) until after the IRR in 2019, owing to the low expenditure⁵¹. Although assurance activities i.e. a Spotcheck was carried out on the DID (July 2019-June 2020)⁵¹. DID were found to be Low Risk. Forever Sabah would not have required a HACT given the level of expenditure. The project has not undergone an independent audit⁵² although the Project Document M&E Framework did include independent audits.
153. Table 7 provides a breakdown of the project expenditure forecast and variance in the Project Document against actual including forecast of the late 2021 (post TE) and 2022 expenditure.

⁵⁰ p. 56, Independent Rapid Review for the UNDP-GEF project: “Mainstreaming of Biodiversity Conservation into River Management”. Final Report, PIMS 5281. 12 November 2019.

⁵¹ In non-audit years, spot checks must be done if expenditure is above \$50,000. (If it is below 150K, UNDP CO staff can do the spot check, with written permission from the RBx, but if it is over \$150,000 it must be done by an accredited 3rd party).

⁵² If the IP has a Low or Moderate Risk HACT, and expenditure of more than \$200,000 pa, then an audit must be done every two years.

Table 7 Project budget and variance

		2017	2018	2019	2020	2021	2021	2022	
Component 1		YR1	YR2	YR3	YR4	YR5 (actual)	YR5 (forecast)	YR6 (forecast)	Total
Project Document		\$139,000.00	\$153,000.00	\$120,000.00	\$50,000.00				\$462,000.00
	Actual	\$0.00	\$10,596.30	\$49,959.64	\$10,196.99	\$42,385.71	\$114,157.14	\$213,237.22	\$440,533.00
	Variance	\$139,000.00	\$142,403.70	\$70,040.36	\$39,803.01				\$391,247.07
		-100%	-93.07%	-58.37%	79.61%				-4.65%
Component 2									
Project Document		\$208,000.00	\$343,000.00	\$151,000.00	\$113,000.00				\$815,000.00
	Actual	\$0.00	\$7,181.47	\$1,060.21	\$471,394.58	\$108,259.19	\$94,136.51	\$149,363.74	\$831,395.70
	Variance	\$208,000.00	\$335,818.53	\$149,939.79	-\$358,394.58				\$335,363.74
		-100%	97.91%	99.30%	317.16%				2.01%
Project Management									
Project Document		\$33,400.00	\$29,900.00	\$31,200.00	\$32,500.00				\$127,000.00
	Actual	\$0.00	\$6,041.27	\$21,683.30	\$34,150.84	\$10,965.07	\$17,553.00	\$33,567.41	\$123,960.89
	Variance	\$33,400.00	\$23,858.73	\$9,516.70	-\$1,650.84				\$65,124.59
		-100%	-79.80%	-30.50%	5.08%				-2.39%
Totals									
Project Document		\$380,400.00	\$525,900.00	\$302,200.00	\$195,500.00	\$0.00	\$0.00	\$0.00	\$1,404,000.00
	Actual	\$0.00	\$23,819.04	\$72,703.15	\$515,742.41	\$161,609.97	\$225,846.64	\$396,168.37	\$1,395,889.58
	Variance	\$380,400.00	\$502,080.96	\$229,496.85	-\$320,242.41				\$8,110.42
		-100%	95.47%	75.94%	163.81%				-0.58%

Table 8 Co-financing level planned and actual

Co-financing type	UNDP financing (US\$ mill.)		Co-financing type	Government (US\$ mill.)		Co-financing type	Partner Agency (US\$ mill.)		Total	
	Planned	Actual		Planned	Actual		Planned	Actual	Planned	Actual
Grants	\$260,000	\$368,536	Grants			Grants	\$720,000	\$1,343,412	\$980,000	\$1,711,948
Loans/concessions			Loans/concessions			Loans/concessions			\$0	\$0
In-kind			In-kind	\$6,600,000	\$6,712,338	In-kind		\$420,000	\$6,600,000	\$7,132,338
Other			Other			Other				
Totals	\$260,000	\$0	Totals	\$6,600,000	\$6,712,338	Totals	\$720,000	\$1,765,412	\$7,580,000	\$8,844,286

Table 9 Confirmed sources of co-financing at Terminal Evaluation stage

Sources of Co-Financing	Name of Co- financier	Type of Co-financing	Investment Mobilized	Amount (US\$)
Recipient Government	DID Sg Klang POP F3A	Public investment	Recurrent expenditure	\$1,258,729
	DID Sg Klang POP F3B & 4	Public investment	Recurrent expenditure	\$1,658,781
	DID Sg Klang POP F5	Public investment	Recurrent expenditure	\$1,754,920
	DID Sg Perak	Public investment	Recurrent expenditure	\$1,443,514
	JPS (River of Life Public Outreach Programme Phase 5 - Klang Basin)	Public investment	Recurrent expenditure	\$596,394
GEF Agency	BIOFIN		Grants	\$368,536
Partner Agencies	GEC	Grants	Recurrent expenditure	\$882,184
	FS			
Civil Society Organization	Spark Foundation-Sg Way/Selangor	Grants	Recurrent expenditure	\$238,022
	Spark Foundation-Kinta	Grants	Recurrent expenditure	\$77,845
	National River Care Fund	Grant	Recurrent expenditure	\$58,294
Private Sector (via GEC)	Yayasan Petronas	Grant	Recurrent expenditure	\$56,885
	HSBC-Upper Kinta Basin	Grants	Recurrent expenditure	\$91,888
	Yayasan Hasanah-Upper Kinta Basin	Grants	Recurrent expenditure	\$300,000
	Yayasan Hasanah-Upper Kinta Basin/Post MCO	Grants	Recurrent expenditure	\$ 59,885
Total				\$8,844,286

3.3.4 Monitoring and evaluation

3.3.4.1 Design at entry

154. The Project’s Monitoring and Evaluation system included the inception workshop report, standard reports and evaluations, and oversight by the Project Steering Committee. Project M&E was to be carried out using the following tools:

- Inception workshop and Annual Work Plans (AWP)
- Quarterly progress reports.
- Periodic Monitoring through site visits: UNDP / DID conducting monitoring visits.
- One audit per year as per UNDP Financial Regulations and Rules⁵³.
- Annual PIRs and the GEF TT
- Terminal Evaluation
- Learning and knowledge sharing

155. The total budget for M&E (inception workshop, evaluations, audit and indicator measurement) was US\$ 129,000 (approximately one-tenth of the total GEF grant) coming from Outcome 2. Out of this amount, only US\$ 20,000 was earmarked for monitoring of indicators. The SRF is reviewed in section 3.2 of this report but, in addition to the coherence of these indicators, in terms of its utility as the project’s principle M&E tool it was complicated with 11 indicators and in the case of the four outcome 2 indicators these were complex indicators with at least 13 sub-clauses with one indicator⁵⁴ reportedly costing US\$ 500,000 to acquire baseline and periodic data sets⁵⁵. Additionally, there was no assessment of the Implementing Agency’s culture and understanding of complex monitoring and evaluation in relation to impacts and adaptive management.

156. The revision of the M&E framework following the IRR was an improvement on the Project Document’s SRF in as much as it reduced the number and complexity of the indicators and allocated M&E roles and responsibilities within the project partners. However, it was still very weak and provided little utility as a M&E tool (see section 3.2.1).

3.3.4.2 Implementation

157. In the first three years of the project the M&E implementation was very poor. There appears to have been confusion of the purpose, roles and responsibilities within the project partners. The absence of an effective PMU largely contributed to this⁵⁶. Between 2016 and 2020:

- The Inception Workshop did not take place until the 25th November 2019.
- Periodic monitoring through site visits was unnecessary as there was no activity.
- There was no audit of the project⁵⁷.
- APRs were produced annually by the UNDP.
- The first PIR was developed in 2021.
- The GEF TT has not been completed since the project preparation (Project Document).
- The Capacity Scorecards have not been completed for key agencies.
- Best Management Practices (BMP) have not yet been developed and will likely be *post facto* of the demonstration sites.

⁵³ In fact, these regulations only required an audit every two years. However, a HACT was not carried out on the IP until after the project had started.

⁵⁴ This was an indicator related to a species of fish which even if financially feasible would have provided a poor indicator given that biological indicators are very unlikely to provide useful data within the space of a four-year project.

⁵⁵ Ibid: p. 44 IRR Report.

⁵⁶ Annual Progress Report, 2018, Mainstreaming of Biodiversity Conservation into River Management.

⁵⁷ This was not needed given the expenditure was only 3.7%. According to the UNDP HACT Policy, an audit is required on the IP when annual expenditure was upward of \$200K. Spotcheck is needed when annual expenditure from the IP hits \$50K. Most of the expenditure made in 2016-2020 was made following UNDP procurement which is subjected to UNDP management audit.

158. The APR produced by the UNDP were accurate in their assessment of the project’s performance, however, the remedial steps were not taken immediately to address the weaknesses at the time.
159. Prior to the IRR in 2019, it does not appear that M&E results were discussed with the NSC, there were no PIRs during this period although the APRs provided a realistic account of the projects performance. The SESP does not appear to have been validated or updated during this period and it is hard to see how any risks or emergent risks (particularly those related to indigenous people and gender) were considered.
160. It is clear that following the IRR there is a dramatic turnaround in the implementation of the monitoring and evaluation. However, by this stage there is a considerable backlog of project management related issues to clear at the same time that the SRF is being revised and until 2021 there was no certainty as to whether the project will receive an extension. Monitoring improves but it is too little and too late.

3.3.4.3 Overall assessment of M&E

161. The initial design of the M&E framework was standard by UNDP-GEF projects. The SRF had inherent weaknesses in it which have to some extent carried over into the revised SRF. The implementation, although now much improved has been poor through most of the project’s lifetime and the revisions to the SRF were not sufficient and robust enough. The appointment of the PMU and PM contributed to the improvements along with direction from the UNDP and RTA. However, these are unlikely to have embedded in the Executing Agency and as the PM’s Contract has now expired, this role largely falls back on the UNDP for the remaining six months of the project⁵⁸.
162. The project did not utilise the Inception Phase, which is a critical point in the project cycle monitoring and evaluation, to make assessments of the M&E framework, institutional capacities and adjust the protocols and procedures accordingly. This would also be the time to validate indicators and baselines and the budgetary allocation for M&E. This did not take place and for the first three years of the project it is not clear that anyone was specifically tasked with the responsibility of monitoring indicators.
163. The issue that appears to have affected M&E the most is the failure in the project design to adequately assess the DID capacity to carryout project M&E and to become familiar with the UNDP-GEF M&E requirements which is likely related to its mandate and core functions; it is not an organisation used to implementing complex process-orientated projects, it is at its core a public utility organisation. What is inescapable is the length of time it took to address these issues through the M&E framework and process.

Table 10 Monitoring and evaluation rating scales

Monitoring & Evaluation (M&E)	IRR Rating	TE Rating
M&E design at entry	NA	MU
M&E at implementation	NA	MU
Overall quality of implementation	NA	MU

3.3.5 Project implementation and execution

3.3.5.1 UNDP implementation and oversight

164. UNDP played a significant role in the project identification in steering the project concept into a GEF-fundable mainstreaming project. Both the UNDP Program Officer and GEC Director played a major role in defining the project scope and intervention strategy during the PIF formulation stage⁵⁹. A project design Consultant was engaged in 2013 to develop the Project Document.

⁵⁸ UNDP indicated that it will fulfil the role of Project Manager for the remaining period of the project.

⁵⁹ Ibid: p. 24, para. 61, IRR Report & key informant interviews.

165. However, a critical risk lay in the selection of an executing agency which did not have the operational procedures, institutional mandate and authority, and specialist capacities to carry out a mainstreaming biodiversity project but would utilise the expertise of the GEC in this particular field.
166. UNDP and the DID struggled to make headway for the first three years of the project. While the APR show that the project is under-achieving it is not until 2019 that there is an intervention in the form of the IRR. Arguably, during the inception phase the risks associated with the institutional changes taking place around the DID and mismatch between the DID mandate and the project’s purpose should have been identified and a risk management plan put in place.
167. At the same time (2016 – 2018), UNDP itself appears to have been experiencing challenges such as a *“poor transition to a new Program Officer”* and *“personnel within the UNDP-CO being oversubscribed to projects due to several Program Officer positions left vacant for several years, resulting in bandwidth issues and a prioritization of higher profile projects within its GEF portfolio”*⁶⁰. To what extent the different project management arrangements affected this, for instance, whether the technical capacities of the GEC which were an important component of the Project Document were now missing, is not clear. However, it seems to have created an inertia in terms of initiating the inception report, mobilising project finances and establishing an effective PMU. Feedback from a number of stakeholders interviewed indicate that the key relationships within the overall project at this time were strained.
168. In 2019 the IRR was initiated followed by substantive UNDP support to the NIM, an aggressive “go-to-green” short term adaptive management plan is developed and an Inception Workshop and Report are produced at the end of 2019. The need to provide a support to the NIM suggests that the early risk assessments and management were weak. Even now, the project will finish the last six months without a dedicated Project Manager, this role being carried out by the UNDP Programme Officer⁶¹. However, the Risk Log has not been updated to reflect issues such as setting up a direct transfer modality to allow some NGOs (GEC and FS) to receive funds directly.
169. It would be prudent to have updated the SESP immediately following the IRR however, this was not done.

3.3.5.2 Implementing Partner execution

170. As stated already in this report, the Implementing Partner organisation (DID) has its main interests in issues related to drainage and irrigation. Furthermore, this was the DID’s first UNDP-GEF project and there would understandably be challenges in getting to grips with the UNDP-GEF procedures and protocols. Given these factors and the circumstances during the first three years of the project of institutional change an uncertainty.
171. During the first three years there was little focus on results. An adequate PMU was not put in place and significant project cycle milestones (e.g. an inception phase and report) were missed. Budget execution was very poor during this period, staff turnover amongst individuals working in the project was high according to many interviewed and the stakeholder relationships do not appear to have been adequately managed by both IA and EA. There still does not appear to be a cohesion between the sum of the project’s activities, outputs and outcomes. One possible reason for this could be that the project has not had a long-term substantive Project Manager to provide that cohesion and direction. The focus of the Project Managers during their tenure would have been largely directed at getting the project activities back on track with little time available for the broader strategic issues giving rise to a focus on outputs within a very tight timeframe.

⁶⁰ Ibid: p. 48, para. 105, IRR Report and supported by key informant interviews.

⁶¹ For the avoidance of doubt, under the circumstances this is likely to be the best solution, albeit not ideal, because it would be impractical to appoint a new PM for just six months remaining. Furthermore, there is a robust firewall in place to counter any conflict of interests, for instance procurement and UNDP project management are separated, plans are approved by a Technical Working Group and evaluation is carried out by a separate unit.

172. Risk management has been weak with a number of risks being realised without timely interventions and some risks not being identified at all.
173. Since the IRR, the PMU has largely been driven by the UNDP intervention and with the end of the current PM’s Contract in October 2021 these responsibilities will largely be absorbed by the DID Biodiversity Unit and UNDP with assistance by a Project Assistant.
174. Reporting has been poor and there seems to have been little effort to adopt the UNDP-GEF reporting procedures and project practices.
175. There have been no further assessments of, or plans to manage, any social and environmental safeguards.
176. There has reportedly been a high rate of personnel turnover in the DID which have adversely affected the DID ownership of the project and its outcomes. During the institutional restructuring in 2018, which created two new ministries with environmental mandates, the Ministry of Water, Land and Natural Resources (*KATS*) and the Ministry of Energy, Science, Technology and Climate Change the project appears to have been without a substantive Project Manager⁶² to coordinate and provide overall direction to the many activities, outputs and outcomes with very little activity taking place.

3.3.5.3 Overall project implementation and execution

177. Overall implementation and execution have been insufficient. Arguably, there have been a number of factors which have contributed to this:
 - Poor management during the start-up of the project by the UNDP⁶³ due to a number of factors such as an incomplete handover between Programme Officers and an overload of project related work within the CO.
 - The position and functions of the DID which has considerable engineering capacities and experience but its primary interests, human resources and other capacities are largely directed towards engineering. This made it an important entity to mainstream into but not ideally positioned to drive a process of mainstreaming across multiple sector players and interests⁶⁴.
 - The loss of the GEC capacity within the project management structure. The position of the GEC in the project following the IRR is very different from the one described in the Project Document. The Project Document management structure does not clarify in operable detail how this arrangement would have worked but it would appear to have provided the capacity in relation to biodiversity and riparian ecosystems⁶⁵.
 - Poor relations between these key stakeholders which, according to a number of key informants⁶⁶, affected the key project partners during the first three years. Ultimately, the responsibility for implementation lies with the Implementing Agency (UNDP) in

⁶² There have been 2 Project Managers: 5/12/2019 – 31/5/2020 and 16/10/2020 – 15/10/2021, totalling 18 months in a 66-month project and the project did not have a Project Manager at the time of the TE and for the remaining 6 months.

⁶³ This was raised by a broad cross-section of key informant interviews, recognised by the UNDP itself and raised throughout the 2019 IRR report.

⁶⁴ This was raised by numerous key informant interviews across a broad cross-section of stakeholders including from within the DID. See also the IRR report p. 55, para. 138.

⁶⁵ The TE was unable to ascertain why the project management arrangements were changed. UNDP did not perform a HACT on the GEC until after the IRR, but there should not have been any grounds for uncertainty as the GEC is a well-established organisation and this should not have delayed the project, a HACT would have been a fairly simple exercise with predictable results. The TE considers that the arrangements set out in the Project Document would have been challenging in terms of the Implementation-Execution roles in terms of overall responsibilities and complying with UNDP procedures. However, the DID and the GEC do not share this opinion and the project was approved by the UNDP and the GEF with these arrangements in place.

⁶⁶ As stated, this was raised by a number of key informants, one informant describing the relations as being “toxic” in 2019.

overcoming this, which it did in 2019 through the IRR. However, it is incumbent on all parties in a project to maintain good relationships.

178. In the event, an overly ambitious four-year planned project has been truncated into two years resulting in a focus on activities and outputs.

3.3.5.4 Coordination and operational issues

179. The IRR noted that:

“The Project has suffered from protracted delays since the agreement was fully executed by the government counterpart on 10 November 2016. This is due to a range of issues (some unavoidable) stemming from a poor transition to a new Program Officer at the UNDP-CO; a transition to a new Country Programme Action Plan 2016 - 2020 between UNDP and the Government of Malaysia in 2016 (where the central planning agency could only formalize the Project Document following the approval of a new CPAP); multiple institutional changes and turnover within key agencies; a pause in government operations due to a general election in 2018; apprehension and lack of readiness on the part of the government implementing partner in starting inception activities and relying on the UNDP-CO; and personnel within the UNDP-CO being oversubscribed to projects due to several Program Officer positions left vacant for several years, resulting in bandwidth issues and a prioritization of higher profile projects within its GEF portfolio”⁶⁷.

180. Coordination has been poor and there has been a lack of governance and oversight which was also noted in the IRR. Capacity assessments of organisations which would play a crucial role in mainstreaming have not been carried out. There has been confusion between the HACT (a financial capacity assessment), the Capacity Scorecard (a monitoring tool) and a capacity assessment and gap analysis which is an analytical tool to produce a necessary capacity building plan.
181. The project faced considerable challenges operating between different state and federal jurisdictions. Critical activities such as institutional capacity assessment and gap analysis have not taken place. Without an effective PMU in place there was no coordination of operations during the period between the project start up (November 2016) and the Inception Workshop (October 2019) the project lacked leadership and direction. It is very clear that without the UNDP intervention of the IRR and subsequent follow up activities, the project would have had to close. Furthermore, direct support from the UNDP to the NIM has been critical and will remain critical until the project ends in 2022.
182. While there has been a dramatic improvement in the project’s overall management since the 2019 IRR this has largely focused on outputs with little attention to achieving outcomes or cross-cutting issues.
183. The Covid-19 pandemic restrictions have severely impacted the project during 2020 and 2021. Travel restrictions have imposed additional challenges on the supervision and monitoring of the demonstration projects as well as stakeholder participation.

Table 11 Implementation / Oversight and Execution Rating Scale

UNDP Implementation / Oversight & Implementation Partner Execution	IRR Rating	TE Rating
Quality of UNDP Implementation/Oversight	NA	MU
Quality of Implementing Partner Execution	NA	MU
Overall quality of Implementation/Oversight and Execution	NA	MU

3.4 Project Results

3.4.1 Progress towards objective and expected results

184. The weakness in the objective description has been discussed in section 3.2.1. Progress towards objective and expected outcomes. A brief assessment with comments of the project

⁶⁷ Ibid, p. 48, IRR Report

overall results (as per PIR), is presented in the following paragraphs. It is important to note that at the time of the TE many of the activities related to outputs were still in progress and a reasonable forecast has had to be made in relation to their completion and final quality.

3.4.1.1 Project Objective assessment

185. *“To commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia”.*
186. An interim report has been produced providing a comprehensive review of Malaysia’s Constitutional, Legal and policy matters relating to biodiversity. Twenty national regulations have been reviewed to identify mainstreaming opportunities. An early recommendation to utilise relevant National Councils (Forestry Council, Biodiversity Council and Water Council) before endorsement by the National Land Council. Biodiversity has been integrated into two draft Policies: National Policy on Biological Diversity 2016-2025⁶⁸ and the National Policy on the Environment. The project has also provided inputs to policy-making on a number of other sectors including on Marine and Freshwater Biodiversity (23 June 2021).
187. Within the DID the Urban Storm Water Manual/ *Manual Saliran Mesra Alam (MSMA)* is likely to be the principal tool for including biodiversity in many of the DID activities.
188. In assessing this result much depends on interpreting what *“to commence an [sic] process towards”* implies. The TE found the technical assistance to the mainstreaming (outcome 1) quite competent but these are rushed and process-oriented activities. Arguably this does not *“commence”* but rather is a small step forward.

Overall Project Objective Rating is *Moderately Unsatisfactory*

3.4.1.2 Outcome 1 assessment

189. This outcome and the associated indicators should be read in conjunction with the objective indicators and reporting. Progress has been poor in this outcome.
190. Outcome 1 relates to: An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes. The related outputs were reduced from five to four after the IRR and focused on i) developing a strategy for inter-agency collaboration, ii) developing guidelines and best management practices (BMPs) for riverine biodiversity management; iii) improved capacity of key agencies, and iv) an awareness programme. The process of addressing these outputs entailed comprehensive institutional and legal review; capacity needs gap, review of financing options and national action plan.
191. The comprehensive analysis of policy matters relating to mainstreaming biodiversity into river management is crucial to formulate the strategic direction for institutionalizing the agenda amongst the relevant federal and state agencies. The project gained accelerated momentum after the IRR (since late 2019) however, given the short timeframe (about a year) to produce the analysis while constrained by Covid-19 restrictions, the quality of the expected outputs to contribute to the achievements of the project’s objectives remain questionable. At the time of evaluation, the consultancy was still on-going, the resource persons expressed confidence of delivering outputs relating to institutional and legal review, capacity needs analysis and review of financing options.
192. For the BMP and guidelines, however, the project may only be able to come up with an outline framework establishing the processes for developing detailed guidelines at a later stage after the project ends. Firstly, it was affected by the sequence of implementation of the two components. The original plan was Outcome 1 to produce BMP options for testing the feasibility on the demonstration sites to provide feedback and lessons to strengthen the final output. However, Outcome 2 started much earlier; partly due to the delay in procuring the consultancy services for Outcome 1. Though this bottom-up process was seen plausible, but the approaches and methods

⁶⁸ Mid-term review

demonstrated at the site levels does not provide constructive lessons and feedback in time that can be translated into BMPs and guidelines for output under Outcome 1.

193. Sustaining the outputs and impacts from Outcome 1 after the Project is questionable. DID may accept the BMP framework, but it does not have any legal mandates to ensure implementation, and DID also lacks resources, particularly competent manpower to nurture change of mind-set moving towards adopting a soft comprehensive nature-based solutions, though the existing DID's Integrated River Basin Management programmes does incorporates some of its elements.
194. Though, there have been some positive outcomes from NSC on the possibilities of merging the BMP and guidelines with the existing schemes such as the *MSMA* (Urban Storm Water Manual) in the absence of legal mandates for DID, however, it might be a challenge to achieve policy cohesion at the higher level considering the fragmented administrative structure with regard to biodiversity mainstreaming and river basin management amongst the policy-making federal ministries.
195. Institutional bureaucracy at the EA in terms of decision making has been major challenge to drive through this component, further to non-performance of the project during the first three years and Covid-19 impediments that have affected the performance severely. Lack of knowledge, competency, and experience in DID as IA for GEF funded project and river biodiversity with its related management and conservation plans are out of the scope of its core business. DID's focus is mainly on hard-engineering solutions to address flood mitigation and river management – factors affecting commitment and buying-in the objective of the Project.
196. The nature of engagement of the consulting company in the project is also raising some concerns with regards to efficiency which seems inconsistent with the norms of the usual procurement procedures practised. Two companies Company A and Company B submitted their bids for this task. Both were assessed having the necessary capacity and expertise to undertake the job. However, Company B's bid was rejected for insufficient submission of documents. Subsequently Company A was awarded the contract by DID. The issues of concern are:
 - i. If Company A and its team was assessed having the required capacity and expertise, then why was there a need to remove the entire team proposed by Company A and replaced with it with the personnel from Company B. In the request by Company A to change the Team, it is stated that this study needs experienced resources persons and additional manpower. (Company A letter dated Sept, 28, 2021). Does this meaning that the team originally proposed by Company A was not qualified enough for the job?
 - ii. The offer of Contract to Company A was made on 26/03/2021 and it was accepted by Company A on the same day. However, the request for replacing the original team with that of the Company B team was made only on 28/09/2021 and approved by DID on 04/10/2021.
197. This does not reflect as an efficient procurement process. Company B opines that UNDP should have exercised its procurement procedures that would have assured efficiency and efficacy in terms of resource use.
198. The original Project Document Outcomes and Outputs were too ambitious. Following the IRR in 2019 the project took the right course of action in reducing the ambitions of the Objective and Outcome 1, reducing the number of indicators and lowering the target levels. However, the quality of these indicators and targets, as reflected in the revised SRF, made monitoring and evaluation very difficult and suggests that there was an understandable focus on activities and outputs⁶⁹ given the time available for effective implementation.

Overall Project Outcome 1 Rating is *Moderately Unsatisfactory*

⁶⁹ This analysis was supported by 2 key informants with very close expert knowledge of the project from 2019 onwards.

Output 1.1: Inter-agency strategy, national action plan and financing plan to mainstream biodiversity into river management developed and adopted – the strategy has still to be completed. Ideally, this would have been sequenced first in terms of outputs to provide a roadmap for the entire project. The experts carrying out the task have the experience and skills necessary for the Consultancy. However, the manner in which this output is being implemented (see section 3.1.4.2) creates a considerable and un-necessary chain and it is not possible for the TE to ascertain if the team carrying out the work is fully resourced to carry out this considerable task. The early indications are that this will be a of a high-quality study and authoritative report based on the second revision of the interim report⁷⁰ (a comprehensive review of the existing situation in its entirety).

Output 1.2: Best Management Practice guidelines developed and adopted – although the existing guidelines have been reviewed the best practice management guidelines have not yet been developed and there are concerns that these may not be fully developed into guidelines by the end of the project.

Output 1.3: Institutional capacity of KASA, DID and other related Federal and state agencies and key non-governmental stakeholders enhanced for riverine biodiversity management – given the importance of river systems in Malaysia and the number of institutions involved in their management the TE is sceptical that this will be achieved by the end of the project. A reasonable sequence might be to develop the strategy first and then test the existing capacities necessary in order to fully implement that strategy in order to provide a gap analysis and programme to address capacity deficiencies. This is a considerable and involved process and would include budgetary and human resources, institutional mandates, operational and working practices, etc. Therefore, the TE is not convinced that these can be “enhanced” in the remaining time available. The creation of a “Biodiversity and Research Unit” within the DID, but the TE cannot state with confidence that this will be effective and persist after the end of the project because there is little information on the terms of reference, budget, activities, human resources, etc., of this unit at the present time.

Output 1.4: Awareness programmes delivered targeting policy makers and practitioners – it is too early to judge to what extent awareness has been raised. Clearly there will be more awareness of riverine biodiversity amongst stakeholders but to what extent that translates into an understanding of how biodiversity needs to be integrated into policy and regulatory frameworks, reflected in human resource skills and capacities, budgeting, changes in working practices and operational procedures as well as long term sector plans; in less than one year this would be expecting a lot from this output and outcome. In many ways, the race to get the project back on track has overshadowed these deeper institutional cultural changes. Stakeholders are aware of the project but not necessarily aware of the need to, and processes involved, in mainstreaming riverine biodiversity.

3.4.1.2 Outcome 2 assessment

199. Outcome (Component) 2 relates to: *Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats*. This component was implemented in three different sites with the contracting of the Global Environment Centre (GEC) and Forever Sabah (FS), as project partners in February 2020. This indicates the project was operating at the height of Covid pandemic imposed restrictions. GEC was responsible for implementing project related activities in Kinta River Basin in Perak; and

⁷⁰ The Sabah and Sarawak Governments have effective full control over the governance of matters related to riverine biodiversity in the State, Mainstreaming of Biodiversity Conservation into River Management, Interim Report 1 (Revised NO.1), September 2021. RBM Engineering

Sungai Klang Basin which cuts across Federal Territory of Kuala Lumpur and the State of Selangor, whilst FS was given the responsibility for Segama River Basin in Lahad Datu Sabah. Outcome 2 was intended to showcase best practices and new practices. However, there was no plan to sequence outcomes and in the event of the project underperforming both outcomes 1 and 2 commenced at the same time around 2020.

200. In both the Klang and Kinta sites there was prior involvement by the GEC in both sites before the 2019 IRR and a number of co-financed activities took place during this time. The IRR noted that: *“while there was some progress on the pilot demonstration site projects at Kinta and Klang associated with the scope of the UNDP-GEF River Project, these were not executed as a cohesive project. No alternative was available since many of these activities were explicitly linked to co-financing commitments that were time-bound”*⁷¹. The statement reflecting the cohesion of the GEF-funded project *per se* and not the activities on the ground.
201. The Klang Basin is an urban setting and was heavily involved with the ROL programme⁷² through the GEC’s existing work in this area. The project has initiated a large number of activities and outputs. A number of these were completed in 2018 and 2019 using co-financing prior to the contracted project engagement. The project has provided input to incorporating biodiversity conservation and habitat rehabilitation into the framework of the ROL Initiative specifically through the ROL Public Outreach programme (ROLPOP) and through the improvement of habitat for riverine and aquatic biodiversity as well as introduction of biological monitoring for water quality, facilitated enhanced community engagement in the monitoring and protection of the Klang River, public education and awareness on riverine biodiversity assessment, monitoring and management, enhancing biodiversity in the river corridor by planting of indigenous species of tree and flowering plant in sections of the river corridor adopted by local communities or established as local classrooms, enhancing awareness on the nature and negative impacts of alien invasive fish species on indigenous biodiversity and discouraging the release of alien invasive fish into the river system by the public or government agencies⁷³, promoting consideration of biodiversity conservation and enhancement into the work of the key government agencies with responsibility for management of the river and river corridor in particular JPS, LUAS and DBKL, the establishment and strengthening of the Friends of Klang River Basin FoKRB to link more than thirty different community and special interest groups working for the assessment, monitoring, rehabilitation and management of the Klang River through the FoKRB Network and The active involvement of 27 Government agencies in the River Cleaning Task Force for the River of life Initiative in the Klang basin that was actively engaged in the public outreach programme and the GEF financed activities.
202. In the Upper Kinta Basin site (implemented by the GEC) the project has initiated the active engagement of 29 government-related agencies in the development of the UKB Management strategy An Interagency Project Working Group (PWG) to facilitate discussion on integrated river basin management and mainstreaming biodiversity, the Upper Kinta Basin (UKB) Riverine Biodiversity Study was carried out by the project in 2020 which demonstrated the importance of riverine biodiversity in UKB as well as the negative impact on biodiversity and water quality and drinking water supply for Ipoh City of the slope erosion on the Simpang Pulai Cameron Highland Highway, the project (together with co-funding through GEC) facilitated the development of the

⁷¹ Ibid: IRR report p. 51, para. 114

⁷² The ROL is a part of the Malaysia government's Economic Transformation Programs, an initiative which combines high-impact projects and programs to elevate the country to developed nation status. Divided into three main components – river cleaning, river master-planning and beautification with an estimated value of US\$1.3 billion in improving water quality in the Klang River in Kuala Lumpur.

⁷³ In the Project Document it was suggested that this was monitored by a Knowledge, Attitudes and Practices (KAP) survey but this was not carried over to the post-IRR SRF. A KAP survey is a considerable undertaking and would have needed to be carried out at least twice during the project.

Upper Kinta Basin Management Strategy (UKBMS) through a consultative process with government, civil society and local communities. This was endorsed by the PWG, co-chaired by JPS and the State Executive Councillor (Minister) on Environment. A specific chapter on the Biodiversity Management Strategy in the UKB has been incorporated in to the UKBMS and bio-engineering approaches were showcased by the demonstration activity undertaken in partnership with the Department of Public Works which was one of the first activities undertaken in Malaysia to stabilize fill slopes (i.e. those below the highway cut mainly formed from soil cut from the upper slopes) with use of coir matting and plants⁷⁴.

203. The intervention in Sabah (implemented by FS) provides an interesting approach⁷⁵. The intervention was designed specifically to align with the mainstreaming objectives of the project. Gender and cross-cutting issues have been integrated in the approach from the point of design. The intervention utilises various convincing approaches (e.g. the ICCA) and is systematic with clear operational, institutional and partnership pathways to mainstreaming. Furthermore, the livelihood activities are established without dependence on project financing.
204. The project activities in Klang and Kinta were completed during the TE whereas the Sabah site activities were still incomplete at the time of the TE. However, the outputs delivered provide initial pathways for commencing the process to synergise with the project mainstreaming objectives.
205. Clearly, there was a disproportionate impact of the Covid-19 pandemic restrictions on this outcome because of the field-based activities and the need to engage many stakeholders especially at the community level. Despite the numerous activities and outputs, the TE has concerns about Outcome 2 and its overall contribution to the project’s objective. Firstly, these activities have been largely completed in a very short space of time and the project has lacked a substantive Project Manager⁷⁶ to bring all of these outputs and activities together. Outcome 1 has been, to a large extent, carried out separately from this, partly as a result of the way in which the work has been contracted out and partly due to the lack of strategic guidance from a Project Manager, but the two outcomes are strategically linked. Secondly, in many instances the livelihoods aspects are wholly project supported and there are questions regarding their sustainability post project⁷⁷. This may be addressed by the establishment of tree nurseries for enhancement planting and to supply the bio-engineering as well as the river trails, however, there are no data available to quantify this, and the indicator from the SRF which might have demonstrated, this lacked utility⁷⁸. Thirdly, a number of demonstrations do not have the experimental monitoring necessary to integrate them into operational procedures necessary to allow their roll out post project. Related to this, while various institutional and agency stakeholders expressed an interest in these BMPs the TE did not find any convincing evidences provided such as, an exit strategy or action plan describing how the outputs from GEF project will be embedded into the respective PWG member’s functions and workplan. As such, they are

⁷⁴ Mainstreaming of Biodiversity Conservation into River Management: (Output 2: Best Management Practices For Critical Riverine Habitats Are Demonstrated At Key Sites Of National Importance: Upper Kinta Basin & Upper Klang Basin). Final Report (Phase 1: 2020). Reference: (13) DLM.PPS.KS (S) 15/2/3/9 JLD.29 DATE: 30.11.2020 and Draft Final Report Phase 2, 31/10/2021 (Phase 2: 2021).

⁷⁵ Although this has yet to be tested partly as a result of the short time available for implementation and also due to the restrictions of the pandemic and the specific risks identified for indigenous peoples.

⁷⁶ In fairness to the Project Manager(s) their tasks were largely directed at getting the project back on track and there can have been little time for strategic thinking. This was raised by a number of well-informed key informants who stressed that there was a drive to “get things done” with a resulting emphasis on project activities and outputs.

⁷⁷ See Section 3.2.2, Table 3, Indicator 2.4.

⁷⁸ It is unclear to what extent the project’s SRF was being utilised for tracking progress and impact. As stated, most indicators lacked utility and FS reported that while they did follow the SRF in reporting they also developed their own indicators as part of their M&E because the specified indicators in the SRF were not fit for purpose.

important, but they remain works in progress and the challenge will be bringing them into the mainstream of these agencies policies and planning approaches.

Overall Project Outcome 2 Rating is *Moderately Satisfactory*

Output 2.1: Biodiversity management strengthened and habitat enhanced through improved water reservoir catchment management in Upper Kinta River Basin (Perak) – this output is reported as completed.

The activities at the three demonstration sites were carried-out in two phases due to the uncertainty over the project’s extension. For GEC, the first phase was from March 2020 until November 2020; and once the extension was granted the second phase was awarded from February 2021 till November 2021. During the peak of Covid-related travel restrictions GEC managed to carry-out the specified activities at Klang River and Kinta River and delivered a number of outputs, as reflected in their submission of two progress reports⁷⁹ (Phase 1 and 2) which corresponds with the actual implementation period of the project (2020 till mid 2022).

The Upper Kinta River Basin (Perak) covers area of about 18,000 ha above Ipoh city in Perak. The focus is on the management of the upper catchment of Sg Kinta that is important for biodiversity conservation and water supply purposes. The project aims to improve understanding and the status of riverine biodiversity and improve the conservation of riverine biodiversity through strengthened watershed management, especially through reduction of sediment loading from highway and agro-tourism developments, as well as strengthening communication between the dam operator, government agencies, private players and local communities to ensure sustainable land uses.

GEC has already been working at this site in collaboration with other parties before the interventions through MBCRM project in 2020 began utilizing the GEF funds. Specifically, with the GEF funds support: the demonstration of bio-engineering sites for slope protection; UKB bio-diversity assessment report; Sungai Kinta open classroom, training programme for both local communities and government counterparts; and production of education and awareness materials. There are other outputs such as UKB Biodiversity Management Strategy which started much earlier and the establishment of a nursery with support of co-financing were delivered during the project period. The whole range of other reported activities and reports produced appears to be an extension and outputs of already on-going activities. In this regard, it is a challenge to establish the relevant linkages arising from some of the activities such as open classroom at Sungai Kinta source with the overall objective of mainstreaming biodiversity into Kinta river management and also to ascertain the impacts of GEF’s investment.

At the outset, the activities were heavily focused on education and awareness raising regarding river biodiversity, which also has been reinforced firmly in GEC’s deliverables proposal. Though enhancement of relevant knowledge is important; the impacts arising from such interventions are hard to ascertain unless it is anchored continuously amongst the key decision-making authorities. The project at Sungai Kinta were coordinated through Project Working Group (PWG) comprising 29 government agencies at Perak State level. Through the collaboration with GEC and the participation

⁷⁹ Mainstreaming of Biodiversity Conservation into River Management: (Output 2 : Best Management Practices For Critical Riverine Habitats Are Demonstrated At Key Sites Of National Importance: Upper Kinta Basin & Upper Klang Basin). Final Report (Phase 1: 2020). Reference: (13) DLM.PPS.KS (S) 15/2/3/9 JLD.29 DATE: 30.11.2020 and Draft Final Report Phase 2, 31/10/2021 (Phase 2: 2021).

of wide range of governments agencies which have helped to raise the awareness and the importance of conservation of riverine biodiversity amongst them, as expressed by DID Perak.

The pilot site created at km 46 of the highway was to demonstrate bio-engineering methods for slope protection and stabilization mitigating the effects of sedimentation in Sungai Kinta from soil erosions and run-offs. The methods to prevent erosions from degraded and bare slopes include planting of various types of trees and plants and slopes covered with coconut-coil mat were already in practice for a long-time, but for the past few decades the agency responsible for roadside landscape management the Public Works Department (PWD/JKR) has heavily depended on hard-engineering solutions. The methods demonstrated through GEF Project’s interventions were helping to revive the old methods under the repackaging as bio-engineering solutions.⁸⁰ Slope stabilisation using planting (bioengineering) is a lengthy process and the benefits are only likely to be measurable in the future. However, robust data collection on unit costs, efficiency at this point in the project would yield useful data for decision-makers in the future on the cost benefits of adopting these measures and to make comparisons with conventional hard engineering solutions.

The commitments shown by PWD Director, and the expansion of membership of the coordinating committee headed by DID Perak consisting of a number of state agencies at Perak State level are positive steps moving forward for institutional strengthening and internalisation. However, to what extent the lessons and knowledge gained from GEF’s Project intervention will be absorbed, sustained, and developed into a strategic plan for the integrated management of river basin is not clear yet. An exit strategy clearly describing the future of PWG and its institutional arrangement, roles and responsibilities would have been a useful indicator to provide confidence that the process to commence mainstreaming biodiversity has been initiated at certain institutional levels.

The local community “orang asli” from Kg Pawong is engaged by GEC to implement GEF project activities at the site. The community is not directly linked to Sungai Kinta for income generation, food sources or to meet any other needs. The involvement of local community “orang asli” from Kg Pawong in the project is limited to hiring them for paid services to carry-out project related activities. A nursery has been established in the village aiming at creating additional income generating opportunity by supplying saplings and seedlings for tree planting at slope stabilization sites and its sustainability (and investment risks) are closely linked to the immediate uptake of bio-engineering as operational policy by the PWD. Therefore, the real incentive for them to be involved in the project is for income, and their sustained involvement after the project closure is not assured and the success of the nursery’s income generation is dependent upon a large-scale adoption of the slope-stabilisation approach.

Output 2.2: Riverine biodiversity and habitat management integrated into planning and implementation of urban river management programmes in the Klang River Basin (Selangor and Federal Territory) – this output is reported as completed.

The Klang River flows through Kuala Lumpur and Selangor (Federal Territory/Selangor) and eventually flows into the Straits of Malacca. It is approximately 120km in length and drains a basin of about 1,288km², running through nine local authorities between the two States. The upper portion of Klang River Basin provides water supply (with two major dams Batu Dam and Klang Gates Dam) to the people of Klang Valley. The work is focused on the urbanised portion of the Upper Klang Basin and currently integrating riverine biodiversity management into the implementation/ follow up of river management projects including the River of Life (ROL) Programme, ROL Public Outreach Programme (ROLPOP).

⁸⁰ The term “bio-engineering” is first mentioned in the IRR report (likely as a suggestion by the GEC) and was used to make the process more relevant to the DID with its engineering focus of interest.

In a short space of time and subject to the pandemic restrictions, GEC has managed to complete a number of activities under the GEF project funds in several locations along the Klang River. This acceleration of implementation was facilitated through the long-standing working relationship that GEC have established with local communities at these sites over the years. From the interaction with the stakeholders associated with Klang River activities, it was observed that the GEC has established good rapport with the local communities and is able to mobilize them at the specific locations. The communities remain committed, championed by individuals and/or a group of people are enthused to continue with their involvement.

Specifically, the Project was focusing on three sites: Taman Warisan, Melawati; Rumah Pangsa AU Keramat and PA Seri Terengganu, Gombak all at up-stream of Klang River; and the GEC collaborating with a CBO River Rangers of Sg Klang, in the town of Klang at the downstream, before the Klang River joining the Straits of Malacca. As part of evaluation three sites were visited at Taman Warisan Melawati, Rumah Pangsa AU Keramat and Klang. Some of the activities started under Phase 1 were extended to Phase 2; and the activities concluded include: pre and post biodiversity study⁸¹ for the three sites (Kg Warisan 300m; Taman Melawati 500m; Rumah Pangsa AU2 200m; PA Seri Terengganu 300m); an awareness raising materials for each site highlighting importance of river biodiversity; eco-trail clean-up and maintenance and establishment of a community garden in Taman Melawati; in AU2 Taman Keramat - maintenance of a community garden; tree planting along 200m of the river bank; small scale wetland system to address sullage water issues; and in PA Seri Terengganu river biodiversity monitoring; community garden and riverine maintenance and beautification. Activities were also extended to Sg Penchala focusing mainly on addressing pollution at point source affecting the river. The Friends of Klang River Basin (FoKRB) based at the downstream of Klang River, the focus was on enhancing the operation of FoKRB a NGO, and establishing an open classroom in Taman Pengkalan Kampar.

The GEF project funded activities in these demonstration sites focused mainly on education and awareness raising and an emphasis on the community engagement. The GEF project was intended to complement other on-going projects such as ROL, in particular the ROLPOP, and activities at the sites were add-ons and extensions of the on-going community-initiated programmes with the support of GEC which started about seven to ten years ago. Under these circumstances it was a challenge for the evaluation to distinguish the GEF project’s contributions and additionality; and draw the relevance to the achievement of the larger objective of mainstreaming biodiversity. The activities observed at demonstration sites are all important for education and awareness raising and for public engagement, furthermore, they raise the profile of biodiversity. However, the sustainability is not explicit without wider mobilization of community and key stakeholders, particularly government agencies and authorities. Though consultations have been held between DID, local authorities and other relevant stakeholders, a coordinating committee (which was established towards end of Phase 1) has been established and is chaired by DID Wilayah, no firm plans are emerging for continuous engagement of the communities and institutionalizing the mainstreaming of biodiversity in river Klang management.

Considering the Klang River flows through two states’ territories and nine local authorities stretching more than 120 km there was a great opportunity for GEF project to create additionalities by bringing these authorities as well other federal and state agencies together to take the Klang River Basin management as a whole. This would have provided a constructive platform for institutionalizing the lessons and experience gained and the roles of civil societies from the on-going activities amongst the

⁸¹ Upper Kinta Biodiversity Assessment, Final Report, November 2020, JPS, UNDP, GEF, GEC.

respective authorities. The sustainability phase (the way forward), however, as reported in the final progress report⁸² (Section 4: Table 4.3) does not provide any firm lead towards that direction and evidence how the outputs from GEF project have contributed to the impacts of ROL project in mainstreaming biodiversity. Despite the GEF’s project intervention and on-going ROL for several years, a statement in the first phase progress report⁸³ suggests that the elements of protecting riverine biodiversity were still not attempted in the work programme of relevant agencies. (*Page 51, section iii: Kebun Komuniti KRT PA Seri Terengganu Sg Gombak: “However in August 2020, DID WPKL has awarded a contract to “clean-up’ the Sg Gombak. The riverbank cleaning contractor removed all the biodiversity and the plants along the riverbank and caused some issues on the project progress.”*)

Linkages with mainstreaming riverine biodiversity are remain fragile. Greater evidence of commitment by the lead agency might reasonably be expected and it is not clear how the local communities, once aware and educated, will be able to influence river management to any great extent. Furthermore, the first phase was carried out in 2020 in the space of approximately 12 months. The second phase followed with little adjustment from the first phase and was completed in just 10 months.

Output 2.3: Riparian habitat protected and enhanced in partnership with the private sector and local communities in the Segama River Basin (Sabah) – this output is reported as nearing completion.

The demonstration site at the Segama River, Lahad Datu Sabah and Forever Sabah (FS) was appointed in April 2020 to implement GEF supported project activities. Contrary to the GEC’s activities in Klang River and Kinta River; activities at Segama River were the products of GEF project. FS took the initiative to review the original scope of work in the SRF, targets and indicators to develop an action plan that is feasible to be implemented and achieved within the short timeframe in the environment of Segama River landscape. During the evaluation mission the project activities are still on-going. Due to the Covid travel and movement restrictions, though some preliminary and preparatory works have been completed, however, progress at the demonstration sites have been severely constrained.

The Segama river forms an integral part of the daily lives of the villagers living along and surrounding of the riverbank. Some villagers depend on the river for fishing, sports fishing and other recreational activities and others are oil palm or rubber smallholders whose plantations are right at the bank of river. A few plantation companies and a sand mining company are operating their businesses in the landscape of the river.

This output took an integrated approach, looking at Segama River Basin as a whole, from the headwaters down to the coast. The strategy is to identify hotspots along the river for targeted interventions with the support of diverse stakeholders including communities, private sector (particularly plantation companies) and government agencies. In this regard, the output has successfully engaged communities from seven villages along Segama River, DID Sabah and few plantation companies.

Preparatory works for engaging communities including socializing the project’s aim, creating a framework for community participation under an Indigenous Community Conserved Areas (ICCA) concept, training and awareness raising amongst the villagers. During the evaluation mission there weren’t any tangible activities which have been demonstrated due to Covid-19 restrictions. Some of the incomplete key works include riparian restoration works with communities, developing protocols for community participation in riparian conservation and restoration, cataloguing BMPs, partnering

⁸² Draft Final Report Phase 2, 31/10/2021 (Phase 2: 2021).

⁸³ Mainstreaming of Biodiversity Conservation into River Management: (Output 2: Best Management Practices For Critical Riverine Habitats Are Demonstrated At Key Sites Of National Importance: Upper Kinta Basin & Upper Klang Basin). Final Report (Phase 1: 2020). Reference: (13) DLM.PPS.KS (S) 15/2/3/9 JLD.29 DATE: 30.11.2020

with government agencies and a sand mining company for compliance with BMPs, and the restoration of abandoned oil palm plantations. To what extent FS would be able to accomplish these tasks within the project period is not clear⁸⁴.

Commitments from the plantation sectors is encouraging. Without GEF project’s intervention, some companies already embarking on their own initiatives in some riparian restoration programmes (for example IOI targets about 30ha for rehabilitation). A few areas have been identified for riparian restoration, but actual work has not been started yet. IOI opines that joining hands with FS, the community and DID would provide further impetus for their programme and are linking it to their corporate environmental and social responsibilities (CESR) initiative. The institutional structure at Sabah, whereby both river and water resources management is placed under DID Sabah is another strong element that works to reassure the Project’s objective in the future.

Some of the activities such as formation of Women’s Association⁸⁵ (Box 4), a biogas plant at one of the villages may produce some results at the site and local levels and fulfilling SRF targets through general waste management and is a long term strategy⁸⁶.

Box 4 Formation of Women’s Association and the role of women

The role of women: Women play an important role in the management of biodiversity and in rural circumstances women often have a high dependency on biodiversity and other natural resources for their livelihood security and its sustainable management is of real and practical concern to them.

Formation of Women’s Association: FS considered this critical towards meeting the objectives of the project because women in the various settings of an indigenous and local community play a central role in using, managing and conserving plant species that are important to their livelihood, including those found in riparian areas. This is practiced in the Kg. Dagat (Kinabatangan) community who are still dependent on rattan and other plants for their livelihood, thus, through the formation of the Women’s Association, FS can facilitate greater knowledge transfer among communities, in addition to increasing economic opportunities for them as they hold a major contribution to household income.

In addition to the livelihood activities that targeted women, it is also FS’s practice to include their involvement across all the components of their work – such as taking more leadership roles in the Segama ICCA Committee as well as the acting committee within their own villages.

Though the expected key activities still underway and the results are yet to be seen, however, the approach taken by FS, overall provides some hope for the sustainability of Project’s aim in the future by namely:

- FS taking a medium-term outlook beyond the Project.

⁸⁴ While compliance of sand mining operators with the existing legislations is the objective for this component, FS acknowledges that this is not achievable by the end of 31 March 2022. Thus, for the purpose of this project, they are focusing on the socialisation and awareness raising of the Guidelines for Minimising Impacts of Sand Mining on Quality of Specific Rivers in Sabah to all relevant stakeholders in an effort to move it forward and improve the relationships with both operators and acting agencies.

⁸⁵ Providing training and guidance, engaging women in some economic activities, enabling them to generate additional income. This includes promoting local dishes, handicrafts, etc. Beside the group also helped to mobilize project related activities at their villages.

⁸⁶ The implementation of a biogas digester is to address the need of protecting and enhancing riparian habitat through waste management in the long run. This also complements *Fasal 12 (BMP Habitat Rizab Sungai)* and *Fasal 13 (Pelan Pembangunan dan Pelaksanaan ICCA)* of the Memorandum of Understanding signed between the communities and Forever Sabah, which will be part of the community’s BMP and protocol to implement in the long run.

- Approaching the issue under the concept of an ICCA which may result in greater understanding and commitments from the villagers. Developing appropriate frameworks and having MOUs possibly assure their continuous participation.
- Commitments from DID and plantation companies are very encouraging, enhancing the chances for multi-stakeholders’ engagement and institutionalizing the efforts into government programme.

The relationship with Sabah State DID is different in as much as the DID has a mandate and regulatory powers for river quality in Sabah, as such, riverine biodiversity is more closely aligned with their institutional purpose. The output is specifically designed to align, as much as practicable, with the mainstreaming purpose of the project. The intervention appears to be a systematic approach addressing elements of water quality, habitat, livelihoods, private enterprise and institutional management. 40km of river have been systematically categorized into different zones for habitat enhancement according to differing tenure regimes and regulatory responsibilities (1) Species Conservation Zone, (2) Oil Palm Estate Conservation Zone, (3) Community Reforestation Areas, and (4) Forest Reserve Extension Zone. Planting efforts have focused on the Community Reforestation Areas but there has been a horizontal and vertical integration between the activities which are creating the necessary linkages between communities, private sector and agencies. These have also utilised emerging market-oriented tools such as linking to FS’s Certified Sustainable Palm Oil (CSPO) team to work towards certification amongst the communities. This aims to provide access to market (improving livelihood) and embeds market incentives within the system with the long-term support necessary to develop these market linkages.

Further, the community involvement has been nested in an ICCA which is a category of protected area that is gaining substantial recognition around the world and to some extent, formalises the community involvement and river biodiversity management and, to a large extent, puts the community in the driving seat.

The citizen science approach is already well supported by FS with existing procedures and processes sufficient to provide robust, credible and actionable data.

The Environmental and Social Screening Procedures (ESSP) has been integrated into the approach from the beginning with gender equality given clear priority in much of the livelihoods approach.

This output has also suffered due to the rushed nature (the FS Contract was signed in early 2020) and the travel and meeting restrictions imposed by the Covid-19 pandemic. This seems to have been recognised early on by FS and the activities and products of this output have, wherever practicable, been aligned with the existing FS programmes in order to ensure continuity and of sufficient expectation to be achieved within the time available.

3.4.1.1 Overall outcome

206. The overall outcome is less than was expected from the Project Document. A number of factors have contributed to this:

- The weaknesses in the project’s design and the mismatch between the Executing Agency mandate and the purpose of the project. This has led to weak ownership and poor project management.
- Insufficient time to fully adjust and develop the outputs to meet the mainstreaming objectives.
- The lack of cohesion between outcome 1 and outcome 2. The demonstration projects are not particularly informed by the larger structural changes necessary for mainstreaming and; the mainstreaming process is not tested and adapted according to what works on the ground due to the rapid rollout of the outcome 2 demonstration projects, limited time and lack of sequencing.

- In its haste to “get things done” the project is focusing on deliverables and tangible outputs without cognisance to the broader outcomes.
- The lack of a substantive, and long-term, Project Manager⁸⁷ to provide the guidance and solve problems as they arose.
- Poor relationships between pivotal stakeholders with overall responsibility for the project and its outcomes.
- The Covid-19 pandemic travel and meeting restrictions have negatively impacted on both outcomes.
- The truncated time available for activities.

Overall Project Outcome Rating is *Moderately Unsatisfactory*

3.4.2 Relevance

207. The Project Document developed a convincing case for the relevance of riverine biodiversity mainstreaming into river management in Malaysia including alignment with a suite of policies (10th Malaysia Plan, National Wetlands Policy 2004, National Integrated River Basin Management Plan and Malaysia’s Common Vision on Biodiversity, 2008). It remains aligned with the direction of policy including: i) the 12th Malaysia Plan⁸⁸ ii) the ecological fiscal transfer (EFT) into annual budgets by the Ministry of Finance and iii) core component of Malaysia’s Nationally Determined Commitments (NDC) submitted in 2015 under the Paris Agreement in support of its national goal of carbon neutral by 2050.
208. The project conforms to the GEF-5 Operational Strategy, the objectives and the eligible activities under the Biodiversity Focal Area Strategy; supporting directly *Strategic Objective 2: To mainstream biodiversity conservation and sustainable use into production landscapes, seascapes and sectors, mainly through Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation, and Outcome 2.2: Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks*. However, this will only be partially achieved with the Outcome 1 outputs and the Outcome 2 demonstration in Sabah.
209. The project will strengthen the implementation of Malaysia’s National Policy on Biological Diversity, thereby contributing towards achievement of the CBD’s Aichi Targets, in particular under the *Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use, Target 5: the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; Target 7: areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity; Target 8: reduction of pollution to levels that are not detrimental to ecosystem functions and biodiversity; and Target 12: preventing extinction of known species*.
210. The project is aligned to the Country Programme Document for Malaysia (2016- 2020), specifically Priority 2: Sustainable and resilient development; *Priority 2a: Enhancing national resilience to climate variability and change and Priority 2b: Value natural capital, reduce environmental impacts and improve access to quality ecosystem services*. This alignment is likely to follow through to the new Country Programme Document.
211. In summary the focus of the project is highly relevant to a range of pressing issues which Malaysia is tackling as outlines in the global and national outcomes above.

Overall Relevance Rating is *Satisfactory*

⁸⁷ There were 6 plus 12 months of a Project Manager in a 66-month project in which stakeholder relations would underpin its success or failure.

⁸⁸ The environmental sustainability dimension, among others include the blue economy, green technology, renewable energy as well as adaptation and mitigation of climate change.

3.4.3 Effectiveness

Effectiveness (contribution of the actual outcomes to the project objective):

212. The reformulated objective was “*to commence a process towards mainstreaming biodiversity conservation into riverine landscapes, through improved river planning and management practices in Malaysia*”. This was to be achieved through two outcomes (components) which were formulated:
- i. An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes.
 - ii. Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats.
213. Outcome 1 results were moderately unsatisfactory in relation to the results achieving the objective. Taking apart, the impact of the Covid-19 pandemic, the institutional arrangements and responsibilities surrounding river and biodiversity management are widely dispersed across a large number of institutional players and jurisdictions.
214. The development of an inter-agency strategy and financing plan should provide a roadmap for the future. However, this was required early on in the project to use the GEF resources to begin implementing it. Furthermore, the impetus for developing this has rested on the DID which is not institutionally positioned to drive the necessary changes across such a large number of stakeholders and stakeholder interests. The strategy is being developed by an external Contractor and the hurried nature of the output suggests that it is not likely to be institutionally internalised⁸⁹. As such there is a very real risk that the strategy will be a good report but not an instrument of change.
215. The effect on institutional capacities is not convincing as it relates to the outcome and objective. The output lacking the resources, and time, necessary to identify, analyse and build these capacities within stakeholders.
216. The BMP and guidelines are similarly exposed to this risk and are largely untested and not embedded in operational procedures and organisational practices to any great extent. The BMPs and guidelines are largely related to approaches and technologies and do not provide the adaptive changes that are needed across government in relation to water issues. As stated in this report, mainstreaming biodiversity into river management is an adaptive challenge necessitating changes in the way government agencies work together more than it is a set of discrete technologies. Biodiversity, riverine biodiversity, is still arguably regarded as something additional to water related issues, something optional. The outcome has not achieved a broad cross-party awareness that people need healthy rivers. Biodiversity needs healthy rivers and healthy rivers need biodiversity. However, biodiversity appears to remain peripheral to water issues and not integral to them.
217. Outcome 2 results were moderately unsatisfactory. In all three demonstration sites, the short time available to test the approaches, the weak project monitoring, and communication between the outcomes have been challenging for the project partners and considerable efforts have gone into getting the work done under unprecedented and difficult conditions due to the pandemic. It is important that these strands are brought together before the end of the project if they are not to become stand-alone projects within the overall project. Ordinarily, this would be the role of the PMU and in particular, a substantive Project Manager. However, as made clear in this report, in the 66 months of the project there has been 18 months with an effective Project Manager and the project is in the final 6 months without anyone with the time and mandate to achieve this. The impressive number of outputs and activities delivered in the Klang and Kinta sites provide

⁸⁹ This is not a reflection on the quality of the work carried out by the Contractor but relates to the process of institutional learning and internalising change.

initial pathways for commencing the process to synergise with the project mainstreaming objectives. However, they will still have yet to demonstrate their utility with sufficient thoroughness to merit their broad uptake across government stakeholders. The slope stabilisation provides a useful approach, but the means of implementation does not yet provide the convincing arguments for a wider uptake. The demonstration does not provide the sort of analysis which would allow decision-makers to make objective statements based on a broad range of factors from efficacy through to efficiency of contracting and operational rollout⁹⁰.

218. The Segama River demonstration has some interesting alignments and activities contributing to the outcome and objective. A systematic approach which has the potential to mainstream, albeit on a scale equivalent to the resources available to the demonstration, biodiversity in a variety of mainstreaming instruments, planning, land tenure (ICCA), CSER and the private sector, agriculture, etc. Although the results are not yet available.

Overall Effectiveness Rating is Moderately Unsatisfactory

3.4.4 Efficiency

Efficiency (project costs):

219. The project budget shows that for the first three years (2017 – 2019) approximately 3.7% of the budget was spent. Following the IRR in the remaining two and a half years (2020 – 2022) approximately 92% of the total budget has been spent or is committed to activities up to May 2022.
220. In the critical early years when the project infrastructure (strategic review, PMU, implementation, monitoring and reporting protocols, mobilisation of partners, etc) were not being put in place. Given that in a mainstreaming project time is a critical factor for effective institutional cognitive and adaptive changes, not only was time wasted but, when the project did begin in earnest, critical processes that need time to internalise and embed themselves; are being rushed suggesting that there is a high degree of expediency and a rush to deliver outputs and not outcomes.
221. Arguably, the most important component of the project is the outcome at an institutional level, creating the enabling environment in outcome 1. However, the original design weakness that has carried through a conventional conservation approach fused to a mainstreaming objective and a ratio of spending of approximately 2:1 (US\$ 815,000:US\$ 462,000) in favour of the demonstration projects suggests an inefficient use of funds if the objective was mainstreaming that was inbuilt in the design. While this might appear counterintuitive in relation to the scale of any demonstration rollout; it also needs to be considered in terms of the sequencing – enabling environment coherence and guidelines first; then demonstration.
222. In relation to Outcome 2 it is reasonable for the TE to reflect on the original project design. Given the timeframes necessary to achieve mainstreaming⁹¹ (which were not available at the time of the project formulation), whether the inclusion of a component directed at demonstration is feasible within the timeframe and resource envelope of a GEF medium-sized project. The TE has commented on the need to sequence the outcomes as part of the project’s strategy and it is reasonable to question whether there would ever have been sufficient time for Outcome 1 to address the inefficiencies and contradictions in the enabling environment sufficiently to free up the policy, regulatory and institutional landscape in time for the demonstrations to work. Similarly, it is reasonable, given the challenges faced by any project, whether there would have been sufficient time for the demonstrations to provide the feedback necessary to modify and

⁹⁰ A clearer and relevant SRF would have been useful in measuring these parameters.

⁹¹ See: Evaluation of GEF’s Support to Mainstreaming Biodiversity, GEF/ME/C.55/Inf.02, GEF Independent Evaluation Office. November 26, 2018 *and*; OECD (2018), Mainstreaming Biodiversity for Sustainable Development, OECD Publishing, Paris *and*; The Nature of Policy Change and Implementation: A Review of Different Theoretical Approaches Lucie Cerna, Analyst, OECD 2013. See also the IRR 2019.

adapt the enabling environment. In any event, this two-way process would have been made more efficient if there had been a substantive Project Manager in place throughout the project’s lifetime to provide the coordination and communication between the different components.

223. Additionally, at least one inefficiency in procurement has been identified in the contracting of technical expertise. The Contract for the outcome 1 activities was awarded to a Company which subsequently replaced its technical expertise with that of by the company that was also in contention in the original call for proposals. Although the unsuccessful company’s proposal was assessed as value for money and meeting the competency requirements, its bid was not accepted. The TE notes that a more straightforward direct company which already held the technical expertise would appear to be a more efficient use of funds.

Overall Efficiency Rating is Moderately Unsatisfactory.

Table 12 Overall rating scales Relevance, Effectiveness and Efficiency

Assessment of Outcomes	IRR Rating	TE Rating
Relevance	S	S
Effectiveness	HU	MU
Efficiency	HU	MU
Overall Project Outcome Rating	NA	MU

3.4.5 Country ownership

224. Given that the first three years of the project took place without effective project management, the mismatch between the project objective and the Executing Agency (DID) mandate and very little evidence to suggest that the project is influencing a wider debate on water resources *per se* in Malaysia there is little to suggest that there is a strong country ownership of the project outcomes and objective.
225. From the field missions in Klang and Kinta, although PWGs were formed to coordinate project activities; however, evidence towards any strong institutional ownership of the demonstration outputs is hard to determine; in Sabah there appeared to be a greater interest in the outputs from the communities (income generation and livelihoods and the ICCA), the private sector (due to strengthening CSER profiles and market approaches) and the DID Sabah due to its wider interest in river quality.

3.4.6 Cross-cutting issues

3.4.6.1 Gender equality and empowerment

226. Gender equality and empowerment was not integrated into the Project Document with no specific strategy. It was captured to some extent in the SESP but that did not carry through to a specific policy and procedures within the project implementation. It is not captured in the objective or Outcome 1 and it remains to be addressed at the field level with the demonstration sites in Outcome 2. There are specific components of indicators in the SRF but these lack substance.
227. During the first three years of the project there is little of consequence taking place and it would appear that in the rush to expediate the project following the IRR no specific plan is put in place to ensure that issues of gender equality and empowerment are taking place.
228. In Outcome 2 the Klang and Kinta demonstrations make an unconvincing case for gender inclusion and the betterment of women stakeholders.
229. In the Sabah demonstration gender is *mainstreamed* into the design of the intervention with specific gender markers within the internal monitoring and evaluation of FS. Furthermore, FS has its own internal gender policies and procedures which appear to be applied in the execution of the demonstration activities. In this instance there is evidence that these activities were gender targeted, responsive and transformative.

3.4.6.2 Social and environmental standards

230. There was a SESP carried out during the development of the Project Document. There is no indication that this has been revised since then. It should be noted that at the time of the project’s development the SESP was a relatively new procedures for UNDP and GEF projects. Today the SESP is given significantly more attention than would have been at the time as the procedure was relatively new and unfamiliar. All risks were considered Low, which would appear to be reasonable. However, the presence of ethnic minorities and indigenous people in the project area should have been given greater prominence including, nowadays; Free and Prior Informed Consent (FPIC). The SES in the Project Document answered “yes” to the question “*are there measures or mechanisms in place to respond to local community grievances?*” although the TE has not seen such a procedure and given that the most interactions with communities would be through third party NGOs it would have been prudent to have such a grievance mechanism in place as part of the project’s risk management.
231. The Covid-19 pandemic is recognised by the government of Malaysia as a particularly high risk to indigenous people and appropriate safeguards were put in place.

3.4.6.3 Sustainable Development Goals

232. The project responds to a number of Sustainable Development Goals (SDG):
- SDG 6: Clean Water and Sanitation, *Target 6.6: Protect and restore water-related ecosystems.*
 - SDG 11: Sustainable Cities and Communities, *Target 11.4: Strengthen natural resources and regional development planning, Target 11.5: Reduce adverse effects of natural disasters, Target 11.6: Reduce the environmental impact of cities.*
 - SDG 15 Life on Land, *Targets 15.1: Conserve and restore terrestrial and freshwater ecosystems, Target 15.5: Protect biodiversity and natural habitats, Target 15.8: Prevent invasive alien species on land and in water ecosystems.*

3.4.7 Sustainability

233. Sustainability is the likelihood of continued benefits after the project ends.

3.4.7.1 Financial resources sustainability

234. Outcome 1 is developing a financing plan. However, unless the products of Outcome 1 are incorporated into efforts to reform the wider water sector, judging by the poor commitment of co-financing during the project’s lifetime the TE concludes that any benefits emerging from the project have a low likelihood of economic sustainability.
235. At the time of the TE it is hard to judge whether the financing plan accompanying the stakeholder strategy will be sufficient to mobilise resources for further mainstreaming activities and for riverine biodiversity *per se*.

Financial Resources Sustainability Rating is Moderately Unlikely.

3.4.7.1 Socio-political sustainability

236. The project does not present a convincing case for socio-political sustainability. Given the short time that the activities have taken place in there are no signs that this has become politically embedded and overall, the subject lacks a high-level champion to drive the process forwards.
237. Issues such as direct payments to communities without homing the financial support in any organisations operational plan of works in Klang and Kinta, for instance, mitigate against sustainability although it is likely that there will be ongoing inclusion in the programmes and activities of the GEC. Initiatives such as the FoKRB are important steps in this process.
238. Output 2.3 (Segama River) suggests a higher likelihood of socio-political sustainability given that it is nested in the programmes of FS, the ICCA has a certain traction with local communities, there appears to be more DID support and it incorporates market-led approaches in relation to plantations.

Socio-political Sustainability Rating is Moderately Unlikely.

3.4.7.2 Institutional framework and governance sustainability

239. Sustaining the outputs and impacts from Component 1 after the Project is challenging. The DID may accept the BMP framework⁹², but it does not have any legal mandates to ensure implementation⁹³, and DID also lacks resources, particularly competent manpower to nurture change of mind-set⁹⁴ moving towards adopting a comprehensive, “softer”, nature-based solution to river management, though the current DID’s Integrated River Basin Management programmes do incorporate some of its elements. However, this is a longer-term objective which will presumably grow out of the Outcome 1 outputs.
240. Though, there have been some positive outcomes from NSC on the possibilities of merging the BMP and guidelines with the existing schemes such as *MSMA* (Urban Storm Water Manual) in the absence of legal mandates for DID, but it might be a challenge to achieve policy cohesion at the higher level considering the fragmented administrative structure with regard to biodiversity mainstreaming and river basin management amongst the policy-making federal ministries. Integrating riverine biodiversity into the *MSMA* is unlikely to put the DID “in the driving seat” in terms of institutional coordination and policy cohesion to maintain the achievements of the project after its closure.
241. Institutional bureaucracy at the government agencies may suggest that sustaining the outputs post project might be a challenge. River biodiversity and its related management and conservation plans are out of scope of DID’s core business⁹⁵. DID’s focus is mainly on hard-engineering solutions to address flood mitigation and river management – factors affecting commitment and buying-in to the long-term Objective of the project. The creation of “Biodiversity and Research Unit” within DID does suggest that there is some institutional traction, but the TE cannot state with confidence that this will be effective; because there is little information on the terms of reference, budget, activities, human resources, etc, of this unit at the present time.

Institutional Framework and Governance Sustainability Rating is Moderately Unlikely.

3.4.7.3 Environmental sustainability

242. The purpose of the project is to create the conditions for the sustainable management of river biodiversity alongside the other ecosystem goods and functions that rivers provide. However, the project has not yet created the conditions whereby biodiversity, in its self and as an indicator or product of wise river management is still not vulnerable to short-term development pressures. It has not created the awareness that clean water supply and a healthy ecosystem in which biodiversity both thrives and sustains the system are one and the same thing. This will need considerably greater effort before environmental sustainability is likely. DID through IRBM and soft engineering was promoted for all the development projects within DID i.e. flood mitigation and river project.

Environmental Sustainability Rating is Moderately Likely.

⁹² These were not available at the time of the TE and the team tasked with producing them were requesting an extension in order to complete the work.

⁹³ This was raised repeatedly by a cross-section of stakeholders (including the DID), it was raised in the IRR and the roles and mandates were contrasted in Sabah where river biodiversity is more closely aligned.

⁹⁴ This was raised by a number of key informants, including within the DID, stressing the task of matching their considerable skills and experience in engineering with the necessary ecological disciplines at both the individual and institutional level was extremely challenging.

⁹⁵ This was a reoccurring theme in key informant interviews.

Table 13 Overall likelihood of sustainability

Assessment of Outcomes	IRR Rating	TE Rating
Financial Resources	ML	MU
Socio-political Sustainability	ML	MU
Institutional Framework and Governance Sustainability	MU	MU
Environmental	ML	ML
Overall Likelihood of Sustainability	NA	MU

3.4.8 GEF additionality

243. There are some signs of GEF additionality commensurate to the time that the project has been effectively operating (2020 – 2022).

244. The Project Document, of its time, used an incremental approach⁹⁶ which is presented in Table 14 alongside the TE assessment of achievement.

Table 14 Incremental approach assessment for GEF additionality

Current Practice	Project Alternative	TE Assessment	Comment
Outcome 1			
Unclear national agency responsibilities and capacity for the management of riverine biodiversity. Current activities are largely <i>ad hoc</i> and sectoral.	Nationally agreed strategy to enhance the conservation of riverine biodiversity, with multi-stakeholder collaboration and allocation of responsibilities to different agencies to enhance riverine biodiversity.	Only partially achieved and will require considerably more support. Final outputs were not available during the TE.	Stakeholder strategy but it lacks an institutional champion and positioning.
Experiences and lessons learned from biodiversity conservation in river management are not documented and shared.	Best management practices for riverine biodiversity conservation collated, reviewed, documented and disseminated through outreach and training programmes and integrated into agency practices.	Not achieved at the time of the TE.	BMP and guidelines being prepared. Due to sequencing there is little in the way of demonstration.
Investments in river management mainly focused on flood control or water supply with little or no focus on riverine biodiversity.	Riverine biodiversity issues mainstreamed into river management planning and practices by national and state agencies.	Not achieved.	Financial plan will still need to be adopted with policy conformity across sectoral plans and budgets
Outcome 2			
Riverine biodiversity in the upper Kinta River catchment will continue to deteriorate due to erosion and sedimentation as agencies and local communities work in isolation.	Strengthened partnership between government agencies as well as local communities addresses reservoir catchment management in an integrated manner, reducing erosion-siltation and enhancing the protection of watershed forests and riverine biodiversity.	Partially achieved.	Observed some linkages; however, evidence are not strong enough to demonstrate the expected impacts and results.
River of Life Project in the Klang River Basin focuses mainly on pollution control	ROL integrates biodiversity considerations and helps to conserve and rehabilitate riparian habitats.	Partially achieved.	Observed some linkages; however, evidence are not strong enough to

⁹⁶ P. 52, Project Document

and enhancement of amenity value.			demonstrate the expected impacts and results.
Riparian zones along the Segama River are protected only by selected land owners while others clear and degrade them.	Protection and rehabilitation of riparian zones is enhanced through collaboration and exchanges between government, private sector and local communities, strengthening connectivity of the local protected area system.	Partially achieved. More results expected by project end.	The strategy employed is coherent and with further time it could show additionality benefits.

3.4.8.1 Catalytic role / replication effect

245. The effective life of the project has not been long enough to see any catalytic effect or replication and upscaling and there is insufficient data to make comparisons between existing hard engineering approaches and the bioengineering techniques.

3.4.9 Progress to impact

246. Progress to impact is hard to detect. It is important to stress again, that the project has not been operating fully for long enough, to have made an impact and the TE is taking place six months before the finalisation of the bulk of the outputs.

247. However, based on the assessment of indicators, outputs and outcomes, the field mission observations and key stakeholder interviews, it is possible to use the TOC (section 2.6) as a metric for the plausible impact achieved by the project. This report has already stated that there was a focus on outputs and not outcomes, due largely to the truncated time available for implementation⁹⁷. Referring to the TOC, the project has, or is still in the process of carrying out, the activities and producing the outputs intended to address the weaknesses and overcome the barriers to mainstreaming biodiversity into river management. A mainstreaming project should place considerable emphasis on *process*, this is the nature of institutional change, of adaptive change (see Annex 14). However, in the rush to complete the outputs, there has been insufficient attention to internalising the process and outputs in order to achieve an outcome.

248. It is, however, possible to postulate that the institutional framework issues and challenges discussed in section 3.4.7.2. *inter alia*: legal mandates to ensure implementation, lack of resources, particularly competent manpower to nurture change of mind-set moving towards adopting soft nature-based solutions etc., and the still fragmented institutional landscape; will be formidable barriers yet to be overcome.

249. That said, in the case of the demonstration sites, there are lessons which will likely emerge from these demonstration. However, there is insufficient evidence that these are either being driven by Outcome 1 or feeding into the process of developing that outcome. On this basis the progress towards impact is weak. Factors affecting this have been the lack of a continuous substantive Project Manager to tie the two outcomes together, the truncated actual implementation time, the effect of the pandemic and the weak project SRF which provides very poor guidance for project process and progress.

⁹⁷ It should be noted that there was no progress prior to the IRR (3.7% budget execution in 3 years) and following the IRR there was considerable uncertainty as to whether a no-cost extension would be granted. These two phases to the post-IRR project have exerted considerable pressure to just get things done.

4 Main findings, conclusions, recommendations and lessons

4.1 Main findings

250. Relevance and design: the project was in line with Government and donor policies in particular the National Policy on Biodiversity and the UNDP CPAP priorities as well as the GEF’s policies on the conservation of biodiversity. It was intended to address two weaknesses or shortcomings in the conservation of river biodiversity:
- i. The fragmented and diffused responsibility for biodiversity conservation in the management of all aspects of rivers in Malaysia – partially started.
 - ii. The lack of examples of effective management practices, approaches and techniques in conserving biodiversity in Malaysia’s riverine ecosystems – partially started.
251. The project’s TOC reconstructed during the IRR and used during this TE identified and captured all the elements of the system including plausible pathways for change. However, the delays in the project and the foreshortened effective implementation time have prevented the sequencing of project activities weakening the mutually reinforcing impacts between Outcomes 1 and 2.
252. Effectiveness and results: the project has been partially effective in “commencing a process” of mainstreaming biodiversity into river management – although it should be noted this objective is vaguely worded in the SRF.
253. Outcome 1, which was intended to address the overall enabling environment and bring coherence to the institutional landscape of river management in Malaysia *vis a vis* mainstreaming biodiversity; is still in progress with the outputs only being ready by mid 2022 and the result has made, overall, a moderately unsatisfactory contribution to the project objective in as much as it is:
- i. Developing an institutional stakeholder strategy for mainstreaming biodiversity into river management. The process is being led by a competent Contractor and early, interim, reports indicate that the report will be of good quality with an associated financial plan.
 - ii. BMP and guidelines are being prepared however, the BMP and guidelines will not have been tested to any extent by the end of the project and the guidelines may be incomplete.
 - iii. Is establishing a Biodiversity and Research Unit within the DID.
254. However, the outputs and outcome will still be institutionally grounded an agency which does not have any legal mandates to ensure implementation, and lacks resources, particularly specific human resource skills to nurture a change of mind-set moving towards adopting soft nature-based solutions. As such it has only contributed in a small way towards the project objective and contributions will not have sufficient post project momentum to sustain themselves and is considered moderately unsatisfactory.
255. Outcome 2 was intended to practically demonstrate approaches to riverine biodiversity conservation and feedback into the mainstreaming process by taking a multi-stakeholder approach at three different sites representing different jurisdictions within Malaysia’s federal system. The demonstration sites have made varying contributions to the project’s objective, such as:
- i. Two of the sites (Klang and Kinta) have demonstrated some relevance in the demonstration activities towards mainstreaming. Where activities have been linked directly to the institutional-policy-operations nexus of mainstreaming there is no evidence of a systematic approach with robust and actionable data for high level decision-making, there is weak evidence of broad adoption and rollout of the approaches of future budget commitment (e.g. incorporation in budgeting, commitment to further trials, etc.).
 - ii. Education and awareness activities have taken place and there is evidence that this has stimulated public interest through the river trails, FoKRB, etc. It is hard to say whether this

- is sufficient to make an impact on policy and future investment but it is commensurate with the level of GEF investment.
- iii. The Segama demonstration site which was specifically designed to align with the project’s outcome and objective presents a more systematic approach and develops plausible linkages between state-community-private sector which are expected of a mainstreaming project. However, these are still in progress and need completion of the GEF-financed activities.
256. The project has not made a satisfactory contribution to the GEF global objective of mainstreaming biodiversity into river management, nor has it effectively demonstrated approaches to mainstreaming biodiversity or the management of riverine biodiversity. This requires the combined efforts of both outcomes, which are incomplete at the time of the TE and have effectively been implemented within a two-year timeframe.
257. Overall, the project was overly ambitious and mis-matched with the institution tasked with executing it. There is weak evidence of effective mainstreaming after five years of implementation, although some results will be finalised in the remaining six months.
258. Efficiency and finance: the project was inefficient showing a budget execution of 3.7% after three years and then subsequently expending the bulk of the budget in the remaining project time plus an eighteen month “no-cost” extension. In reality, this necessitated expending the bulk of the GEF funds in a two-year window through three discrete Contracts. One Contractor (GEC) has managed to complete within this timeframe with a large number of activities and outputs being completed. The remaining two Contractors (RBM and FS) were still completing their outputs during the TE.
259. The delays in the project are due to a number of factors. These included, delays in finalising the GoM and UNDP CPAP, institutional reorganisation affecting the positioning of the DID within the Ministry, weak institutional ownership of the PMU by the DID and an inability of the UNDP to establish its project assurance and oversight role until 2019. These appear to have been compounded by a breakdown in relations between key project partners for at least the first part of the project.
260. Initial delays in the project resulted in committed co-financing sources being expended before the project activities gained momentum. The PMU was not adequately recording co-financing.
261. There has been adaptive management taking place, albeit belatedly. The decision to carry out an IRR was very effective and had a profound effect on the project. Changes made to the SRF have reasonably reduced the expectations of the project, the “quantity”, but the quality of the changes did not strengthen the utility of the SRF as a monitoring and evaluation tool. This has made it even more challenging to track performance and impact.
262. The change in the project management structure, with considerable direct support to project execution by the UNDP, was necessary but, likely also has reduced accountability and ownership of the outcomes and impact. The project would have benefitted from a substantive Project Manager to ensure cohesion and direction between the two outcomes for the duration of the project. Of the 66 months of the project there have been only 18 months with a sitting Project Manager and for the remaining 6 months (October 2021 to May 2022) there is no Project Manager in place.
263. Budgeting and financial management was poor in the first three years of the project. Following the IRR this has improved however, some inefficiencies in procurement are evident resulting in one instance of preferred Contractor being selected and awarded a Contract over a Contractor with stronger technical qualifications – only to have the successful Contractor replace the technical expertise with that of the unsuccessful Contractor which has resulted in delays.
264. The shortened implementation timeframe has also affected the veracity of the demonstration projects.

265. The Covid-19 pandemic has seriously disrupted project implementation, negatively impacting the project just at the time that the project revisions were being implemented. This has particularly restrained the Outcome 2 activities with local communities as well as oversight to these demonstration sites due to travel restrictions although the two Contractors involved found ways to keep activities going where practicable, but this was not always possible given that remote working does not fit well with community-based and field work.
266. Sustainability and ownership: Clearly, during the first three years there was little stakeholder participation taking place. Weak ownership and uncertainty within the institutional landscape were largely responsible for this. The Covid-19 pandemic restrictions have contributed to it. However, the PMU does not appear to have been able to establish the connections, the coalition of the willing, to give the project – one in which establishing strong stakeholder relationships and linkages is fundamental – a common purpose and direction.
267. Most of the Outcome 2 outputs will be owned by the DID which is not in an ideal position and may not have the legal mandate to drive these forwards and embed them in other stakeholder organisations. There is unlikely to be sufficient time for effective capacity building to have taken place although it is clear that individuals and institutions have been exposed to ecologically orientated management approaches.
268. There are few signs of the DID or other agencies taking up the approaches with, for instance, future budgetary commitments or policy and working practice reviews. This may emerge from the outputs produced under Outcome 1 but this would need continued support in the form of a credible project legacy plan. The project does not appear to have established a motivation for the adoption of biodiversity-friendly approaches to carrying out their river-related responsibilities and mandate yet.
269. The financial and economic risks to the project objective are considerable. Neither has the project given attention to operational and bureaucratic procedures, for instance in relation to slope stabilisation, there is weak analysis of the efficiencies in institutionalising bio-engineering and agency budget execution, all things that could mitigate against the uptake of “soft” biodiversity-friendly alternatives to hard engineering. Clearly, there is interest, but this needs to be taken further.
270. Outcome 2 makes a strong case for continued NGO involvement in mainstreaming however, the real impetus for this needs to come from the institutional management agencies themselves. Outcome 1 was intended to drive this process. The results of this were not available during the TE although all the signs (initial reports⁹⁸, etc.) suggest that the materials will be useful. They will still need to be adopted and internalised across a range of stakeholders.
271. Overall, sustainability of the project results is low and vulnerable.
272. Contribution to impact: Overall, there is some contribution to the predicted impact. Many of the outputs of the project are still in progress. However, the opinion of the TE is that all together, they have not achieved sufficient critical mass – the linkages, the coalition of purpose, mobilised resources and high-level support – to drive the mainstreaming of biodiversity in river management past the end of the project.
273. The project will have developed a stakeholder strategy, financial plan, a review of institutional capacities and best management practices with a framework for guidelines (expected Outcome 1 delivery is early 2022).
274. At the demonstration sites many of the activities and outputs have still to be tested or adequately internalised at a level that would suggest that they have become part and parcel of working practices, largely a result of the earlier project delays. In Sabah, these are largely a work in progress and unfinished at the time of the TE.

⁹⁸ Mainstreaming of Biodiversity Conservation in River Management, Inception Report May 2021, RBM.

275. Gender equality: The Project Document did not provide a thorough gender analysis and this was largely identified in the SES which concluded that gender-related risks were low. There were no specific project activities to address gender equality. However, some of the demonstration site activities were specifically targeting women (principally related to livelihood activities) which in the instance of the Segama River intervention they could be described as specifically gender targeted and supported by strong internal gender equality policies and protocols within FS which would suggest that they are also gender responsive and transformational in nature.
276. Other cross-cutting issues: given the short time for effective implementation conclusions on the cross-cutting achievements of the project are hard to detect and the TE is cautious about drawing to firm a conclusion about the project’s impact across a range of cross-cutting issues. Poverty alleviation is addressed in some ways in the demonstration projects, however, these are closely linked to the project activities⁹⁹ and may be vulnerable without continued project or NGO support.
277. The project is aligned with SDG 6, target 6.6, SDG 11, targets 11.4, 11.5 and 11.6 and SDG 15, targets 15.1, 15.5 and 15.8.
278. Arguably, the project could have created linkages to other cross-cutting areas such as climate change mitigation and adaption but either by omission or through lack of time this does not appear to have occurred.
279. Stakeholder engagement and partnerships: The 2018 and subsequent (2020) reorganisation of the executing agency, Ministry of Environment and Natural Resources (MENR), both were renamed as Ministry of Economic Affairs (MEA) and Ministry of Water, Land and Natural Resources had a profound effect on project implementation and contributed to the lack of ownership with the project now placed under a newly created ministry known as Ministry of Environment and Water (KASA).
280. The project appears to have struggled to establish stakeholder participation and coordination likely due to the short period of effective project management and an understandable urge to deliver outputs.
281. The newly restructured administrative structure presents challenges in achieving the objective of the Project of mainstreaming biodiversity in river management, as the functions of managing biodiversity related matters and management of water resources are now split into two separate ministries. These institutional complexities at federal level compounded further the issue of ownership in which the project was lacking from the beginning and challenging any potentiality seeking policy cohesion between federal agencies and related state departments

4.2 Conclusions

282. The identification of biodiversity conservation in river management was highly relevant and necessary, as was the need to address the fragmented institutional management landscape.
283. The positioning of the PMU coupled with two significant institutional reshuffling events at the start of the project resulted in a lack of institutional ownership of the project’s operational and implementation processes and the project drifting for the first three years of implementation. During this time the UNDP was unable to exert its oversight and project assurance role as exemplified by 3.7% budget execution three years into a four-year project or ensure that an effective PMU was established. Poor relations between project partners also appear to have contributed to this.
284. In 2019 the UNDP, recognising that the project was underperforming, instigated an IRR to assess the viability of the project and make recommendations about its future. The IRR was a thorough and useful exercise and recommended revising the SRF, strengthening the PMU and an aggressive “go for green” approach with a number of milestone triggers for extending the project

⁹⁹ Including the institutional uptake of the best management practices.

or closing it. The preferred option for project management was a hybrid of NIM with direct support by the UNDP.

285. The original SRF was unnecessarily complicated. However, the revised SRF following the IRR reduced the expectations of the project to match the time and modest resources available to the project and adjusted the Objective, Outcome 1 and some outputs. Still, the phrasing of the objective, outcomes, the selection and wording of indicators has not much improved the SRF; it is still weak and it lacks a utility for monitoring and evaluation.
286. While the post-IRR implementation arrangements have increased efficiency, they have not fundamentally addressed the issue of ownership. Sustaining the outputs and impacts from Component 1 after the Project will be challenging. DID may accept the BMP framework, but it has a weak institutional mandate to ensure implementation, and DID also lacks resources, the organisations human resource capacities being largely geared to skilled engineers it will likely find the task of nurturing the change of mind-set moving towards to adopting soft nature-based solutions challenging. The creation of a Biodiversity and Research Unit within the DID is not convincing, coming too late in the project for it to internalise the outputs and the lessons, and further, lacking the institutional positioning and authority to drive through mainstreaming across a range of other government departments and sector interests.
287. The post-IRR efforts to get the project implemented and produce results has been commendable, although it has come at the cost of attention to process and largely focused on the delivery of discrete outputs. These outputs will be useful in further mainstreaming biodiversity into river management but, of themselves; they don’t amount to mainstreaming.
288. These inherent weaknesses in the project’s infrastructure and management arrangements has resulted in low efficiency and weak effectiveness in producing results.
289. The likelihood of the project achieving its objective by the end of the GEF-funded period in May 2022 is unlikely and the outputs achieved will remain vulnerable.

Table 15 Evaluation ratings

Evaluation Ratings			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry	MU	Quality of UNDP Implementation	MU
M&E Plan Implementation	MU	Quality of Execution - Executing Agency	MU
Overall quality of M&E	MU	Overall quality of Implementation / Execution	MU
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance	S	Financial	MU
Effectiveness	MU	Socio-economic	MU
Efficiency	MU	Institutional framework and governance	MU
Overall Project Outcome Rating	MU	Environmental	ML
		Overall likelihood of sustainability:	MU

4.3 Recommendations

290. The TE provides a small number of recommendations because the project’s actual effective implementation has taken place over a very short time period. In addition to this, this report reproduces a number of the recommendations made during the IRR which are relevant for sustaining the project’s achievements.
- i. Organise a workshop to develop an exit strategy or legacy plan – the products of the project are not secure and if they are not correctly managed as the project closes they will be lost. These include the inter-agency strategy, national action plan and financing plan. The responsibility to ensure that these are followed and implemented should sit within a level of

government which has the mandate and authority to ensure that the strategy and action plan is implemented across a range of different state bodies. Furthermore, whichever ministry is responsible should already possess the capacities necessary to implement the strategy and action plan as well as the authority to hold other agencies accountable for playing their parts. The exit strategy is too important to leave to the PMU and has to be developed through a participatory process to ensure full understanding, attachment to reality and broad cross-sectoral agreement.

- a. The legacy plan should provide a super-framework within which the inter-agency strategy and action plan are framed. This should place biodiversity firmly in the future of the water sector in Malaysia, not as a series of trade-offs but as an integral part of achieving water security and part of the process of addressing climate change.
- ii. The project should be audited prior to its closure. The Project Document required four audit events during the project cycle. This was un-necessarily excessive. However, while there is no evidence to suggest this risk has occurred, it should be scrutinised by an independent auditor in the interests of transparency and visibility of process.
- iii. Immediately extend the deadline for the deliverable of Outcome 1 Outputs to provide the Contractor with sufficient time to deliver the best quality products such as the institutional stakeholder strategy and the BMP and guidelines. A reasonable delivery date would be February 2022.
- iv. Complete the Biodiversity tracking Tool before the closure of the project. There is little point in doing the Capacity Score cards due to the time between the baseline assessment.
- v. In the Segama River demonstration site, resources should be concentrated and consolidated where there is the most promise of demonstrating the benefits of mainstreaming.
- vi. UNDP should realistically review the co-financing commitments during the design phase of GEF projects against a range of criteria including realism and relevance to the project's objective and develop a clear format for reporting co-financing during the project. Project expectations are hyper-inflated because of the co-financing and the responsibility for co-financing is diffuse within the exiting GEF project architecture. In-kind co-financing should not be earmarked to foundational components of any project, especially those poised for demonstration value; these should be adequately resourced through the core GEF grant¹⁰⁰.
- vii. GEF funded projects have become increasingly complex and sophisticated, especially those related to mainstreaming. Governance of renewable natural resources is at their core as they seek to address the inequalities and inefficiencies within the policy, regulatory and management landscape. Future programming should closely align GEF biodiversity projects with other programme areas to take advantage of synergies, a common purposes and resources¹⁰¹. Mainstreaming has a much longer time horizon than a single project cycle and project results need to be nested in continuous reform processes and mutually supporting other mainstreaming agendas.

4.4 Lessons learned

291. The TE provides a small number of lessons learned because, given the project's very short time of effective implementation and the impact of the Covid-19 pandemic there are few, if any,

¹⁰⁰ IRR Lesson 9

¹⁰¹ A number of key informants stated that this was the first mainstreaming project by UNDP and it is repeated in the IRR. At the time of design this was the case however, now this is not the first mainstreaming project implemented. UNDP has implemented a separate mainstreaming project with Ministry of Women.

project experiences which have been tried and tested. In addition to this, this report repeats some of the lessons drawn from the IRR where applicable (the full IRR lessons are provided in Annex 21:

- i. The GEF project design phase is critical. Given the complexity of socio-ecosystems, projects intended to intervene in order to bring about a change in the direction a system is travelling in will be dealing with multiple fields of socio-economic, political-administrative and environmental-ecological. In all of these fields there are high levels of uncertainty and unpredictability. As such the project strategy is built on a multiplicity of assumptions, some of which may be correct and some of which may subsequently prove to be false. The project itself is often a merging of national expectations and the larger global expectations of the GEF. While there is a comprehensive policy framework to determine these priorities and guide the project designers, inevitably there is a high degree of compromise. By their very nature, GEF projects are addressing complex socio-ecosystems with high degrees of unpredictability and a multiplicity of stakeholder interests and system drivers. There needs to be a degree of reality in what can be achieved by a medium-sized project within the available resource envelope and the time allowed for project completion. Trying to fix all of a system is probably not possible and expectations should be managed to reflect what is practicable.
- ii. Mainstreaming requires a systemic approach. This needs to begin with the concept, move through the design and become embedded in the implementation. It requires a detailed understanding of how governments work. The IRR TOC went some way to setting out the groundwork for this, which was more sophisticated than the reductionist approach used in the Project Document. However, the project strategy was based upon the latter. A key weakness in the project was to place the reins of the project in an institutional vehicle which did not have the powers or capacities to re-organise government stakeholders and to bring about change. The starting point for the design of a mainstreaming project should not be the subject matter (biodiversity) but rather the mechanics and motivations of government within which it is framed. There needs to be an institutional separation between the policy-regulatory agency and the management agency in the interests of good government, there needs to be a hierarchy of authority. A project intended to bring about systematic change needs to be placed at the highest level of authority within the system. When the system was re-organised, the project moved with the DID. The authority and capacity to drive institutional change remained with the original Ministry. Although the project was intended to re-organise the system in favour of a more sustainable approach to river management it had no power or authority to influence the reshuffling of the pieces on the board, even though this was the intention of the project. Designing a mainstreaming project requires a greater understanding of how governments work because they require expert thinking in multiple fields but underpinning this should be a clear understating of the nature of governments and institutions.
- iii. Projects when under-performing can benefit considerably from an *ad hoc* exercise such as the IRR. Considering where the project was in early 2019 the IRR had a profound effect on its performance.
- iv. Good relations between the primary project partners are critical to the successful outcome of a project. If relationships are poor at the outset, or breakdown during the project, it can have a profound impact on the project’s performance. It is beholden on the project partners to recognise if relationships are breaking down and put in place some sort of arbitration process as quickly as possible.
- v. In a complex project, a substantive Project Manager with technical experience as well as management experience is critical. Furthermore, they should have sufficient authority to guide the project as part of the adaptive management process. The position should not be a

wholly administrative role and he or she should have the responsibility to direct the activities, outputs and outcomes towards the objective.

- vi. There needs to be continuity between key stages of GEF project incubation to maximise institutional memory, preserve rationale for the underlying intervention logic and implementation arrangements, and ensure action items are undertaken in a timely manner¹⁰².
- vii. Linking biodiversity management and gender equality provides synergies which can drive mainstreaming and result in building considerable social capital¹⁰³. Arguably biodiversity loss and women’s advancement in society are the result of systemic inequalities and inefficiencies, amongst other causative factors. Rights-based approaches towards the management of ecosystem goods and services such as biodiversity can create an effective congruence of interests providing a focus for both issues. When women play an important role in informal economies, their role in managing resource bases which other economic activities are dependent upon can go unrecognised. Formalising these arrangements through a project intervention, in this case a Women’s Association, and recognised management structures such as the ICCA, while facilitating their active role in leadership positions can enhance the benefits resulting from a project. However, benefits should not only be measured in terms of income or biodiversity. It is important to keep in mind that: *“benefit is usually conceptualized in terms of financial revenue, and in unusual circumstances this can be substantial. Normally however natural resource production can only supplement inputs from agriculture and other modes of production, and it is important not to regard community participation in conservation as a panacea for rural poverty. Benefit should also be understood in non-pecuniary terms, and when economic benefit is linked with authority and responsibility large increments in social capital can result”*¹⁰⁴.
- viii. A fundamental weakness in this project’s design, and one shared with a number of other UNDP-GEF mainstreaming projects is that it was approaching an adaptive challenge armed with a set of technical tools (for further information see Annex 14). This approach ignores the human aspect of the institutional framework and assumes that all actors will react logically with regards a common purpose. In reality, these actors are all doing their best, trying their hardest but working within parameters which constrain their actions. The challenges of complexity and scale cannot be addressed through a narrow lens of *biodiversity* within this wide diversity of differing agendas, working practices, institutional cultures and backgrounds, training and experience, jurisdictions, means of measuring success, *ad infinitum*. There is an inherent assumption that a focus on biodiversity in river management will bring what is a disparate set of actors together for a common purpose. Rarely is this the case and the project, normally the project manager, is left trying to steer individuals, institutions, differing interest groups towards an objective that may have little relevance to their own pressing concerns and the metrics used to measure their success or failure, individually and collectively. Sometimes, this scale and complexity is overwhelming, leading actors to focus in to a level of detail which is irrelevant or; merely dismissing the challenge as something which cannot be done. Overcoming these challenges of scale and complexity is a prerequisite for solving all of the other problems which a mainstreaming project sets out to resolve. However, most

¹⁰² IRR Lesson 4

¹⁰³ The networks of relationships among people who live and work in a particular society, enabling that society to function effectively.

¹⁰⁴ Community-based Conservation: Old Ways, New Myths and Enduring Challenges, Proceedings of the Conference on “African Wildlife Management in the New Millennium”, Key address No. 3 “Community-Based Conservation – The New Myth?”, Professor Marshall W. Murphree, CASS, Zimbabwe, Mweka, Tanzania, 13 – 15 December 2000

mainstreaming projects assume that simply producing a number of discreet outputs will create an outcome and those outcomes will achieve a desired objective. There is no tool, no facility, within the project which will help the participants challenge their own views of how the world works. Instead individuals, coalitions of interest and whole institutions are expected to bring about change using the same mind set with which they started the process. Whether or not it is recognised at the start of a project, these different actors enter the process with differing mindsets, different views of how the system works, how the world works. These mindsets are shaped by the individual's and the institution's experience, by their training, their capacity and also likely culturally nuanced. While not all of these different views are wrong *vis á vis* a specific component of a system (e.g. riverine biodiversity), neither can they all be right.

What this project lacked, in common with a number of other mainstreaming projects, is a tool to bring these different understandings of how a system works - into a shared and collective understanding of the systems working and how it can be changed.

Scenario planning is a tool which can assist this process by supporting the project's cognitive processes, but it is rarely employed by projects. However, it allows the key actors to address the complex and unpredictable elements (in this project's case - mostly institutional arrangements and change) of a system and to address issues of scale. Furthermore, it does not set out from a specific world view, but rather, allows the individuals within a system to shape that world view according to their own experiences (see Annex 20 for a description of scenario planning within a project context).

Annexes

Annex 1 TE ToR (excluding ToR annexes)

Terms of Reference for ICs and RLAs through /GPN ExpRes

Services/Work Description: Project Terminal Evaluation

Project/Programme Title: “Mainstreaming Biodiversity Conservation into River Management” Project

Consultancy Title: Lead Evaluator

Duty Station: Home-based

Duration: 45 working days (1 September 2021 – 28 February 2022)

Expected start date: 1 September 2021

1. BACKGROUND

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the medium sized project titled ‘PIMS 5281 Mainstreaming Biodiversity Conservation into River Management’ implemented by the Department of Irrigation and Drainage (DID) Malaysia. The project started on 10 November 2016 and undergone an Independent Rapid Review (IRR) in 2019 to identify implementation issues and recommend corrective and adaptive measures to put the project back on track. Subsequent, a 12-month extension was approved on 21 August 2020 with new project operational closure date on 9 May 2022. Currently, the project is in its fifth year of implementation. The TE process must follow the guidance outlined in the document ‘Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects’ (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

1. Project Description

Malaysia has some 157 river systems, as well a variety of tropical wetlands, forests and marine ecosystems, representing several Global 200 Ecoregions, and it is recognized as one of 17 mega-diverse countries in the world. Its river systems as well as riparian and catchment forests support an immense diversity of aquatic and terrestrial biodiversity, including more than 600 freshwater fish species. These river systems provide ecosystem services benefiting both rural communities and urban societies, including water supply, artisanal fisheries, the aquarium fish industry, transport routes, tourism and recreation. However, Malaysia’s rivers face threats from a wide range of pressures that threaten their biodiversity and ecological stability, with ongoing loss of genetic resources, ecosystem services and national and local socio-economic benefits.

As called for in Malaysia’s Common Vision on Biodiversity, this project on “Mainstreaming Biodiversity Conservation into River Management” was developed to mainstream biodiversity conservation into riverine landscapes through improved river planning and management practices. This will be achieved through two interrelated components of work, to be undertaken in parallel:

Component 1: addresses the need for an operational national institutional framework and capacity for a more integrated and holistic approach to river management that takes riverine biodiversity into account;

Component 2: will demonstrate best management practices for riverine habitats in three different situations (a forested water supply reservoir catchment area, an urban river, and a rural river impacted by plantation development and smallholder land uses).

The global environmental benefits that will be secured by the overall project will result from strengthened sustainable management of Malaysia’s river systems and associated riverine buffer zones and catchment areas that specifically takes into account biodiversity conservation. Signed project document can be referred at <https://www.my.undp.org/content/dam/malaysia/docs/EnE/EnEProDocs/Riverine%20Prodoc.pdf> Specifically, Key details of the project are as below:

Start Date:	10 November 2016	Supporting Cities:	Cyberjaya, Iskandar Malaysia, Melaka, Petaling Jaya, Putrajaya
End Date:	9 May 2019	GEF Financing:	USD 1,404,000
Revised End Date:	9 May 2022 (with 12-month extension)	Other Financing (In-Kind & Cash):	<ul style="list-style-type: none"> • National Government (NRE): \$5,850,000 • Selangor State Government: \$250,000 • Perak State Government: \$250,000 • Sabah State Government: \$250,000 • GEC: \$720,000 • UNDP: \$200,000 • Cost Sharing: \$60,000
Executing Partner	Ministry of Environment and Water (KASA) (Ministry of Natural Resources and Environment – when Project started)	Implementing Partner:	Department of Irrigation and Drainage (DID)

Since 3 January 2020 when the first COVID19 cases was reported in Malaysia, by 1 Aug 2021, Malaysia has recorded 1,130,422 confirmed cases of COVID-19 with 9,184 deaths. Beginning on 18 March 2020, Government of Malaysia officially enforced the Movement Control Order (MCO) under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967. The order prohibited inter-state travel, gatherings and restrictions on the entry of all tourists and foreign visitors into the country. Although movement restrictions were relaxed when cases subsided, Government of Malaysia has reinstated the MCO 3.0 nationwide starting from 12 May 2021 have been extended beyond 28 June 2021 as cases continue to climb. In mid-June 2021, the Government has launched the National Recovery Plan to guide, among other, the conditions for lifting the movement restrictions in the country.

Although the prolonged movement restrictions have extensively hindered the progress of the project’s implementation, the delays had been addressed by having activities moved onto the virtual space, with regular meetings and discussions with executing agencies in ensuring activities are implemented accordingly.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK

Terminal Evaluation (TE) Purpose:

The TE aims to assess the achievement of project results against what was expected to be achieved, and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall

enhancement of UNDP programming. The TE report promotes accountability and transparency, and assesses the extent of project accomplishments.

The TE will assess the 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 TE will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNDP, Ministry of Water and Environment (KASA)¹⁰⁵, and their national project partners namely State DIDs (Perak, Sabah, Selangor and Wilayah Persekutuan), Global Environment Centre and Forever Sabah as well as project beneficiaries namely the local communities. The project is on its last year of the implementation cycle and the TE’s outcomes and recommendations will be instrumental to assess the impact of the project towards the development outcomes outlined in the Country Programme Action Plan 2016-2020. Lessons learned, best management practices and recommendations from the project will be used to inform the formulation, design and management of new UNDP pipeline projects in the Country Programme Action Plan 2022 – 2025, signed between Government of Malaysia and UNDP.

Approach and Methodology:

The TE must provide evidence-based information that is credible, reliable and useful.

The TE team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, Independent Rapid Review report, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE team is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisors, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Department of Irrigation and Drainage (DID) under Ministry of Environment and Water, State DIDs agencies namely Perak, Sabah, Selangor and Wilayah Persekutuan, project partners (Global Environment Centre and Forever Sabah), senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc.

The specific design and methodology for the TE should emerge from consultations between the TE team and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE team must, however, use gender-responsive methodologies and tools and ensure that gender equality and women’s empowerment, disability, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Travel to the country has been restricted since 18 March 2020 travel in the country is also currently restricted. Given in-country travel is off limit, the TE team should develop a methodology that takes this into account the conduct of the TE virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation

¹⁰⁵ Following the change in Government in February 2020, restructuring of the Ministry has resulted in the Department of Irrigation and Drainage to be placed under the Ministry of Environment and Water (KASA).

questionnaires. Such virtual methodology should be detailed in the TE Inception Report and agreed with the Commissioning Unit.

If all or part of the TE is to be carried out virtually, consideration should be taken for stakeholder availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue.

The Lead Evaluator will work remotely with support by the National Evaluator in the field, if permissible, to travel for the purpose of the evaluation mission. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority. These limitations must be reflected in the final TE report. The final methodological approach including interview schedule, field visits and data to be used in the evaluation should be clearly outlined in the inception report and be fully discussed and agreed between UNDP, stakeholders and the TE team.

The final TE report should describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

Detailed Scope of the TE:

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see TOR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in Annex C.

The asterisk “(*)” indicates criteria for which a rating is required.

Findings

Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women’s empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- Identify complementarity between the results of this project and other projects in the Sustainable and Resilient Development Portfolio ie the “Improving Connectivity in the Central Forest Spine Landscape” Project (ATLAS ID 00077143/ PIMS 4594) and the new Malaysia’s FOLUR national project – PPG Heart of Borneo (ATLAS ID 00116884/ UNDP PIMS 6382).
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women’s empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report outline, including the Evaluation matrix, is enclosed in the ToR Annex C and D.

3. Expected Outputs and deliverables

The TE Lead Evaluator shall lead, prepare and submit:				
No.	Deliverable	Description	Approximate Timing	Responsibilities
1	TE Inception Report:	TE team clarifies objectives and methods of the TE	No later than 2 weeks before the start of TE mission. (tentatively by 15 September 2021)	TE team submits the Inception Report to the Commissioning Unit and project management.
2	Presentation of initial findings upon completion of field mission (virtually for Lead Evaluator)	Initial findings	End of TE mission (tentatively by 31 October 2021)	TE team presents initial findings to project management and the Commissioning Unit at the end of the TE mission
3	Draft TE Report	Full draft report with annexes using TE report Template in Annex C	Within 3 weeks of the end of the TE mission (tentatively by 30 November 2021)	TE team submits to Commissioning Unit; reviewed by RTA, Project Management Unit and GEF-OFP
4	Final TE Report and Audit Trail	TE team submits revised report, with Audit Trail detailing how all received comments have (and have not) been addressed in the final TE report	Within 2 weeks of receiving UNDP comments on draft report, by 31 December 2021	TE team submits to Commissioning Unit
5.	Presentation of Final findings at the TE Concluding Workshop	TE team presents the final findings and recommendations	31 January 2022	TE team presents final report.

		to UNDP, IPs and key stakeholders		
<p>The final TE report must be in English. All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO’s quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.¹⁰⁶</p>				

4. Institutional arrangements/reporting lines

The principal responsibility for managing the TE resides with the Commissioning Unit – UNDP Country Office.

The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

5. Experience and qualifications

A team of two independent evaluators will conduct the TE – one international Lead Evaluator (with experience and exposure to projects and evaluations in other regions) and one National Evaluator, from Malaysia. The Lead Evaluator will be responsible for the overall design and writing of the TE report, etc. The national evaluator will assess emerging trends with respect to regulatory frameworks, budget allocations, capacity building, carry out consultations in bahasa Malaysia as needed, provide support in translating key sections of documents from bahasa Malaysia to English as needed, provide written inputs to the evaluation report as required from the Team leader, and work with the Project Team in developing the TE itinerary, etc.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project’s Mid-Term Review or Independent Rapid Review and should not have a conflict of interest with the project’s related activities.

The selection of evaluators will be aimed at maximizing the overall “team” qualities in the following areas:

¹⁰⁶ Access at: <http://web.undp.org/evaluation/guideline/section-6.shtml>

I. Academic Qualifications:

- A Master’s degree or higher in conservation biology, ecology, limnology environmental or natural resources management, or other closely related field (10 points)

II. Years of experience:

- Relevant experience with results-based management evaluation methodologies for at least 10 years (15 points);
- Experience applying SMART indicators and reconstructing or validating baseline scenarios (10 points);
- Competence in adaptive management, as applied to environmental projects/programmes (10 points);
- Experience working with UNDP or GEF or within United Nations system evaluations for at least 5 years (10 points);
- Experience working in Malaysia, South East Asian or Asia-Pacific region (10 points)
- Demonstrated understanding of issues related to gender and disability, with experience in gender/disability responsive evaluation and analysis (5 points);

III. Language:

- Fluency in written and spoken English.

IV. Competencies:

Corporate competencies:

- Commitment to UNDP’s mission, vision, values and ethical standards
- Sensitivity to cultural, gender, religion, race, nationality and age differences
- Treat all stakeholders fairly and without prejudice
- Maintains objectivity and impartiality in handling evaluation processes

Functional competencies:

- Experience in project development, implementation and evaluation particularly in directly managing results-based monitoring and evaluation methodologies
- Demonstrated experience in conducting evaluation of multi-year and multi-component programmes and projects
- Familiarity with the norms and issues in environmental conservation and management
- Demonstrated strong coordination and facilitation skills

- Strong interpersonal skills and the ability to initiate discussions with national/local governmental officials, civil society organizations and communities
- Demonstrated ability to function in a team environment and to deal with complex multi-stakeholder environment
- Demonstrated ability to prepare and present comprehensive reports

6. Payment Modality

Payment to the individual contractor will be made based on the actual number of days worked, deliverables accepted and upon certification of satisfactory completion by the manager.

Duration of the Work

The total duration of the TE will be approximately 45 working days over a time period of seven months starting 1 August 2021. The tentative TE timeframe is as follows:

Timeframe	Activity
18 August 2021	Application closes
31 August 2021	Selection of TE Team
1 September 2021	Prep the TE team (handover of project documents)
7 September 2021 (4 days)	Document review and preparing TE Inception Report
15 September 2021 (2 days)	Finalization and Validation of TE Inception Report- latest start of TE mission
16 September – 31 October 2021 (12 days)	TE mission: stakeholder meetings, interviews, field visits* *To be conducted by a national TE consultant
31 October 2021	Mission wrap-up meeting & presentation of initial findings- earliest end of TE mission
30 November 2021 (10 days)	Preparation of draft TE report
1 December 2021	Circulation of draft TE report for comments

15 December 2021 (2 days)	Incorporation of comments on draft TE report into Audit Trail & finalization of TE report
31 December 2021	Preparation & Issue of Management Response
31 January 2022	Concluding Stakeholder Workshop
28 February 2022	Expected date of full TE completion

The expected start date of contract is 1 September 2021.

Payment Schedule:

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report, and powerpoint slide deck to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report, presentation at the concluding workshop and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other MTR reports).
- The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP’s financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the TE, that deliverable or service will not be paid.

Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

List of ANNEX:

Annexes include:

- Annex A: Project Logical/Results Framework
- Annex B: Project Information Package to be reviewed by TE team
- Annex C: Content of the TE report
- Annex D: Evaluation Criteria Matrix template
- Annex E: UNEG Code of Conduct for Evaluators
- Annex F: TE Rating Scales and TE Ratings Table
- Annex G: TE Report Clearance Form
- Annex H: TE Audit Trail template

Annex 2 TE Mission itinerary

Field Mission to demonstration sites in Segama River, Lahad Datu, Sabah

7 – 11 November 2021

Date	Stakeholders	Role/Agency	Venue	Contacts
8/11/2021	Cynthia Ong (Chief Executive Facilitator) Dr. Nicola Abram (Technical Coordinator - SPaCES Project/HCV Mapping) Dr. Casey Ng (Technical Coordinator - Freshwater for Future) Chen Kok On (Technical Coordinator - Legal Innovation) Neville Yapp (Technical Support - Mapping & Riparian Conservation) Febe Soliun (Project Coordinator) Troy Hessler Paul (Field Coordinator)	Forever Sabah, project partner to implement demonstration sites activities in Segama River	Lahad Datu (virtual meeting)	cynthia@foreversabah.org nicola@foreversabah.org casey@foreversabah.org kokon@foreversabah.org neville@leapspiral.org febe@foreversabah.org - paultroyhessler@gmail.com
9/11/2021 (9.00 am)	Kurundi A. Jerandi bin Guramoi Sitijah binti Guru Sumasnie John	ICCA Committee Members	Kampung Belacon, Segama	
9/11/2021 (11.00 am)	Aslan Kumin	Biogas Plant Operator	Kampung Tawaiyari, Segama	
9/11/2021 (1.00 pm)	Nurshafikah Abdullah Sarinam Isa Maliya Lepat Ruani Garang Dimnah Maria Jonah	Women’s Association, Ulu Segama – representing various villages	Kampung Litup Pandai, Kampung Sunduron, Kampung Upah, Kampung Belasoh, Kampung Kidan Kidan	
9/11/2021 (3.00 pm)	Agos bin Atan Valerie Binati	Plantation Company	IOI Plantation	agos@ioigroup.com valerie.binati@ioigroup.com
10/11/2021	Morning visit & boat ride Sungai Segama			
10/11/2021 (3.00 pm)	Miklin @ Osmond bin Ationg	Principal Assistant Director	DID, Sabah	miklin.ationg@sabah.gov.my

Field Visits to demonstration sites in Sungai Kinta, Perak, 16 – 18 November 2021

Date	Stakeholders	Role/Agency	Venue	Contact
16/11/2021	Dr. Kalithasan Kalasam, Manager Sathis Venkitasamy, Senior Programme Officer	Golbal Environment Centre, Project Partner in Outcome 2 (demonstration site in Sungai Kinta & Klang River	Cameron Highlands	kalithasan@gec.org.my sathis@gec.org.my
17/11/2021		Visit to Upper Kinta Basin, demonstration of Open Education Class at Upper Kinta basin		
8.30 am				
10.30 am		Visit to slope protection demonstration site along Simpang Pulai – Cameron Highlands road.		
12.00 pm	Ismail bin Balah Bahngah Bahgot Wahteh Kecek Roslan Jali	Head of Indigenous People Community Association Member Member Member	Kg. Pawong & Kg. Jantung Baru, Orang Asli Settlement	
18/11/2021	Sasitharan Manikam	Senior Assistant Director, DID Perak	Ipoh, Perak	sasitharan@water.gov.my

Field visit to Klang River Demonstration Sites, 23rd November 2021

Date	Stakeholders	Role/Agency	Venue	Contacts
23/11/2021	Mazlan Jamaluddin	President, Residents Association, Kg. Taman Warisan, project coordinator	Kg. Taman Warisan, Ampang, Kuala Lumpur	
8.30 am				
10.00 am	Haji Mohd Halim	President, Gardening Club, Residential Housing, AU2, Ampang, project coordinator	Ampang	
12.00 pm	Hamdan Haji Yusuf Mohd Khir Mohd Effendi Siti Rahawati Muzir Radziah Mat Ali Izuan Khamis	President, River Rangers, Klang River Member Member Member Member Project coordinator Klang		

Annex 3 List of persons interviewed

Date	Stakeholder	Role/Agency	Venue	Contacts
20/10/2021	Randolph Jeremiah	Ex Project Manager	Jalan Gasing, PJ	+6013980389
22/10/2021	Gopinath Nagaraj, Puvanes, Ramadas, Dr. Shahwahid	Consultants for Outcome 1	Fanli Marine and Consultancy Sdn Bhd	sspuvanes@fanlimarine.com gopinath@fanlimarine.com
26/10/2021	Dato' Ir. Hj. Jamil Bin Shaari	National Project Director, DID	ARAS 3, BLOK C7, KOMPLEKS KERAJAAN PARCEL C 62000 W.P. PUTRAJAYA MALAYSIA	jamils@water.gov.my
26/10/2021	Ahmad Fauzan Mohd Sabri, Khairulanwar bin Mohamad	Project Management Unit, DID	ARAS 3, BLOK C7, KOMPLEKS KERAJAAN PARCEL C 62000 W.P. PUTRAJAYA MALAYSIA	fauzan@water.gov.my khairul.anwar@water.gov.my
27/10/2021	Ir. Ratna Rajah Sivapiragasam Lily Azyyati binti Johar (F)	Partner with GEC in Sg Penchala, WPKL	DID KL Wilayah Persekutuan (Virtual meeting)	ratnarajah@water.gov.my lily@water.gov.my
27/10/2021	Camilo Ponziani	Consultant for Independent Rapid Review	Canada (virtual meeting)	cponziani@interamnagroup.com
28/10/2021	Zanita Muhktar	GEF Political Focal Point	Economic Planning Unit, Putrajaya (virtual meeting)	ashikin@epu.gov.my jenny.ravappan@epu.gov.my zanita.muhktar@epu.gov.my
1/11/2021	Seok Ling Tan	Programme Assistant, UNDP CO	Putrajaya	seok.ling.tan@undp.org
2/11/2021	Dr.Khairul Naim Adham Quek Yew Aun	Secretary, Biodiversity Management Division Assistant Principal Secretary	Ministry of Energy & Natural Resources. Putrajaya (virtual meeting)	khairulnaim@ketsa.gov.my gyewaun@ketsa.gov.my

“Mainstreaming Biodiversity Conservation into River Management”; “*The Riverine Project*”
PIMS 5281, UNDP-GEF & Ministry of Environment and Water (KASA) Malaysia.
Terminal Evaluation, Final Report, 25th February 2022

3/11/2021	Gabriel Jaramillo	Regional Technical Advisor,	Nature, Climate and Energy, UNDP Bangkok Regional Hub	gabriel.jaramillo@undp.org
5/11/2021	Ir Hj Mohd Nazri Bin Yasmin Ir. Nor Hafizah Binti Mohd. Suhadis	Deputy Director Senior Assistant Director	DID Selangor	nazri@waterselangor.gov.my norhafizah@water.gov.my
12/11/2021	Muhammad Afiq bin Suhaimi Siti Aliyya binti Russly	Assistant Secretary Assistant Secretary	Water Resources Management Division, Ministry of Environment & Water	afiq@kasa.gov.my aliyya@kasa.gov.my
15/11/2021	Manon Bernier	Deputy Resident Representative	UNDP Malaysia	manon.bernier@undp.org
25/11/2021	Gan Pek Chuan	Programme Manager	UNDP Malaysia	pek.chuan.gan@undp.org
7/12/2021	Dato’ Jana Santhiran a/l Muniyan Sheela Inthiram	Deputy Secretary General (Environment), Ministry of Environment & Water (KASA) Senior Assistant Secretary, KASA	GEF Operational Focal Point Climate Change Programme Unit	jana@kasa.gov.my sheela@kasa.gov.my

Annex 4 List of documents reviewed

#	Project related item / documents reviewed
1	Project Identification Form (PIF)
2	UNDP Initiation Plan
3	Final UNDP-GEF Project Document with all annexes
4	CEO Endorsement Request
5	UNDP Social and Environmental Screening Procedure (SESP) and associated management plans (if any)
6	Inception Workshop Report
7	Independent Rapid Review Report and management response.
8	
9	All Project Implementation Reports (PIRs)
10	Progress reports (quarterly, semi-annual or annual, with associated workplans and financial reports)
11	Oversight mission reports
12	Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)
13	GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages)
14	GEF/LDCF/SCCF Core Indicators (from PIF, CEO Endorsement, midterm and terminal stages); for GEF-6 and GEF-7 projects only
15	Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions
16	Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
17	Audit reports
18	Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)
19	Sample of project communications materials
20	Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
21	Relevant socio-economic monitoring data, such as average incomes / employment levels of stakeholders in the target area, change in revenue related to project activities
22	List of contracts and procurement items over ~US\$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
23	List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or “catalytic” results)
24	Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available
25	UNDP Country Programme Document (CPD)
26	List/map of project sites, highlighting suggested visits
27	List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Team members, and other partners to be consulted

28	Project deliverables that provide documentary evidence of achievement towards project outcomes
29	Project Reports including but not limited to: Upper Kinta Biodiversity Assessment, Final Report, November 2020, JPS, UNDP, GEF, GEC., Draft Final Report Phase 2, 31/10/2021 (Phase 2: 2021), Mainstreaming of Biodiversity Conservation into River Management: (Output 2 : Best Management Practices For Critical Riverine Habitats Are Demonstrated At Key Sites Of National Importance: Upper Kinta Basin & Upper Klang Basin). Final Report (Phase 1: 2020). Reference: (13) DLM.PPS.KS (S) 15/2/3/9 JLD.29 DATE: 30.11.2020

Annex 5 Summary of field visits

Upper Kinta River Basin, Perak

The Upper Kinta River Basin (Perak) covers area of about 18,000 ha above Ipoh city in Perak. The focus is on the management of the upper catchment of Sg Kinta that is important for biodiversity conservation and water supply purposes. The project aims to improve understanding and the status of riverine biodiversity and improve the conservation of riverine biodiversity through strengthened watershed management, especially through reduction of sediment loading from highway and agro-tourism developments, as well as strengthening communication between the dam operator, government agencies, private players and local communities to ensure sustainable land uses.

GEC has already been working at this site in collaboration with other parties before the interventions through MBCRM project in 2020 utilizing GEF funds. The three activities specifically shown under GEF project include i) open classroom established at the source of Sungai Kinta; ii) demonstrating slope protection techniques using bio-engineering methods at a site along KM 46 of Simpang Pulai Cameron Highlands highway; and iii) establishment of nursery at Kampong Pawong, an orang asli settlement. The rest of the reported activities and reports produced appears to be extension and outputs of already on-going activities.

At the outset, the activities were heavily focused on education and awareness raising regarding river biodiversity, which also has been reinforced firmly in GEC’s deliverables proposal. Though enhancement of relevant knowledge is important however the impacts arising from such interventions are hard to ascertain unless it is anchored continuously amongst the key decision-making authorities. In this regard, it is hard to draw any relevant linkages from the open classroom at Sungai Kinta source to the overall objective of mainstreaming biodiversity into Kinta river management.

The pilot site created at km 46 of the highway was for demonstrating bio-engineering methods for slope protection and stabilization mitigating the effects of sedimentation in Sungai Kinta from soil erosions and run-offs. The methods to prevent erosions from degraded and bare slopes include planting of various types of trees and plants and slopes covered with coconut-coil mat were in practice for a long-time, but for the past few decades the agency responsible for roadside landscape management the Public Works Department (JKR) heavily depended on hard-engineering solutions. The methods demonstrated through GEF Project’s interventions were helped to revive the old methods under the repackaging as bio-engineering solutions.

Nevertheless, the effectiveness of the methods in-terms of cost and reducing the sediment loads into river is yet to be ascertained to provide concrete rationales for the agencies like PWD to consider the bio-engineering methods as viable alternatives to the conventional hard-engineering ones. The

commitments shown by PWD Director, and the expansion of membership of the coordinating committee headed by DID Perak consisting of a number of state agencies at Perak State level are positive steps moving forward for institutional strengthening. However, to what extent the lessons and knowledge gained from GEF’s Project intervention will be absorbed, sustained, and developed into a strategic plan for the integrated management of river basin is not made clear yet.

The local community “orang asli” from Kg Pawong is engaged by GEC to implement GEF project activities at the site. The community is not directly linked to Sungai Kinta for income generation, food sources or to meet any other needs. The involvement of local community “orang asli” from Kg Pawong in the project is limited to hiring them for paid services to carry-out project related activities. A nursery has been established in the village aiming at creating additional income generating opportunity by supplying saplings and seedlings for tree planting at slope stabilization sites. Therefore, the real incentive for them to be involved in the project is for income, and their sustained involvement after the project closure is not assured.

The value of the biodiversity assessment conducted within a short period of time at the upper basin of Kinta River is not clear – how it will fit into the larger scheme of mainstreaming biodiversity in the management of Kinta River.

Klang River Basin (Federal Territory/Selangor)

The Klang River flows through Kuala Lumpur and Selangor and eventually flows into the Straits of Malacca. It is approximately 120km in length and drains a basin of about 1288km², runs through 9 local authorities between the two States. The upper portion of Klang River Basin provides water supply (with two major dams Batu Dam and Klang Gates Dam) to the people of Klang Valley. The work is focused on the urbanised portion of the Upper Klang Basin and currently integrating riverine biodiversity management into the implementation/follow up of river management projects including the River of Life (ROL) Programme, ROL Public Outreach Programme (POP).

Specifically the Project was focusing on 3 sites: Taman Warisan, Melawati; Rumah Pangsa AU Keramat & PA Seri Terengganu, Gombak all at up-stream of Klang River; and GEC collaborating with a NGO River Rangers of Sg Klang, in the town of Klang at the downstream before the Klang River joining the Straits of Malacca. As part of evaluation National Consultant visited Taman Warisan Melawati; Rumah Pangsa AU Keramat and Klang.

From the interaction with the stakeholders associated with Klang River activities, it is observed that GEC has established commendable good rapport with the local communities and is able to mobilize them at the specific locations. The communities remain committed, championed by individuals and/or a group of people are enthused to continue with their involvement. But the future is not assured without wider mobilization of community and key stakeholders, particularly government agencies & authorities. Though consultations have been held between DID, and local authorities, coordinating committee has been established chaired by DID Wilayah, however, no firm plans are emerging for continuous engagement of the communities, institutionalizing mainstreaming of biodiversity in river Klang management.

GEF project funded activities in these demonstration sites mainly focused on education and awareness raising and the emphasis on the community engagement. GEF Project intended to complement other on-going project such as River of Life (ROL) and activities at the sites were add-on and extension of the on-going community-initiated programmes with the support of GEC which started about 7 -10

years ago. Under these circumstances it is a challenge for the evaluators to distinguish GEF project’s contributions and additionality; and draw the relevance to the achievement of bigger objective of mainstreaming biodiversity. The activities observed at demonstrations sites such as building eco-trail along the bank of river in Taman Warisan; displaying signages for flora and fauna; planting trees for a stretch of 800m in Taman AU2 Keramat; and providing a cabin as an education centre for River Rangers of Klang River – all are important for education and awareness raising; and for public engagement but in the context of GEF project’s objective it adds little value.

Considering the Klang River flows through two states’ territories and nine local authorities stretching more than 120 km there was a great opportunity for GEF project to create additionalities by bringing these authorities as well other federal and state agencies together to take the Klang River Basin management as a whole. This would have provided a constructive platform for institutionalizing the lessons and experiences gained and roles of civil societies from the on-going activities amongst the respective authorities. Instead, the Project continued to focus on community engagement at demonstration sites and analysis at the some stretches of the river; and without the support of the agencies responsible for water resource management and enforcing laws, it is difficult for community initiatives to make any meaningful impacts in the larger objective of mainstreaming biodiversity in Klang River Basin.

Segama River, Lahad Datu Sabah

The third demonstration site is Segama River, Lahad Datu Sabah and Forever Sabah (FS) was appointed in April 2020 to implement GEF supported project activities. Contrary to the GEC’s activities in Klang River and Kinta River; activities at Segama River were the products of GEF project. FS has taken the initiative to review the original scope of work in SRF, targets and indicators to develop an action plan that is feasible to be implemented and achieved within the short timeframe in the environment of Segama River landscape. During the evaluation mission the project activities are still on-going. Due to the Covid travel and movement restrictions, though some preliminary and preparatory works have been completed, however, progress at the demonstration sites have been severely constrained.

The Segama river forms an integral part of the daily lives of the villagers living along and surrounding of the riverbank. Some villagers depend on the river for fishing, sports fishing and other recreational activities; and others are oil palm or rubber smallholders whose plantations are right at the bank of river. Besides, few plantation companies and a sand mining company operating their businesses in the landscape of the river.

FS taking an integrated approach, looking at Segama River Basin as a whole, from the headwaters down to the coast. The strategy is to identify hotspots along the river for targeted interventions with the support of diverse stakeholders including communities, private sectors and government agencies, and private sectors particularly plantation companies. In this regard, FS has successfully engaged communities from seven villages along Segama River, DID Sabah and few plantation companies.

Preparatory works for engaging communities including socializing the project’s aim; framework for community participation under Indigenous Community Conserved Areas (ICCA) concept; training and awareness raising amongst the villagers. During the evaluation mission there weren’t any tangible activities have been demonstrated due to Covid restrictions. Some of the incomplete key works include riparian restoration works with communities; developing protocols for community participation in riparian conservation and restoration; cataloguing Best Management Practices; partnering with government agencies and sand mining company for compliance with BMPs;

restoration of abandoned oil palm plantations. To what extent FS would be able to accomplish these tasks within the project period is not clear.

Commitments from the plantation sectors is encouraging. Without GEF project’s intervention, some companies already embarking on their own initiatives in some riparian restoration programmes (for example IOI targets about 30 hac for rehabilitation). Few areas have been identified for riparian restoration, but actual work have not been started yet. IOI opines that joining hands with FS, community and DID would provide further impetus for their programme.

Institutional structure at Sabah, whereby both river and water resources management is placed under DID Sabah is another strong element that would able to assure realizing the Project’s objective in the future at least in Sabah’s case.

Some of the activities such as formation of Women’s Association, a biogas plant at one of the villages may produce some results at the site and local levels and fulfilling SRF targets, but not having relevance to the overall objective of the Project.

Though the expected key activities still underway and the results are yet to be seen, however, the approach taken by FS, overall providing some hope for the sustainability of Project’s aim in the future.

1. FS taking a medium-term outlook beyond the Project.
2. Approaching the issue under the concept of ICCA may entail for greater understanding and commitments from the villagers. Developing appropriate frameworks and having MOUs possibly assure their continuous participation.
3. Commitments from DID and plantation companies very encouraging, enhancing the chances for multi-stakeholders engagement and institutionalizing the efforts into government programme.

Annex 6 Evaluation Question Matrix (evaluation criteria with key questions, indicators, sources of data, and methodology)

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF Focal area, and to the environment and development priorities at the local, regional and national level?			
To what extent are the project's objectives consistent with beneficiaries' requirements, country needs, national priorities and policies, global priorities and partners' and GEF policies and priorities?	Adequacy of activities in relation to policies and stakeholders' needs Alignment of project objective and outcomes with policy objectives Alignment of projects strategy and theory of change with country situation and national priorities	Conventions, Project Document, UNDP Country Programme, sector policies and regulatory frameworks, regional agreements and programmes	Interviews of stakeholders / beneficiaries Interviews steering committee members Review of documents
To what extent were decision-making processes during the project's design phase reflecting national priorities and needs? Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, considered during project design processes?	Effectiveness of partnerships arrangements since inception, co-financing budget execution	Project Document, Inception Report, PIRs, minutes of NSC meetings, TOC, IRR.	Document review, interviews with government agency stakeholders and project partners, analysis.
How relevant is the project strategy to the situation in the project area? Does it provide the most effective route towards expected/intended results? Were lessons from other relevant projects properly incorporated into the project design?	Coherence between project design and implementation – what changes have had to be made. Level of project resources assigned to tasks.	Project Document, Inception Report, Consultant's studies and reports, minutes of Steering Committee and Technical Working Group	Document review, interviews with government agency stakeholders and project partners, analysis.
What was/is the problem addressed by the project and the underlying assumptions? What has been the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document? Was the problem correctly identified?	Suitability of specific components of the project to address issues and achieve results areas. Changes to the strategy, changes to the interventions. Completeness of interventions by mid-term.	Project Document, Inception Report, IRR, Work Plans, PIR and NSC minutes of meetings, Consultants reports.	Documents, interviews with stakeholders, project implementing partners, PMU and project Consultants.

Does the project’s Theory of Change reflect the complexity, uncertainty and framework of national government agencies?	Project TOC causal pathways, outputs and outcomes, emergent or unidentified risks, weak links in the cause and effect relationships	TOC, Project Document strategy, IRR, risk register, NC field mission findings, PMU, implementing partners	Discussion and analysis
To what degree is the project’s implementation a participatory and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? If so, how is this achieved?	Gender disaggregated data, level of co-financing commitment/ expenditure, workshop and meeting attendance, degree of ownership of project community-based initiatives	Project reports, PIR, workshop reports, co-financing records	Documents, interviews with stakeholders, project implementing partners.
Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits?	National policy priorities and strategies, as stated in official documents. Approved policy and legislation related to biodiversity, land use and land use planning, budgets, etc.	National policy and regulatory framework documents	Document review, interviews with high-level project partners.
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
To what extent have the expected outcomes and objectives of the project been achieved?	SRF indicators	Project Document, IRR, revised SRF, PIRs	Document review, analysis, interviews with stakeholders and beneficiaries
To what extent did the project contribute to the Country Programme outcomes and outputs, the SDGs, the UNDP Strategic Plan and Country Programme, GEF strategic priorities, and national development priorities?	Alignment and synergies of outcomes	Project Document, IRR, CPAP, SDGs, GEF strategic priorities	Document review, high-level stakeholder interviews, analysis
What factors have contributed to the achieving or not achieving intended outcomes and outputs? Could the project include alternative strategies?	Progress towards results, efficiency of project strategy, adjustments to strategy Number of key priorities that have been met through the project	SRF, Project Document, IRR, PIR, risk log	Document review, interviews, analysis

	Assumptions not met / unpredictable effects		
Has the project produced unintended results -positive or negative? If there are negative results, what mitigation activities are in place?	Progress towards results, efficiency of project strategy, adjustments to strategy Number of key priorities that have been met through the project Assumptions not met / unpredictable effects	SRF, Project Document, IRR, PIR, risk log	Document review, interviews, analysis
To what extent the project has demonstrated: a) scaling up, b) replication, c) demonstration, and/or d) production of public good	Number of relevant initiatives not directly financed by the project	PIR, other project reports	Document review, interview with PMU, stakeholder, beneficiaries, government agencies
What evidence is there to suggest that the project will achieve the outcomes and objective by the close of the GEF-fund?	Budget execution, realism of work plans, results to date	PMU, project documentation	Document review, interviews, field visits
Efficiency: Was the project implemented efficiently, in line with international and national norms and standards?			
To what extent has the project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of global environmental and development objectives according to schedule, and as cost-effective as initially planned?	Activity modifications (removal / adding) Circumstances for no-cost extension Functionality of M&E system Compliance with UNDP-GEF rules	UNDP finance & project staff Project Director interview Annual reports	Interviews, analysis, field visits
To what extent were project funds and activities delivered in a timely manner?	As above	As above	As above
How did the project adapt to the new normality COVID-19? Did the project contribute to minimizing the socioeconomic effects of the Pandemic?	Implementation adjustments (e.g., remote training, more widespread use of technology for communication / decision-making	Interviews steering committee members Interviews of activity implementers Interviews of project team Covid-19 plan	As above
Financing and co-financing			

Are there variances between planned and actual expenditures? What are the main reasons? To what extent did financial controls allow the project management to make informed decisions regarding the budget? How many resources have the project leveraged? How have they contributed to the project's ultimate objective?	Disbursement trends Follow-up and adjustments of procurement plan Co-financing complementarities / substitution M&E system updates and annual/intra-year budgetary adjustments	UNDP finance & project staff Project Director interview Annual reports	Interviews, analysis
Implementation, Oversight and Execution			
To what extent has UNDP delivered effectively on activities related to project identification, concept preparation, appraisal, preparation of detailed proposal, approval and start-up, oversight, supervision, completion and evaluation? To what extent has the Implementing Partner effectively managed and administered the project's day-to-day activities? How was UNDP's overall oversight and supervision?	Changes in UNDP staff Periodicity of technical meetings with project team & relevant support / timeliness of recruitments Changes in project team staff Activity / staff / service payment delays...	Annual reports / IRR report UNDP, ministry & project team interviews CDR	Interviews, document review, analysis
Sustainability: To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results?			
How are risks monitored and managed?	Project risk log in ATLAS and management responses, communication with partners and stakeholders	Project Document, Annual Project Review/PIRs and the ATLAS Risk Register, project communications strategy, IRR	Review, interviews, analysis
What is the likelihood of financial and economic resources not being available once the GEF assistance ends?	Public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)	National policies and plans, local policies and plans, NGO feedback, private sector feedback, project exit arrangements. Consultants and service providers reports	Review, interviews, analysis
What are the long-term socio-political risks to the outcomes of the project?	Partner and stakeholder ownership, public / stakeholder awareness in support of the long-term objectives, sharing of information on risks, adjustments to interventions to address specific risks	National policies and plans, local policies and plans, NGO feedback, private sector feedback, project exit arrangements. Consultants and service providers reports	Review, interviews, analysis

What are the environmental risks to the sustainability of the project's outcomes? How are these managed and mitigated?	Climate data and forecasts. National disaster risk reduction strategies and plans	National data, policies and plans	Review and analysis, field visits
Gender equality and women's empowerment: How did the project contribute to gender equality and women's empowerment?			
How were gender and human rights considerations integrated in the project's design, including analysis, implementation plan, indicators, targets, budget, timeframe and responsible party? To what extent has the project contributed to gender equality, the empowerment of women and human rights of disadvantaged or marginalized groups? To what extent did women, poor, indigenous, persons with disabilities, and other disadvantaged or marginalized groups participate and benefit from the project? Was the UNDP Gender Marker rating assigned to the project document realistic and backed by the findings of the gender analysis? Is there any potential negative impact on gender equality, women's empowerment, disadvantaged or marginalized groups? If so, what can be done to mitigate this? To what extent was the ESMP realistic, followed and monitored.	M&E system covering gender Activity adaptability as per gender and target beneficiaries' types Degree of project targeting of vulnerable people Number of women & vulnerable people that were direct beneficiaries from project's results Level of participation of vulnerable groups & women in activities' operationalization Safeguarding actions and activities FPIC	Gender-specific & marginalized group interviews (focus groups) Project team interview Municipalities interviews Annual reports ESMP	Documentation review, interviews, field visits, analysis
Other cross-cutting issues			
How have the project activities contributed to poverty reduction and sustaining livelihoods? To what extent has the project contributed to better preparations to cope with disasters or mitigate risk, and/or addressed climate change mitigation and adaptation? To what extent has the project incorporated capacity development activities? Were results achieved?	Conversion incentives success rate Increased resources through improved technology (& capacity building) / diversification Pilot-project appropriation and empowerment Level of operationality of surveillance committees	Interviews project staff Interviews final beneficiaries Interviews community & committee members / representatives	Documentation review, interviews, field visits, analysis
Stakeholder engagement and partnerships			

To what extent do project stakeholders share a common understanding and are involved in the decision-making process of the project? To what extent did stakeholder's participation mechanisms in place lead to empowerment and joint ownership of the project? What should be done better to increase their participation and engagement?	Degree of active participation in project activities / capacity building training Project responsiveness re. final beneficiary/community needs Degree of participation of stakeholders in project (annual) planning	Project staff & ministry interviews Interviews of community representatives and municipalities	Documentation review, interviews, field visits, analysis
Results framework			
To what extent the project's objectives and components are clear, practicable and feasible within its time frame? Was there a clearly defined and robust Theory of Change? Were the indicators in the Results Framework SMART?	Number of activities that were amended / terminated and reasons Follow-up of METT indicators Changes of indicators during implementation, number of indicators not assessed Usability of baseline studies	Interviews project team Interviews of ministry Interviews steering committee members	Documentation review, interviews, field visits, analysis
Monitoring and evaluation			
To what extent did the Monitoring systems allow the collection, analysis and use of information to track the project's progress, risks and opportunities toward reaching its objectives and to guide management decisions? Were the budget and responsibilities clearly identified and distributed?	Level of functionality of M&E system; updating and effective integration into decision-making (planning + adjustments)	Interviews project team	Documentation review, interviews, field visits, analysis
Risk Management, Social and Environment Standards and Adaptive Management			
To what extent were risks (both threats and opportunities) properly identified and managed? To what extent did the project maximize social and environmental opportunities and benefits and ensured that adverse social and environmental risks and impacts were avoided, minimized, mitigated, and managed? What "safeguards" did the project implement? Were the project's changes based on evidence? Were they properly managed?	Updating of assumptions and risks realistic Relevant project implementation changes M&E system operationality	Project team interviews, UNDP interview	Documentation review, interviews, field visits, analysis
GEF additionality			

<p>To what extent has the project lead to additional outcomes?</p> <p>Global Environmental Benefits</p> <p>Livelihood improvements and/or social benefits</p> <p>Innovation Additionality</p>	<p>Overall increase / stabilization of ecosystem benefits/services</p> <p>High-profile species status</p> <p>METT score increases</p>	<p>Interviews SNAP & ministry</p> <p>Interviews project team</p> <p>Annual reports</p>	<p>Documentation review, interviews, field visits, analysis</p>
<p>Impact: Are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?</p>			
<p>To what extent are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?</p>	<p>Pollution/eutrophication reduction</p> <p>Operationality of monitoring /controlling structures</p> <p>Reduction of pressures (fisheries, agriculture, plantations (through behavior change and threat reduction and mitigation)</p>	<p>Technical reports</p> <p>Monitoring reports</p> <p>Interview of wetland users</p> <p>Interviews of NGOs & community representatives</p>	<p>Documentation review, interviews, field visits, analysis</p>

Annex 7 Sampling criteria and questionnaire used

Preliminary List of Questions by Stakeholder Sample

Note: Some questions are repeated between different interviewees for purposes of triangulation and to obtain a fuller range of views on key issues. The interview process is an iterative process and the question lists will be fine-tuned and elaborated before each interview depending on the relevance and level of involvement in the project – implementation, oversight, execution, management, beneficiary, etc...

Theme	Questions
UNDP/RTA – Implementing Agency	
Preparation	<ul style="list-style-type: none"> Describe the project preparation process, how were stakeholders involved?
Relevance / mainstreaming	<ul style="list-style-type: none"> How does the project contribute to the CPAP and strategic goals of the CO? How has the project addressed gender and rural people’s requirements during implementation? What oversight role has UNDP played in this regard?
M&E	<ul style="list-style-type: none"> Please summarize the role of the CO in relation to project oversight and technical and M&E support. What challenges have been experienced in carrying out these responsibilities? What actions were taken to address such challenges? What were the outcomes? What support was provided by the RTA throughout project development and implementation? Describe the relative strengths and weaknesses of such support. How have the UNDP/GEF CO and Regional Office supported the project in cross-project learning and knowledge sharing, especially with GEF projects with similar objectives in the region? In particular, those within the focal area and related to mainstreaming? How frequently has the Project Board/Steering Committee met? Has the composition of the Project Board been optimal to oversee implementation? Would it have been beneficial to include any other stakeholders? What key decisions has the SC made?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> How is project implementation coordinated with other UNDP initiatives (list them) – for example SGP, Governance, etc.. - and what benefits have been evident as a result? What other GEF and bilateral projects are related to MBCRM Project (list them), and how are efforts being coordinated? How do the stakeholders (state and non-state) contribute towards the sustainability of KMBCRM outcomes? How are project relations with partners? How would you characterise them?
Financing	<ul style="list-style-type: none"> Describe UNDP’s role in supporting project financing. Have GEF and UNDP financing arrangements proceeded smoothly for implementation – any delays or setbacks related to financing? Are there sufficient financial resources to implement the project as described in the Project Document? Has there been any impact of any shortfalls in project financing? If so, how is UNDP addressing these financial challenges? Has UNDP’s co-financing been fully delivered, and what activities does it support? What co-financing hasn’t materialised and why? What actions, if any have been taking to resolve this? What provisions are in place to ensure timely disbursement of the budget in the last months of the project?
Execution	<ul style="list-style-type: none"> How would you characterise the implementation modality – NIM or DIM? What specifically led to the Project’s poor performance or non-starter till IRR? What motivated or contributed for project to perform after IRR? In UNDP’s opinion, how efficiently has KASA /DID and the PMU coordinated project execution? What were the relative strengths and weaknesses? Has the project been adequately resourced in relation to its planned activities, outputs and outcomes? What specific resource-related problems have been encountered, and how were these resolved? Has the project’s attention to sustainable livelihoods and gender been adequate for the project context? What will happen to project equipment?
Risks	<ul style="list-style-type: none"> How have risks been logged and managed by the UNDP Office? What risks have emerged since the project started? Have these been logged and is there an appropriate response/mitigation?

	<ul style="list-style-type: none"> What has been the overall impact of the Covid-19 pandemic? What specific actions has UNDP put in place to mitigate these?
Results / Impacts	<ul style="list-style-type: none"> How has the MBCRM project contributed towards a reduction in the loss of aquatic and terrestrial biodiversity and sustainable livelihoods in the pilot areas? In Malaysia? What specific impacts has it achieved? Are the log-frame targets achievable within the time and budget remaining? If not what course of action should be taken? What main lessons have been learned from the project, from UNDP’s side?
Sustainability	<ul style="list-style-type: none"> In what ways will UNDP continue to foster the sustainability of MBCRM outcomes post project?

PMU	
Information	<ul style="list-style-type: none"> Confirm the list of outputs / documents available to the evaluation
Relevance / mainstreaming	<ul style="list-style-type: none"> How have UNDP and GEF gender and rural community peoples’ policy requirements been addressed during project implementation. Could more have been done? How is the project linked to cross-cutting issues such as climate change, poverty alleviation, disadvantaged groups, etc?
Coordination / M&E	<ul style="list-style-type: none"> Describe the coordination oversight mechanism between KASA/DID and the PMU. How well integrated was the PMU with DID? How often were meetings held between the NPD and PM / other PMU staff? How long were the meetings? Has this been adequate to ensure smooth execution of the project? What support have you received from UNDP during implementation? Was this adequate? Describe relative strengths and weaknesses. Please provide a present project management diagram
Linkage / stakeholder engagement	<ul style="list-style-type: none"> What other GEF projects are related to MBCRM, and how are efforts being coordinated? What are KASA/DID and UNDP’s roles in coordination? How have other sectors been involved, e.g. agriculture, tourism, forestry, other water resources, etc..?
Financing	<ul style="list-style-type: none"> Financing – describe responsibilities for financial management among the team. How is accountability ensured in the management of GEF funds? Any delays in receiving GEF funds or co-financing inputs? How are these documented and reported? What were the impacts of any such delays? What action was taken to address such problems? Is the UNDP co-financing should be reported through the normal budget reporting mechanism? How is in-kind co-financing being recorded? Has the project been adequately resourced in relation to its planned activities, outputs and outcomes? What specific resource-related problems have been encountered, and how were these resolved? What issues remain? What will happen to project equipment? What audits have been done? Were any questions raised?
Execution	<ul style="list-style-type: none"> Have there been any changes in PMU staffing? Why? PMU Office location – what benefits / disadvantages? Are there conflicts between both areas of the project? How has an equitable distribution of project efforts been achieved? Describe how the pilot projects are implemented What have been the strengths and weaknesses of these arrangements? What have been the most significant challenges in implementing the planned activities? What process was followed to find national consultants? Was it difficult to find suitable expertise within Malaysia? Update on progress against top priorities identified in the PIRs, including: <ul style="list-style-type: none"> Since July 2021 Update on other relevant recommendations: <ul style="list-style-type: none"> Since July 2021
Risks	<ul style="list-style-type: none"> What risks face the sustainability of the project outcomes? Can you break them down: <ul style="list-style-type: none"> Financially

	<ul style="list-style-type: none"> ○ Intuitional ○ Socio-politically ○ Environmental ● What actions are planned to mitigate these risks?
Information Management	<ul style="list-style-type: none"> ● Confirm what project related data is held and how it is managed (who is responsible for what databases)? What will happen to these data after project closure? ● Describe the back-up and virus protection measures taken to protect project data. Have these been adequate? Any weaknesses that need to be addressed?
Results / Impacts	<ul style="list-style-type: none"> ● How has MBCRM contributed towards an integrated approach to managing rivers and biodiversity for ecosystem resilience, improved livelihoods and threat reduction? ● What specific impacts has it achieved? ● Are the results framework targets achievable within the time and budget remaining? ● What lessons have been learned from your experience of implementing the project? ● Add specific questions relating to the status of results framework indicators. Check assumptions
Sustainability	<ul style="list-style-type: none"> ● Has any MBCRM Sustainability and Exit Plan been approved by the Project Board/Steering Committee? Is it being implemented? ● Do you have any concerns about this plan?

KASA / DID – Executing Agency	
Relevance / mainstreaming	<ul style="list-style-type: none"> ● How does MBCRM contribute towards national policy and strategic priorities? Could it have done more? What lessons have been incorporated into the water and river management sector policies? The National CBNRM Policy? ● How has the MBCRM contributed towards NBSAP implementation in the Malaysia? Which indicators and targets? ● What relevance does it have to other national priorities and policies? ● Has it improved coordination between agencies involved in managing land and river quality? ● Has it improved visibility and coordination (synergies) with other sectors (finance, industry, urban planning, etc...)?
M&E / Coordination	<ul style="list-style-type: none"> ● Describe the coordination oversight mechanism between the KASA /DID and the PMU. ● How often are meetings held between the NPD and PM / other PMU staff? How long are the meetings? Has this been adequate to ensure smooth execution of the project? ● What are the reporting requirements between the PMU and the KASA ?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> ● How is MBCRM coordinated with related GEF and other (e.g. bilateral) biodiversity/rural livelihoods projects, and the other related projects ? ● What lessons from similar regional initiatives have been incorporated into the K MBCRM approach? ● How have other sectors been involved, e.g. agriculture, tourism, water resources, others?
Financing	<ul style="list-style-type: none"> ● Has the project been adequately resourced in relation to its planned activities, outputs and outcomes? ● What specific resource-related problems have been encountered, and how were these resolved?
Execution	<ul style="list-style-type: none"> ● What specifically led to the Project’s poor performance or non-starter till IRR? What motivated or contributed for project to perform after IRR? ● What progress has been made against the top priorities identified in the PIRs, including: <ul style="list-style-type: none"> ○ The reported under-estimate of the costs of key components of the project’s strategy in the project’s design phase. How were these costed? Were tenders offered? Was there a bench-marking exercise? ○ Why was there an initial delay in establishing the Project Management Unit (PMU)? ○ How would you describe UNDP’s roles in establishing PMU particularly in contracting PMU staff? ○ What are the challenges in coordinating the various implementing partners and their contributing components? What organisational or structural changes needed to be made to improve coordination?

	<ul style="list-style-type: none"> ○ Why were there delays in mobilising the co-financing elements? Can the project achieve its outcomes without this co-financing? What could have been done to improve co-financing? ○ Were there challenges in recruiting and retaining PMU personnel? Are there differences between the NIM modality described in the Project Document and the present arrangement? Why? Have these worked? ○ What have been the short to medium term impacts of the Covid-19 pandemic on the project’s execution? What are the likely long term impacts on the outcomes? ○ What measures have been put in place to mitigate the impacts of Covid-19 on the performance and long term impacts of the project?
Risks	<ul style="list-style-type: none"> • What risks face the sustainability of the project outcomes? • Who needs to do what to mitigate these risks?
Results / Impacts	<ul style="list-style-type: none"> • How has the MBCRM improved policy, agency and sector coordination (mainstreaming) in relation to river quality and biodiversity in Malaysia? Give specific examples. • Overall, how has MBCRM contributed to the improvement of river quality In Malaysia? How has the MBCRM contributed to the status of aquatic biodiversity in Malaysia? In the region? What specific impacts has it achieved? • How have the interventions reduced the incidence of water pollution? Aquatic Invasive Species? Catchment protection? Habitat loss? • In what ways has it made rural livelihoods more secure? • How has it secured linkages between wise river management and sustainable livelihoods? • Are all the log frame targets achievable within the time and budget remaining? • What lessons are being learned from the project? • How has the MBCRM benefited disadvantaged groups? Women and gender equality?
Sustainability	<ul style="list-style-type: none"> • Has a MBCRM Sustainability and Exit Plan? How will this play out? Triggers? • What measures will KASA /DID take to ensure that the outcomes of the MBCRM are sustainable? • How will KASA/DID seek to replicate / upscale the MBCRM results to other parts of the Malaysia’s natural freshwater system?

National Steering Committee (PSC) members	
Relevance / mainstreaming	<ul style="list-style-type: none"> • How has MBCRM contributed towards the implementation of national biodiversity conservation policies and/or water policies (e.g. NBSAP, climate resilience, Sustainable development, etc.)? How does this fit with the rural development context? How does this fit with the urban development context?
M&E / Coordination	<ul style="list-style-type: none"> • How frequently has the PSC met? Was this adequate for project oversight?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> • Has the composition of the PSC been optimal to oversee implementation? • Would it have been beneficial to include any other stakeholders? • Does the PSC represent state, local government and community interests? • How have other sectors been involved, e.g. agriculture, forestry, tourism, water resources? • Are NGOs and CSOs involved? Examples?
Execution	<ul style="list-style-type: none"> • Describe the nature of the PSC’s decision-making process • How effective was the PSC in taking action on any difficult issues? Describe. • Has the project’s attention to sustainable livelihoods been adequate for the project context? • How has the PSC addressed the PIR recommendations? Has this been effective? <ul style="list-style-type: none"> ○ On agency collaboration? ○ Project management challenges?
Risks	<ul style="list-style-type: none"> • What risks are there to the sustainability of project outcomes?
Results / Impacts	<ul style="list-style-type: none"> • How has the MBCRM contributed to sector and agency coordination (mainstreaming) in Malaysia? How has this worked across the political administrative system e.g. federal, state,...?

	<ul style="list-style-type: none"> How has the MBCRM contributed towards aquatic biodiversity conservation in Malaysia? What specific impacts has it achieved (e.g. improving river and water quality, reducing downstream effects, catchment area management, habitat loss, pollution reduction, sustainable rural livelihoods)? Are the log frame targets achievable within the time and budget remaining? What lessons have been learned from the project?
Sustainability	<ul style="list-style-type: none"> How will the outcomes of MBCRM be replicated to other areas of the Malaysia and upscaled across the country as a whole?

National Consultants, Contracted Parties and CTA	
M&E / Coordination	<ul style="list-style-type: none"> What are your reporting requirements? Could they be improved in any way? How were your assignments coordinated? Were your inputs well-coordinated with other project activities? How could this have been strengthened? Where the ToR relevant to the expected outcomes?
Execution	<ul style="list-style-type: none"> How smooth has the contracting process been? Any challenges involved?
Results / Impacts	<ul style="list-style-type: none"> Describe the main outputs and impacts of your specific assignments How will the results of your work be used to support future action to improve biodiversity conservation, river quality and resilience within the freshwater system? What lessons have been learned from your experiences? How has MBCRM contributed towards a reduction in pollution, improvement of river quality, biodiversity conservation and sustainable land use including agriculture and other land use options which affect the resilience of freshwater systems? What specific impacts has it achieved?
Sustainability	<ul style="list-style-type: none"> How sustainable are the results of your inputs and why?

National NGOs	
Relevance / mainstreaming	<ul style="list-style-type: none"> How relevant do you think MBCRM has been in terms of the needs of the river system and aquatic biodiversity? Do your organisations objectives align to those of the aims and objective of the MBCRM? How?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> What related activities is your organization currently implementing or planning, and how have these been linked with MBCRM (if at all)? Has the PMU been supportive of your work? Have you had any concerns? Where you able to voice these concerns? What was the outcome?
Financing	<ul style="list-style-type: none"> What co-financing or other support has your organization provided?
Execution	<ul style="list-style-type: none"> What role have you played in MBCRM project preparation and implementation? How could this role have been enhanced for greater mutual benefits / synergy? Does the project pay sufficient attention to awareness raising and sustainable livelihoods? Does the project pay sufficient attention to issues of gender/equality? Does the project pay sufficient attention to disadvantaged groups? Could anything have been done differently/better to include representation of women and disadvantaged groups? Specific questions to be added for each organization
Results / Impacts	<ul style="list-style-type: none"> How has the MBCRM contributed to sector and agency coordination (mainstreaming) in Malaysia? How has this worked across the political administrative system e.g. federal, state,...? How has the MBCRM contributed towards aquatic biodiversity conservation in Malaysia? What specific impacts has it achieved (e.g. improving river and water quality, reducing downstream effects, catchment area management, habitat loss, pollution reduction, sustainable rural livelihoods)? What specific impacts has it achieved? Has the project provided greater security to rural communities in the project areas? Has it improved river quality? Does the project adequately address landscape-level conservation approaches for the effective management of the freshwater system? Any lessons learned?

Sustainability	<ul style="list-style-type: none"> • What should UNDP /KASA be doing to follow up the project? • What should UNDP / State/Municipal government be doing to follow up the project? • Are there specific areas of the project which are more vulnerable? • What actions will your organization be taking to follow it up?
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District Administration / Local Government	
Relevance / mainstreaming	<ul style="list-style-type: none"> • How relevant has the project been to your area’s development priorities? • Where these priorities included in the project’s design? • Were you involved/consulted on the project’s design? How? • Do you support the objectives of the project?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> • How have other sectors been involved, e.g. agriculture, livestock, tourism, forestry, water resources? • Are there specific conflicts between these sectors? • Are you satisfied with the PMU? Is there anything that needs to be changed?
Financing	<ul style="list-style-type: none"> • Has your administration provided any co-financing or other contributions towards the project activities? In-kind?
Execution	<ul style="list-style-type: none"> • How has the implementation of the MRBCM been coordinated with your administration? What role has your administration played in the project? • How well has it been implemented within your territory? What relative strengths and weaknesses? What could have been improved? • Describe progress in implementation of capacity building for the decentralised/district-level agencies and community groups
Risks	<ul style="list-style-type: none"> • What risks may affect the sustainability of the project results locally?
Results / Impacts	<ul style="list-style-type: none"> • What specific results and impacts has the project achieved? • How has this benefited the people of your area? • What lessons were learned?
Sustainability	<ul style="list-style-type: none"> • How can these benefits be sustained? • How do you think they can be replicated / upscaled across the your state/municipal area? • What should UNDP / KASA / DID be doing to follow up the project? • What actions will your administration be taking to follow it up? • Have any of the activities or outputs from the budget caused you to include these in your budgeting?

Implementing partners	
M&E	<ul style="list-style-type: none"> • How has coordination been maintained with the PMU. How regularly are meetings held? How often are field reports submitted?
Linkage / stakeholder engagement	<ul style="list-style-type: none"> • To what extent have local stakeholders been involved? What mechanisms were used and how effective were they? • How effective are the activities in addressing / resolving issues?
Financing	<ul style="list-style-type: none"> • Have there been any delays or problems receiving financing for project activities at the site? How were they resolved?
Execution	<ul style="list-style-type: none"> • What main MRBCM activities have been implemented by your organisation/agency, and how well have they been implemented? What relative strengths and weaknesses? What could have been improved? • Is your organisation/agency better capacitated to fulfil its duties now? • Describe progress in implementation of capacity building for your organisation/agency. • Describe progress in the evaluation, documentation and readiness for replication of the outcome of the activity. Is this approach ready for replication? What else needs done? • Does the project pay sufficient attention to issues of gender/equality? • Does the project pay sufficient attention to disadvantaged groups? • Could anything have been done differently/better to include representation of women and disadvantaged groups? • Specific questions to be added for each organization
Risks	<ul style="list-style-type: none"> • What risks may affect the sustainability of project outcomes at your site • What effects of climate change at your site?

Results / Impacts	<ul style="list-style-type: none"> What specific results and impacts has the project achieved for your organisation/agency? Will these be completed by 2022? How has the project benefited local communities at the site? How have women, minorities and disadvantaged people benefited? What lessons have been learned from your experiences?
Sustainability	<ul style="list-style-type: none"> How can these benefits be sustained? How do you think they can be replicated / upscaled within your jurisdiction? What should UNDP / KASA / DID be doing to follow up the project?

Target Communities / Stakeholders	
Financing	<ul style="list-style-type: none"> How did you become involved in the project? What contributions have been made by the project? What contributions and / or support have you provided to the project activities? What support has the project provided to you?
Execution	<ul style="list-style-type: none"> What MRBCM activities have been implemented with your involvement? What was your role in these activities, and how were you engaged? How well have they been implemented? What relative strengths and weaknesses? What could have been improved? Did you encounter any problems with the activity? How were these resolved?
Results / Impacts	<ul style="list-style-type: none"> What specific results and impacts has the project achieved in this area? How has the project benefited you (local communities)? What lessons have been learned from your experiences?
Risks	<ul style="list-style-type: none"> What risks may affect the sustainability of project outcomes at your site or of the activity?
Sustainability	<ul style="list-style-type: none"> How has the activity benefited your community/Trust? How can these benefits be sustained? How do you think they can be replicated / upscaled in your area/to other communities? Have any other communities expressed an interest in the activities you have implemented? What should UNDP / KASA /DID / State/district administration be doing to follow up the project?

Annex 8 TE Rating scales

Monitoring & Evaluation	Rating
M&E design at entry	
M&E at implementation	
Overall quality of M&E	

UNDP Implementation/Oversight & Implementing Partner Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall Quality of Implementation/Oversight and Execution	

Assessment of Outcomes	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	

Assessment of Outcomes	Rating
Financial resources	

Socio-political	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Annex 9 Signed Evaluation Consultant Agreement form

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people’s right not to engage. Evaluators must respect people’s right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders’ dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated.

TE Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

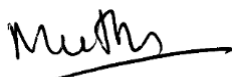
Name of Consultant: **MUTHUSAMY SUPPIAH**

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Kuala Lumpur, Malaysia, on Monday, November 1st, 2021

Signature:



Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people’s right not to engage. Evaluators must respect people’s right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders’ dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated.

MTR Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant: **Francis Hurst**

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Moncarapacho, Portugal on Monday 1st November, 2021

Signature: 

Annex 10 Signed UNEG Code of Conduct form

Evaluation Consultants Agreement Form To be signed by all consultants as individuals (not by or on behalf of a consultancy company) before a contract can be issued.

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Francis Hurst

Name of Consultancy Organisation (where relevant): N/A

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Moncarapacho, Olhão, Portugal on 1st October 2021

Signature:



Evaluation Consultants Agreement Form To be signed by all consultants as individuals (not by or on behalf of a consultancy company) before a contract can be issued.

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Muthusamy Suppiah

Name of Consultancy Organisation (where relevant):

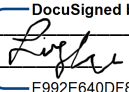

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at KL, Malaysia on 1st October 2021

Signature:



Annex 11 Signed TE Report Clearance form

Evaluation Report Reviewed and Cleared by			
UNDP Country Office			
Name: _____	DocuSigned by: _____	27-Feb-2022	
Signature: _____		Date: _____	
UNDP GEF RTA	E992E640DF87490...		
Name: Gabriel Jaramillo	DocuSigned by: _____	27-Feb-2022	
Signature: _____		Date: _____	
	94281976E4884D9...		

Annex 12 Data Collection and Analysis

The TE utilized three sources of primary data and information:

Desk review: the documentation covering project design, implementation progress, monitoring and review studies, local and national development plans, policies and regulatory instruments. This covered and elaborated on the documents listed in the UNDP TOR, a working list of which is presented in Annex 4.

Interviews, stakeholder consultations and field missions: additional information collection and validation took place through remote and (where possible) face-to-face consultations with a wide range of stakeholders (Annex 3), using "semi-structured interviews" with a key set of questions in a conversational format. This was accompanied by site visits to the pilot projects conducted by the National Consultant. The questions asked aimed to provide answers to the points listed in the

evaluation matrix in Annex 6. An initial list of generic questions is provided in Annex 7, which was refined according to specific stakeholder interviews during the field mission and by follow up Skype/Zoom, WhatsApp, etc., calls as necessary. Interviews were confidential and the information used discreetly without accreditation. Information from interviews was triangulated and validated, where necessary, before inclusion in the analysis and reporting. Interviews started with an introduction about the aims and nature of the evaluation and informing the interviewee(s) that they have the right not to respond if they so wished.

Interviews and the information collected has been disaggregated to reflect the different stakeholders (e.g. Implementing Agency – Executing Agency – PMU – implementing partners – beneficiaries). These are provided in Annex 7 as an interview guide and not a rigid questionnaire format. Information from the interviews was collated and analyzed to provide evidence-based conclusions on the overall performance and impact of the project as well as crosscutting issues.

Direct observations of project results and activities: wherever possible from the project area including consultations with local government and local agencies, local community representatives, project partners, CSOs and participants in field activities. An agreed format for presenting the information followed the ToR guidance and a logistical plan designed to provide a robust sampling of stakeholders is provided in the following section in the Inception Report and subsequently updated as needed.

Gender equality and women’s empowerment was assessed through collecting gender-disaggregated results arising from project activities, inclusion of women participants and relevant women’s groups in the evaluation interviews and specific questions regarding the extent to which they were included in project’s design and implementation and/or benefited from the project. Gender and disadvantaged groups were included in all appropriate questions and crosschecked against specific questions related to these issues. Specific attention was given to analyzing examples, best practices and lessons learned regarding women’s empowerment arising through the project’s scope of activities.

Following the data collection phase, the TE team analyzed the information according to the TE guidelines and the ToR in order to draw conclusions and propose recommendations. A draft TE Report was circulated to key stakeholders for comment and feedback. The Inception Report provided a timeframe for key deliverables and milestones. The final TE Report was submitted including an audit trail documenting the feedback from stakeholders and how these have been addressed by the TE.

Annex 13 Progress towards results as reported by the PMU

Description of Objective indicator	End of project target	Level of progress by end of project as reported by the PMU <i>TE comments (in italics)</i>
<p>i) Riverine biodiversity conservation is mainstreamed into river management policies, regulations and plans involving related sectors, as indicated in the GEF Biodiversity 2 Tracking Tool2.</p> <p>ii) A multi-stakeholder strategy for mainstreaming biodiversity in river management, developed through a participatory process.</p>	<p>Proposed integration of biodiversity in the draft stage of any policy such as:</p> <p>a) National Agrofood Policy (will be reviewed in 2020);</p> <p>b) National Action Plan on Invasive Alien Species (IAS) (in preparation);</p> <p>c) National Environmental Plan (under review, to be completed in Dec 2019);</p> <p>d) National Policy on the Environment (in preparation);</p> <p>e) National Physical Plan (to be reviewed in 2020);</p> <p>f) National Forestry Policy (to be completed in 2020);</p> <p>g) National Water Resources Policy (under review, to be completed in 2020); and</p> <p>h) Sabah and Sarawak’s riverine-related policies</p>	<p>PMU response:</p> <p>Integration of biodiversity into the draft stages of two policies namely:</p> <p>a) National Policy on Biological Diversity 2016-2025 (Midterm Review). Inputs during the Focus Group Discussion on Marine and Freshwater Biodiversity (23 June 2021) and Private Sector Involvement (16 June 2021);</p> <p>b) National Policy on the Environment, currently under revision.</p> <p>A multi-stakeholder strategy for mainstreaming biodiversity in river management through a participatory process is being developed. The strategy is expected to be completed by November 2021</p> <p>Due the overall delay of the project, a number of policies listed have concluded and/or in its final endorsement stage.</p> <ol style="list-style-type: none"> 1. Malaysian Forestry Policy 2021 2. National Action Plan on Invasive Species 2021-2025 3. National Agrofood Policy 2.0, 2021-2030 (yet to be published) 4. Fourth National Physical Plan (final endorsement stage). <p><i>TE comment:</i></p> <p><i>Given the confusing wording of the objective and the two objective indicators more related to outcome 1 progress towards results is hard to judge. However, the achievements listed amount to some parts of what is required for mainstreaming. However, they do not amount to a significant change in circumstances and the TE cannot state that the “process” of mainstreaming has “commenced” to any great effect.</i></p>
Description of Outcome 1 indicator	End of project target	Level of progress by end of project
<p>1.1 Availability of guidelines on slope stabilization, pollution control and riparian zones that systematically address the management of riverine biodiversity in the Malaysian context.</p>	<p>(i) guidelines for management of riverine biodiversity developed, adopted and made widely available for application by KATS and DID.</p>	<p>PMU response:</p> <p>The draft guidelines/framework on Best Management Practices (BMP) from the demonstration sites as well as other BMPs are scheduled to be delivered in Q4 2021.</p> <p>A detailed review of existing guidelines on river management was report in the revised Interim Report No. 1 as follows:</p> <ul style="list-style-type: none"> • Guidelines of River Sand Mining – Environment Protection Department Sabah. • Development of River and River Reserves – Department of Irrigation and Drainage. • Guidelines of River Sand Mining – Department of Irrigation and Drainage. • Managing Biodiversity in the Riparian Zone – Ministry of Natural Resources and the Environment. • Urban Storm Water Management (MSMA) – Department of Irrigation and Drainage.

		<ul style="list-style-type: none"> Manual on Best Management Practices (BMPs) for the Management and Rehabilitation of Riparian Reserves – RSPO. <p><i>TE comment:</i></p> <p><i>These guidelines have to various extent addressed the conservation of riverine biodiversity and will be used to guide the development of Best Management Practices (BMPs) which are scheduled to be delivered in the Interim Report No. 2.</i></p>
1.2 Improved capacities at key departments of national and state responsible riverine biodiversity conservation as shown by an increase in the Riverine Biodiversity Capacity Development Scorecard.	i) Score on the Capacity Development Scorecard increases by 50% by end of project ii) Agencies/section(s) responsible for riverine ecosystem/biodiversity management are clearly specified at national (level).	<p>Updated Score Card not available.</p> <p>The detailed assessment of the capacity of the four major target groups are on-going:</p> <ul style="list-style-type: none"> DID at Federal and State levels; Federal sectoral agencies; State level agencies; and Local communities/non-government organisations and the public. <p><i>TE comment:</i></p> <p><i>In September 2021 DID’s River Basin Management Division renamed its ‘Technical Unit’ to ‘Biodiversity and Studies Unit’ which is an initial step towards mainstreaming biodiversity within the Department. Although there is no measure of how effective this will be and what changes (skills, budget, mandate, etc..) have been made internally in order to create this unit.</i></p>
Description of Outcome 2 indicator	End of project target	Level of progress by end of project
2.1 Pilot demonstration 1 in upper Kinta Basin improves status of riverine biodiversity through strengthened watershed management, indicated by: (i) demonstrating at least 1 site of erosion mitigation through a bioengineering approach (bamboo or enrichment planting).	(i) At least 1 site established and demonstrated using bioengineering techniques. (ii) 5 communities actively monitoring on quarterly basis.	<p>PMU response:</p> <p>Pilot demonstration #1 in upper Kinta Basin’s riverine biodiversity improved through strengthened watershed management:</p> <p>(i) One site of erosion mitigation through bioengineering approach (bamboo or enrichment planting) was established.</p> <p>(ii) One community actively monitored and participated in related events.</p> <p>The pilot site identified in Q2 2020 with slope failure was along the Simpang Pulai Highway. Four trial plots on bio-engineering were established at the demonstration site to evaluate suitable vegetation for slope stabilization. The monitoring and evaluation of the effectiveness of bio-engineering is still on-going. A fifth plot was established in early 2021.</p> <p>The primary outputs under Outcome 2 were completed by end-2020 by the project partner, Global Environment Centre (GEC). GEC was subsequently appointed for a second phase for 2021.</p>

<p>(ii) at least 5-10 communities actively monitoring and participating in related events.</p>		<p>The pilot site with slope failure along the Simpang Pulai Highway selected for rehabilitation work using bioengineering techniques continues to be monitored. A new demonstration plot, Plot 5 has been fully established. For the previous plots, Plot 1 to 4, additional plants were added for enhancement. Plot 4, which has been experiencing severe sediment erosion originating from failed slopes outside the project site, has undergone additional planting and a natural barricade comprising of living stems covered with geotextile has been erected.</p> <p>For the establishment of the Sg. Kinta Open Classroom (SKROC) where the community of Kg. Pawong will be the custodian, four learning stations were identified i.e.:</p> <ul style="list-style-type: none"> • Source of Kinta • Meandering • Voice of the Stream • River Monitoring Location <p>A river restoration plan has been developed to enhance the river in respect of the learning objectives, together with an eco-trail to allow access for participants, and a guidebook for the Open Classroom.</p> <p>Ten community members from Kg. Pawong are actively monitoring the source of Sg. Kinta and have been engaged for river restoration work. SKROC is in its final stage of establishment with the construction of the eco-trail.</p> <p>GEC comment:</p> <p>A total of 14 communities within UKB actively monitored the river or participated in related events and activities supported by main GEF5 funding and co-financing. it was not possible to directly raise awareness to aquarium shops since they were closed for many months as a result of the COVID-19 Lockdown. Instead, engagement was carried out in 2020 through social media and WA to groups of anglers (communities). In 2020, during the World River’s Day Celebration event in AU2 community in Selangor – Department of Fisheries and Department of Agriculture Officers were invited to share information and exhibit to outreach to the communities and anglers (participating in the AIS Fishing Competition). The talk was broadcast to public via Fb live and YouTube sharing. The materials developed to was distributed by e- medias and during the event on 26th Sept with expertise from DOF and Fanli marine sharing the impact of AIS on our river. During the session, communities at Upstream (Kamp Taman Warisan) and downstream (Pengkalan Kampar) developed a short video that also covers interviews on the anglers. The video was shared during the webinar and made available via YouTube at the following link:</p> <p>https://www.youtube.com/watch?v=miuuRyEJEAO</p> <p>https://www.youtube.com/watch?v=iV9HLtg8oAs&t=1s</p> <p>In total during 2020 and 2021, 17 webinars/online training, 8 site based workshop, training and localised activities was carried out focused on community based capacity building. These engaged 3,257 people.</p> <p>232 activities and materials undertaken. This is broken down as follows:</p>
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		<p>5 out of 89 meetings and site visits are referenced in the TE report; 3 out of 25 events and webinars are referenced in the TE report; 4 out of 35 materials are referenced in the TE report; 8 out of 83 community biodiversity monitoring activities are referenced in the TE report.</p> <p><i>TE comment:</i></p> <p><i>The indicator and the means of measurement make it hard to assess, institutional management as well as forecasting their sustainability and actual impact on riverine biodiversity. The Klang Basin is an urban setting and was heavily involved with the ROL programme¹⁰⁷ through the GEC’s existing work in this area. The project has initiated a large number of activities and outputs. A number of these were completed in 2018 and 2019 using co-financing prior to the contracted project engagement. The project has provided input to incorporating biodiversity conservation and habitat rehabilitation into the framework of the ROL Initiative specifically through the ROL Public Outreach programme (ROLPOP) and through the improvement of habitat for riverine and aquatic biodiversity as well as introduction of biological monitoring for water quality, facilitated enhanced community engagement in the monitoring and protection of the Klang River, public education and awareness on riverine biodiversity assessment, monitoring and management, enhancing biodiversity in the river corridor by planting of indigenous species of tree and flowering plant in sections of the river corridor adopted by local communities or established as local classrooms, enhancing awareness on the nature and negative impacts of alien invasive fish species on indigenous biodiversity and discouraging the release of alien invasive fish into the river system by the public or government agencies¹⁰⁸, promoting consideration of biodiversity conservation and enhancement into the work of the key government agencies with responsibility for management of the river and river corridor in particular JPS, LUAS and DBKL, the establishment and strengthening of the Friends of Klang River Basin FoKRB to link more than thirty different community and special interest groups working for the assessment, monitoring, rehabilitation and management of the Klang River through the FoKRB Network and The active involvement of 27 Government agencies in the River Cleaning Task Force for the River of life Initiative in the Klang basin that was actively engaged in the public outreach programme and the GEF financed activities.</i></p>
2.2 Riverine biodiversity management integrated into planning and implementation of the Klang River of Life Programme, indicated by:	(i) Riverine habitats will be enhanced at the following four sites: S1: Kampung Taman Warisan, S2: Bukit Kiara (Sg Penchala), S3: Sg Gombak (KRT Seri Terengganu), S4: Taman) Melawati	<p>(i) Riverine habitats were enhanced at the following three sites: S1: Rumah Pangsa AU2, S2: Sg Gombak (PA Seri Terengganu), S3: Taman) Melawati</p> <p>(ii) Zero percent awareness of Aquatic Alien Invasive Species (AIS) risk among targeted registered aquarium shops and angler’s association/groups</p>

¹⁰⁷ The ROL is a part of the Malaysia government's Economic Transformation Programs, an initiative which combines high-impact projects and programs to elevate the country to developed nation status. Divided into three main components – river cleaning, river master-planning and beautification with an estimated value of US\$1.3 billion in improving water quality in the Klang River in Kuala Lumpur.

¹⁰⁸ In the Project Document it was suggested that this was monitored by a Knowledge, Attitudes and Practices (KAP) survey but this was not carried over to the post-IRR SRF. A KAP survey is a considerable undertaking and would have needed to be carried out at least twice during the project.

<p>i) physical enhancement of riverine and riparian habitats in the Klang River are benefiting riverine biodiversity</p> <p>ii) awareness levels concerning the risks posed by aquatic alien invasive species (AIS)</p>	<p>(ii) At least 50 percent awareness of Aquatic Alien Invasive Species (AIS) risk among targeted registered aquarium shops and angler’s association/groups</p>	<p>A module on Biodiversity Enhancement and Riverine Management for local communities, a guideline for on-site training/observations on riverine biodiversity and posters on Alien Invasive Species (AIS) were developed as part of capacity building activities.</p> <p>Three webinars were held titled community biodiversity monitoring on 24 Feb. 2021 with 58 participants, value of riverine biodiversity and the role of the community on 4 March 2021 and community experiences on conservation work on 24 April 2021.</p> <p>Due to current movement control order imposed by Government of Malaysia to address COVID19, awareness on AIS risks with targeted community groups and public will be held in Q4 2021 or earlier when restrictions are lifted.</p> <p>The primary outputs under Outcome 2 were completed by end-2020 by the project partner, Global Environment Centre (GEC). GEC was subsequently appointed for a second phase for 2021.</p> <p>Riverine habitat enhancement was completed at Taman Melawati (river clean-up, replanting and developing eco-trails); Rumah Pangsa AU2 Taman Keramat and PA Seri Terengganu (riverine tree planting). However, the three sites are continuously supported which include its participation in the wider network of the Friends of Klang River Basin (FOKRB). Two additional sites in the middle and downstream section of Sg. Klang were identified to expand the programme to include areas beyond the urbanized sites under Phase 1. Engagement has proceeded at the midstream site of Taman Rimba Kiara (at the Sg. Penchala tributary) and the downstream site at Taman Pengkalan Kampar.</p> <p>Localised and guided follow-up trainings have been conducted with selected communities at the pilot sites from Phase 1 and FoKRB community sites i.e., Komuniti Kampung Taman Warisan, AU2 Taman Keramat, PA Seri Terengganu, RIVER Ranger Sg Pinang, Klang, Kebun Komuniti Mutiara Magna, Taman Cuepacs, PPR Batu Muda, Kampung Kassipillay and also educational institutions.</p> <p>GEC had highlighted an issue with sewage pollution at the upstream of Sg Penchala with the Dept. of Irrigation and Drainage, Wilayah Persekutuan Kuala Lumpur (DID WPKL) on the overflow of effluent from septic tanks at Perumahan Awam Bukit Kiara. on 19 & 24 March 2021. There has been a series of engagements with DID WPKL, Dewan Bandaraya Kuala Lumpur, Department of Environment, Wilayah Persekutuan Kuala Lumpur and Indah Water Consortium to address this problem which has impacted water quality along Sg. Penchala. As of 28 September 2021, each agency will be providing their input on actions undertaken and on how the problem can be addressed collaboratively. According to DBKL, desludging of the septic tanks will be carried out twice a year or when they receive the complaint; however, no desludging activities was carried out in 2021.</p> <p>At the Taman Pengkalan Kampar site, the Klang Municipal Council has provided an official letter on 21 September 2021 for the establishment of the Open Classroom. The site was assigned to the River Ranger Sg. Pinang group who have acknowledged their role as the caretaker under the project. A cabin has been installed and the upgrading the centre is currently in progress.</p> <p>GEC is providing support for the operation of FoKRB with the organisation of four sharing sessions via Zoom and Facebook live. There are 68 personnel, 40 organisations and 19 Friends of River within FOKRB. Outreach and engagement via social media have resulted in an increase in membership with 73 individuals subscribed in the FoKRB WhatsApp group, 575 followers on FoKRB Facebook and 333 followers on FoKRB Instagram.</p>
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2.3: Pilot demonstration 3 in Sabah enhances: (i) Length of riparian zone conserved along Segama River	(i) at least an additional 20km of riparian habitat enhanced/ conserved by end of project period.	<p>(i) 40 km stretch of riparian habitat in Segama River was enhanced.</p> <p>(ii) 104 villagers from 9 villages were involved in Segama river monitoring / conservation. Riparian habitat along 288 km of Sg. Segama was evaluated and a 40-km stretch was prioritized for action. Four sites were identified for enhancement as follows: (1) Lower-Mid Segama (next to Hap Seng plantation), (2)</p>

¹⁰⁹ Mainstreaming of Biodiversity Conservation into River Management: (Output 2 : Best Management Practices For Critical Riverine Habitats Are Demonstrated At Key Sites Of National Importance: Upper Kinta Basin & Upper Klang Basin). Final Report (Phase 1: 2020). Reference: (13) DLM.PPS.KS (S) 15/2/3/9 JLD.29 DATE: 30.11.2020 and Draft Final Report Phase 2, 31/10/2021 (Phase 2: 2021).

<p>(ii) Engagement of local communities in river monitoring and conservation</p>	<p>(ii) At least 20 villagers from targeted village involved in river monitoring / conservation</p>	<p>Mid-Segama (near Kg. Litang/Hap Seng & Wilmar plantations/Tabin Wildlife Reserve), (3) Lower-Mid Segama (near IOI plantation), and (4) Upper-Mid Segama (near Kg. Upak and Kg. Segama Lama)</p> <p>Riparian areas were classified into four main zones: (1) Species Conservation Zone, (2) Oil Palm Estate Conservation Zone, (3) Community Reforestation Areas, and (4) Forest Reserve Extension Zone. It was decided that enrichment planting efforts will focus on the Community Reforestation Areas which would potentially involve an area of 490 ha.</p> <p>A total of 104 individuals from nine villages located near the four sites were engaged on river monitoring, rehabilitation and conservation, waste management and livelihood improvement. Training workshops were held using the Citizen Science approach on four subject matters: Water Quality, Riparian Biodiversity, Fisheries and Aquatic Invasive Species.</p> <p>Additionally, an online event in conjunction with World Water Day title Celebrating the History and Culture of Segama was held on 21 March 2021 in collaboration with Sekolah Kebangsaan Bukit Balacon with students from the age of seven to twelve.</p> <p>The primary outputs under Outcome 2 were completed by end-2020 by the project partner, Forever Sabah (FS). FS was subsequently appointed for a second phase for 2021.</p> <p>The priority riparian areas for conservation are currently focused Species Conservation Zone (Zone A) and Community Restoration Zone (Zone C). Due to constraints in carrying out the fieldwork, Forever Sabah focused on building capacity with the parties involved to obtain their commitment to conserve/enhance riparian zones. For Zone A, a meeting was conducted with stakeholders in Kinabatangan to identify the intervention to be done. Amongst the key stakeholders are:</p> <ul style="list-style-type: none"> i. IOI Plantations ii. Kinabatangan District Office iii. Sabah Wildlife Department (SWD) <p>IOI has agreed to collaborate with the Department of Irrigation and Drainage (DID) Sabah for restoration work in Zone A (Bottle Neck 1); the collaboration is presently being formalized. A proposal for the groundwork is being drafted which will focus on IOI’s commitment in over the next three years and the development of BMPs to be replicated amongst other oil palm companies. Engagement with Hap Seng is still ongoing, however obtaining their commitment has been a slow.</p> <p>SWD has also taken interest in the protection of wildlife in Zone A. However, the land status is being obtained from Land and Survey Department (assisted by the Kinabatangan District), after which SWD will conduct an internal discussion on how best to protect the area.</p> <p>For Zone C, FS focused on establishing as Indigenous Community Conserved Area (ICCA) as part of the restoration plan. ICCA and mapping workshops have been conducted, and a community ICCA Committee has been formed to drive this forward. FS have identified a river corridor 20km in length for potential enrichment planting from Kg. Upak to Kg. Bukit Balacon. This initiative will aim to allow the community to be the decision-makers in deciding the areas for restoration. At present, through the Committee, Forever Sabah will undergo a systematic Free, Prior, and Informed Consent (FPIC) process with the community leaders to obtain their</p>
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		<p>commitment which will culminate in the signing of Memorandum of Understanding between the communities and Forever Sabah, thereafter building a development plan with the community for implementation. A citizen-science guideline has also been developed for controlling the spread of invasive species found in Segama which was socialised with the community in Kg. Dagat on 25 September 2021 via Zoom. Additional engagement has been conducted with sand-mining operators in Kg. Taliwas and a site visit in Kg. Kidan-Kidan and Kg. Batu 8. Only one legally operating sand miner was interviewed, while seven of the 11 operators located in Kg. Bukit Balacon-Kg. Batu 8 area has shut down operations due to increase in land rent by the community. All findings throughout this project will be shared with Land and Survey Department Sabah Director as he had shown interest in sand mining activities.</p> <p><i>TE comment:</i></p> <p><i>This demonstration site provides some evidence of mainstreaming. There are linkages between the local community, institutional players and the private sector. The initiative has used an emerging protected areas approach (an ICCA) to empower local communities to take control of their natural resources and supported this with systematic technical assistance in terms of survey and appropriate zoning and jointly assigning roles and responsibilities to community/NGO/state/private sector actors with a credible feedback loop for mainstreaming BMPs. The work will not be completed by the end of the project but there is sufficient evidence to support the continuation of these activities and the mainstreaming process after the GEF-funded project ends. An important aspect of this is that the State DID in Sabah has statutory responsibilities for river quality¹¹⁰.</i></p>
2.4 Four Community involvement at the demonstration sites provides socio-economic benefits to local communities and proactively engages women in the communities, indicated by: - number of households in target communities involved in implementing project activities	<p>Site 1: Orang Asli from at least 20 households trained and receive income from tourism and slope protection and rehabilitation activities;</p> <p>Site 2: At least 20 households actively participate in community groups promoting river quality improvements</p> <p>Site 3: At least 20 households trained and receive income from tourism, handicraft and seafood processing activities</p>	<p>Site 1: 18 Orang Asli were trained and receive income from tourism and slope protection and rehabilitation activities (Ulu Sg. Kinta);</p> <p>Site 2: 25 individuals from 13 community groups actively participated in community groups promoting river quality improvements (Ulu Sg. Klang);</p> <p>Site 3: 104 individuals from 9 villages were trained and received income from tourism, handicraft and seafood processing activities.</p> <p>Gender equity achieved in all sustainable livelihood activities through engagement of 5 female facilitators for community groups.</p> <p>Site 1 (Ulu Sg. Kinta): 18 individuals from the Orang Asli community at Kg. Pawang underwent training on monitoring biodiversity and slope protection on 6 September 2020. The community are actively involved in slope protection work and monthly monitoring. In addition, a nursery was established providing seedlings for</p>

¹¹⁰ The Sabah and Sarawak Governments have effective full control over the governance of matters related to riverine biodiversity in the State, p. 44, Mainstreaming of Biodiversity Conservation into River Management, Interim Report 1 (Revised NO.1), September 2021. RBM Engineering

<p>(such as tree planting) on a paid basis; - proportion of women participating and benefiting from sustainable livelihood groups supported and facilitated by the project</p>	<p>At least gender equity achieved in all sustainable livelihood activities through engagement of female facilitators for community groups</p>	<p>the bio-engineering plots. In addition, four villages located below Kg. Pawong were trained on environmental awareness and river pollution monitoring i.e. Kg. Chadak, Kg. Tonggang, Kg. Suluh, Kg. Makmur, Kg. Tonggang and Kg. Choh.</p> <p>Site 2 (Ulu Sg. Klang): Two training workshops on biodiversity enhancement and riverine management was conducted with 25 individuals from 13 community groups on 12 and 13 September 2020. Three community-based biodiversity inventories at five sites were conducted on 20 September 2020 with a total of 61 participants with the aim of enhancing understanding on biodiversity values.</p> <p>Site 3 (Sg. Segama): A total of 104 individuals from nine villages (Kg. Sapadulang, Kg. Upak, Kg. Lituk Pulau, Kg. Pendising, Kg. Tawaiyari Kg. Sapadulang, Kg. Batu 8/Segama Lama, Kg. Litang and Kg. Bukit Balacon) located near the four sites were engaged on river monitoring, rehabilitation and conservation, waste management and livelihood improvement.</p> <p>Riparian areas were classified into four main zones: (1) Species Conservation Zone, (2) Oil Palm Estate Conservation Zone, (3) Community Reforestation Areas, and (4) Forest Reserve Extension Zone. It was decided that enrichment planting efforts will focus on the Community Reforestation Areas which would potentially involve an area of 490 ha.</p> <p>Additionally, an online event in conjunction with World Water Day title Celebrating the History and Culture of Segama was held on 21 March 2021 in collaboration with Sekolah Kebangsaan Bukit Balacon with students from the age of seven to twelve. Site 1 (Ulu Sg. Kinta): Orang Asli from at least 25 households trained and received income on their involvement on the slope protection and rehabilitation activities including Sg Kinta River Restoration activities. Orang Asli are from Kg Pawong, Kg Makmur and Kg Tonggang. From the 25 households, there were ten youths (40%) (25 years and below) and one women (4%) involved in the project activities.</p> <p>Site 2 (Ulu Sg. Klang): Two training workshops on biodiversity enhancement and riverine management was conducted with 25 individuals from 13 community groups on 12/13 Sept. 2020. Three community-based biodiversity inventories at five sites were conducted on 20 September 2020 with a total of 61 participants with the aim of enhancing understanding on biodiversity values. The River Ranger 2.0 on monitoring river health was held during a Jom Turun Sungai (Let's Visit the River) activity in conjunction with Word Water Day on 27 March 2021 with 21 participants from DID, community-based organisations, students and the public. A City Nature challenge was also organised at Taman Rimba Bukit Kiara in collaboration with Friends of Sg Penchala (FOSP) and Friends of Bukit Kiara (FoBK) on 3 May 2021. To date under the GEF5 project, 18 activities, in form of site based initiative, workshop and trainings and webinars, the involvement as on gender is quite balanced at approximately 55% are women. In total of 3,408 actively involved, 1874 are women.</p> <p>Site 3 (Sg. Segama): A total of 104 individuals from nine villages (Kg. Sapadulang, Kg. Upak, Kg. Lituk Pulau, Kg. Pendising, Kg. Tawaiyari Kg. Sapadulang, Kg. Batu 8/Segama Lama, Kg. Litang and Kg. Bukit Balacon) located near the four sites were engaged on river monitoring, rehabilitation and conservation, waste management and livelihood improvement. A meeting with the communities at Kg. Upak and Kg. Pendising for the planning of a livelihood enhancement workshop was held on 23 June 2021.</p>
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		<p>A cooking and agriculture demonstration workshop was carried out with the communities on 21-22 July 2021 in Kg. Upak, Kg. Pendising, Kg. Tawaiyari and Kg. Sunduron. Forver Sabah have provided the Women’s Association a RM500 allocation to experiment with product development and sales. Once done, they will be provided with seed fund to continue, whilst monitoring their progress.</p> <p>An online training workshop for the building of a biogas digester was conducted on 18 & 25 August 2021, with a site visit on 22 September 2021 in Kg. Tawaiyari. The site has been prepped for construction, which aims to begin in October 2021. The biogas digester will benefit three houses and aim to educate the community on waste management.</p> <p>MSPO/RSPO certification for smallholders has proceeded with data collection, which is currently conducted by three field staff in seven villages. Early data shows no smallholders are certified yet, thus this activity will be absorbed under Forever Sabah’s Certified Sustainable Palm Oil (CSPO) team to work towards certification amongst the communities. This aims to provide access to market (improving livelihood) for the communities and also smallholders’ commitment to conserve/enhance riparian zones in the long run.</p> <p>GEC comment:</p> <p>A total of 206 Orang Asli community members were trained or received income from education, tourism, slope protection, biodiversity study and rehabilitation (bio engineering and Sg Kinta Source Restoration) activities in UKB.</p> <p><i>TE comment:</i></p> <p><i>As discussed in section 3.2.1 this indicator is even more confusing than the others containing elements of an output, restating targets and actual amounts in the wording. The TE makes the following observations: in Sabah there appears to be a solid move to incorporate gender equality into sustainable (post project) programmes (e.g. CSPO) as well as concrete moves to ensure that livelihoods are established and promoted using GEF funds but income from those livelihoods is internalised, they are not dependent upon the project’s continued financing. Linkages with riverine biodiversity are thin but they are there and they have built social capital and engaged and empowered women to a reasonable extent of the project financing. The activities are specifically gender targeted.</i></p> <p><i>In Klang and Kinta there are activities such as the development of a tree nursery for enhanced planting (Klang) and a nursery for growing plants suitable for bioengineering. The river trails also have an element of income generation. There is some evidence of gender targeting these activities. The TE does raise the issue that project payment of individuals or communities to participate in project activities is quite reasonable to get things done. However, it should not be included as an indicator of impact.</i></p>
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Annex 14 Adaptive and Technical Challenges

Technical and adaptive challenges

Technical challenges:

- A technical challenge is a challenge that can be addressed with existing expertise, protocols, and operations.
- Implementing solutions to technical challenges often falls to someone with the authority to address them.
- Technical training (i.e. using a manual and new equipment) can resolve the problem.

Adaptive challenges:

- Encounter situations for which solutions lie outside the current way of operation, and possibly, thinking.
- Applying existing procedures and understanding does not provide the solution needed.
- Stakeholders must be involved in developing and implementing solutions.
- Solutions lie not in the application of expertise, but rather from a process of learning and adapting.
- Addressing adaptive challenges requires trying solutions that are new and maybe quite different.
- Inherent in addressing adaptive challenges are the need to become comfortable with not knowing what the next move might be, dealing with uncertainty.
- It is necessary to think (institutionally, individually, collectively...) what we should continue to do, what we should start to do and, critically, what we might need to stop doing...
- Addressing adaptive challenges may require the transfer of power (the ability to make decisions and to influence future events) from one party to another.
- Normally require expert thinking, which is the ability to solve non-rule-based problems.
- Adaptive challenges require time for adaptive solutions to have an effect and stakeholders cannot expect to react too quickly because of the discomfort that comes with not knowing.

Adapted from: Heifetz, Ronald A.; Leadership Without Easy Answers (Belknap/Harvard University Press, 1994)

Annex 15 Project Document risk ratings

Risk	Type	Impact Probability	Mitigation	TE Comment
<p>Sectoral conflicts due to lack of coordination and collaboration impact project progress</p> <p>Various government agencies responsible for the management of different aspects of river basins are unwilling to coordinate and collaborate, leading to inappropriate or conflicting development in the catchment, e.g. logging, road construction, land-clearing for agriculture, etc. and undermining project progress.</p>	Political	Medium	<p>The Government recognises the need for better coordination to improve riverine area management. The project will develop the inter-agency strategy to mainstream biodiversity into river management, which will be adopted by key agencies. The Strategy will include an inter-agency coordination mechanism with clear jurisdictions of concerned agencies as well as coordinated enforcement and compliance monitoring mechanisms. It will also include plans for mainstreaming riverine biodiversity management into operations of related sector agencies, private sector and communities, collaborative operational modality and a financing plan. The project will also invest in capacity development of NRE, DID and other relevant agencies at Federal and state levels to enable more effective collaboration between institutions. At the site level, collaboration will be established by: establishment of site level project coordination committees and/or riverine area management working committees that will be linked to existing state committees and mechanisms.</p>	<p>By describing this risk in terms of conflict it frames the risk in terms of a “conflict” whereas it may have been better to describe this in terms which individuals might recognise. Underestimating the commitment and motivations of organisations and the individuals in organisations could create a barrier to participation in itself. Certainly, there would be a high level of inertia but that might not amount to a “conflict” as such. The lack of coordination and collaboration may not be perceived as such by an organisation or individuals within the organisation who are possibly doing their very best to work to an agreed institutional mandate for which riverine biodiversity may not be a recognised measure of success. The purpose of mainstreaming is not so much about getting everybody working for the good of riverine biodiversity but to include biodiversity in a range of recognised key performance indicators in such a way that it alters their sector policies, working practices and motivation. Even within the framing of this risk the mitigation measure owes more to a description of the outcome at the end of the project and does not provide a credible mitigation that would need to be in place from day one of the project in order to achieve this state (the described mitigation).</p> <p>The risk is poorly articulated and should be both political and operational (i.e. there should have been a specific activity/tool to catalyse this collaboration) and the risk was underestimated. Furthermore, the mitigation relied on considerable capacity building activities which are not evidenced in the resource allocation of the SRF.</p>

Risk	Type	Impact Probability	Mitigation	TE Comment
Local communities may be reluctant to engage in project activities and in riverine habitat management in general. There is a risk that local communities may not perceive any benefit from the project demonstration activities in their areas, and may be apprehensive of potential negative impacts on their livelihoods.	Operational	Low	Component 2 of the project builds on aforementioned extensive baseline activities, plus stakeholder analysis and consultations with local communities at the demonstration sites during the PPG phase. Through this process, the receptivity of local stakeholders to the project has been determined and key stakeholders have been identified to lead on implementation of the project activities. Other forms of engagement will include capacity building training, awareness raising and support for their participation in project activities. SESP consultations have taken specific account of potential negative impacts on local communities and vulnerable groups and safeguards included in the project design.	This risk is reasonable. However, it would appear that in ne circumstance the project has resorted to paying local communities (as a project indicator) with inherent sustainability risks. The risk might have been better articulated as <i>project fails to establish linkages between good river management practices and economic benefit.</i>
Climate change trends will increase water temperatures and the variability of rainfall, exacerbating floods and droughts and increasing pressures on riverine biodiversity. Climate change impacts, such as increasing temperatures and hydrological regime changes, could affect aquatic and riparian habitats as well as water resource availability. Such changes would especially affect aquatic biodiversity, particularly during prolonged drought periods.	Environmental	Low	The project will aim to address the anticipated negative impacts of climate change by increasing the ecological resilience of river basins through enhancing forest cover in catchment areas, rehabilitating riparian forest cover, and improving water quality through an integrated river basin management approach. This approach, coupled with improved availability of information from biophysical monitoring, will provide a strengthened basis for ecosystem-based adaptation to climate change impacts.	A reasonable risk description and rating, given that “inevitable” is not yet recognised in UNDP-GEF risk ratings. The mitigation measures could have been strengthened by cross-cutting measures to develop linkages with disaster risk reduction programmes and activities.

Risk	Type	Impact Probability	Mitigation	TE Comment
Government staff turn-over, especially trained technical staff, may affect the project negatively. Government staff with strong knowledge of biodiversity related subjects may retire or move position during the project period, weakening institutional knowledge and capacity for project implementation.	Operational	Medium	The project will support strengthening of institutional capacity of DID as the principal government agency in charge of river management. Project intervention will include review of staffing structure of DID and its enhancement. This will reduce negative impacts from possible staff turnover. A series of training sessions will be conducted strengthening knowledge and skills necessary for integrated river management. The overall advancement of this subject area provides increased opportunity and incentives for staff to remain involved.	Risk rating might arguably have been “High”. Mitigating measures are reasonable but not supported by the project’s strategic framework and resource allocation within the project. Any delays to implementation would certainly move this risk to “High” which should have triggered an early response and specific intervention.
Human rights concerns raised by stakeholders at project sites are not addressed The main concerns of relevance (see SESP) are continued access to natural resources and land uses in riparian zones.	Operational	Low	At project demonstration sites, the project has conducted stakeholder analysis and consultations regarding project aims and activities with the concerned communities. The project design includes specific stakeholder involvement mechanisms to ensure that local communities both participate and benefit from project activities. Continued access to riverine resources depends on the legality of existing uses, where encroachment into legal riparian buffer zones may be an issue. A consultative approach towards resolving such issues would be taken, allowing informed decisions to be taken through government led processes. The same issues apply at a wider national level, in terms of the implications of the intersectoral strategy for riverine biodiversity management, which should undergo screening for social impact assessment during its development, and include provisions to address and compensate potential social impacts arising from its implementation.	Risk identification and rating is reasonable for the time although it would likely be raised to medium with today’s increased focus on the SESP. If repeated today it would likely require FPIC. Mitigation measures are not comparable with the level of resources allocated in the project. It is a good answer, but not based in reality.

Risk	Type	Impact Probability	Mitigation	TE Comment
Gender equality concerns raised by stakeholders at project sites are not addressed The most likely concerns (See SESP) are that the project maintains the status quo, without raising awareness of the significance of gender equality or empowering women through their engagement in the project activities.	Operational	Low	At the project demonstration sites, the project has conducted stakeholder analysis and consultations that specifically included assessment of the current roles and livelihoods activities undertaken by women in local communities. These have been taken into account in the design of the demonstration activities, in order to ensure the empowerment, engagement and delivery of benefits to women in the targeted communities. Project monitoring and evaluation specifically includes indicators and reporting on the engagement of women in project implementation.	Risk identification and rating is reasonable for the time although it would likely be raised to medium with today's increased focus on the SESP and might easily have required a more robust gender mainstreaming approach to be described in the project's strategy. Mitigation measure is also reasonable but not realistic in relation to the project's resources, without capacity assessments it would not be clear whether those tasked with carrying this out would already have these skills.
The project negatively impacts environmental sustainability of critical habitats and protected areas The potential concern (see SESP) is that the project will have negative impacts on the protected areas and critical habitats within the project area. This is considered extremely unlikely as the project is intended to achieve overwhelmingly positive impacts for biodiversity conservation.	Operational	Low	The project is designed to enhance biodiversity conservation into river management. At such, it will result in improvements in the environmental sustainability of river basin management, enhanced riparian zone protection, improved water quality, strengthened biodiversity conservation, climate change adaptation and sustained delivery of riverine ecosystem services. No negative impacts are foreseen at either the demonstration sites or through national implementation of the inter-sectoral strategy for riverine biodiversity conservation.	It is not clear why this risk was even included in the risk log.

Risk	Type	Impact Probability	Mitigation	TE Comment
<p>Indigenous peoples dependent on riparian resources at project sites and elsewhere in Malaysia are negatively impacted by project outcomes</p> <p>Indigenous communities are present at all three project demonstration sites, and in many other riverine settlements throughout the country. There is a risk (identified in the SESP) that their land uses and access to riverine resources could be negatively impacted by stronger protection of riverine biodiversity.</p>	Operational	Low	<p>This impact is essentially the same as the risk on human rights above, only in this case considered specifically for indigenous peoples, whose communities are often associated with rivers, and who traditionally rely on riverine resources to a fair degree (together with adjacent forest resources and other sources of livelihood including agriculture and outside labour). The mitigation measures are essentially the same as for Risk 1 above, but including specific consideration of the needs of indigenous peoples in stakeholder assessments and the design of project activities at demonstration sites, and social impact assessments for national plans. During project design, specific attention has been given to involving indigenous communities in activities at the demonstration sites, including ensuring that they benefit directly from activities such as appointment of river rangers, ecotourism development, support for traditional fishery management, biodiversity monitoring, and habitat rehabilitation.</p>	<p>Risk identification, rating and mitigation is reasonable. It is worth noting that any SESP carried out today would need to obtain Free and Prior Informed Consent (FPIC). Furthermore, the appointment of river rangers might trigger issues within the community and authority if there is a reporting and enforcement element to their duties.</p>

Annex 16 Covid-19 security plan

The MTR will progress on the basis of avoiding any raised risk of infection. Follow guidelines of the GoM <https://covid-19.moh.gov.my/> and the WHO <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> as well as guidance from the UNDP.

- Testing the NC before and after traveling to the project sites.
- Providing sufficient hand sanitizer and an anti-virus cleaner to wipe down surfaces before and after any meetings.
- Providing hand-thermometer to test body temperatures of any participants in meetings.
- Masks will be worn at all times by all participants.
- Social distancing of 2m apart. Meetings requiring seating will be arranged beforehand with seating socially distanced.
- All meetings held indoors will be in a venue sufficient to comply with social distancing and will be well-ventilated.
- Meetings and interviews will be held outdoors whenever practicable.
- Wherever possible interviews will be carried out using telecommunications and internet technology.
- The NC will try to travel to community meetings (possibly entailing additional travelling) rather than require large numbers of people to travel to the meeting.

Annex 17 Management response to IRR

IRR Recommendation	Management Response	TE Observation
<p>Recommendation 1 - Strengthen National Implementation Modality to enhance delivery, management support and accountability:</p> <p>Option 1 – DID program management, with minimal UNDP Country Office project governance oversight</p> <p>Option 2 – Enhanced UNDP Country Office management support embedded within the Project Management Unit in the DID organization projects in Malaysia.</p>	<p>Option 2 was selected and implemented.</p> <p>PMU & NSC met regularly from February 2020</p>	<p>This was carried out efficiently and the right option under the circumstances was selected. Sufficient oversight controls are in place.</p>
<p>Recommendation 2 - Adopt an aggressive “go to green” Short-Term Adaptive Management Plan and achieve key milestones by the end of the year. The UNDP-GEF River Project must demonstrate that it is primed and ready to execute by undertaking (stated) activities and meeting the following critical (stated) milestones in the timeframe provided.</p>	<p>All were carried out.</p> <p>UNDP commissioned an independent company to conduct HACT capacity assessment on GEC.</p> <p>A draft GEC capacity assessment report has been produced and reported during the PMU meeting on 15 January, 2020. The final report was produced later and reported during the NSC meeting on 6 February 2020.</p> <p>Inception workshop was conducted on 25 November 2019.</p> <p>A letter was issued by DID on 16 December 2020 to UNDP to request for office equipment for the PMU office space</p> <p>An advertisement for a short-term Technical Specialist was issued and filled on 23 November 2020. An advertisement and TOR for the Project Manager was prepared and issued in February.</p> <p>The short-term Technical Specialist was appointed and had organised the workshop on 25 November, 2020.</p>	<p>Some of the capacity assessments were not completed until late 2021</p>

	<p>The Inception Workshop has come up with the SRF follow-up action items.</p> <p>The Inception Workshop conducted and the output was presented during PMU Meeting on 15 January 2020.</p> <p>It was again be presented during the NSC meeting scheduled on 6 February 2020.</p>	
<p>Recommendation 3 - Clarify ownership, governance, meeting cadence and communication / meeting protocol. The IRR review team certainly did not expect water issues to be such a multifaceted and fractious issue in Malaysia during the mission and was wholly unprepared for the confusion over which government entity would be responsible for river biodiversity resources. Notwithstanding, the IRR attributes a lack of clarity of ownership and accountability, as one of the main reasons for the resulting delays. Ownership issues, including which department will Chair the NSC, need to be resolved quickly.</p>	<p>The organizational structures and responsibilities of the members of the PMU and NSC have been clarified and finalized. The frequencies of PMU and NSC meetings are at least once a month and once a year, respectively. TL1</p>	<p>Appears to have been carried out in relation to the project ownership and responsibilities. Outcome 1 should identify roles and responsibilities but is not expected before 2022 and will not have time to institutionally embed.</p>
<p>Recommendation 4 - Bring on a short-term consultant to fast-track activities where possible. Funding earmarked for an Mid-Term Evaluation, which is not required for a Medium- Sized Project, should be re-allocated and made available to bring on a short-term consultant to help ramp up the project if the recruitment and onboarding of a Program Manager for the PMU takes longer than anticipated. This will enable the project to keep to the milestones established in the adaptive management plan</p>	<p>GEC and FS were Contracted for Outcome 2 activities.</p>	<p>An interim short-term Consultant was appointed and subsequently replaced by a one-year contracted PM. Contract expired 6 months before end of project. Role to be filled by DID, Project Management Assistant and UNDP Programme Manager.</p>
<p>Recommendation 5 - Commence implementation phase only if the activities identified as part of Recommendation 2 are completed by the end of 2019. The Project must demonstrate it is viable and capable to set up the necessary operational modalities to deliver its objectives. These tasks are consistent with GEF-specific project management requirements and should be undertaken within 3 months of project signature to create the necessary momentum and avoid any confusion during project implementation.</p>		<p>This is a condition/trigger for progressing further with the project. Operational modalities were put in place in time.</p>
<p>Recommendation 6 - Deliver early value in the first Quarter of 2020. It is only then that a recommendation to request for a project extension of 18 months would be a viable and prudent option. Otherwise, the project will not be set for success due to the timeline constraints and a subsequent project termination is advised by the IRR team</p>	<p>Request approved 6th February NSC meeting</p>	<p>This is a condition/trigger for progressing further with the project. Operational modalities were put in place in time.</p>
<p>Recommendation 7 - Define priority areas and a substantive risk management plan as contingency. Assuming the project receives the go-ahead to commence execution, the Project will have many on-going activities in parallel and there is a risk that some will not be finished within the remaining time even with an 18-month extension.</p>	<p>The SRF was reviewed and indicators and targets revised</p>	<p>The review of the SRF was weak, while it reduced expectations of the project it did not significantly improve the SRF as a M&E tool (see sections 3.2.1 & 3.3.1)</p>

Consequently, the Project needs to plan ahead, take pre-emptive actions to de-risk activities on an ongoing basis and define a priority hierarchy in the event it needs to refocus efforts on priority areas. Notwithstanding, the PMU should frequently review progress against targets and the remaining time to ensure that it can deliver the entire package of activities which have many dependencies between them.		
Recommendation 8 - Clarify boundaries and spending procedures. A project EA receives project specific GEF funding from a GEF Implementing Agency to execute a GEF project, or parts thereof, under the supervision of the same GEF Agency. Thus, EAs undertake the execution of projects which implies the ability to fully manage and administer the day-to-day activities of a project. Execution generally includes the management and administration of project activities, in addition to managing the delivery of project outputs (funded by the GEF project financing and respective co-financing). It is recommended that UNDP-CO, DID and GEC clarify the boundaries for the spending of GEF funds on all activities in advance. The IRR team noted this has been the source of some contention during the IRR and observed that differences of opinion have resulted in delays for other GEF projects within the UNDP-CO portfolio.	As far DID is concerned, this component has been clarified. However, the total clarification of boundaries and procedures can only be achieved following the appointment of GEC as the consultant.	There was still considerable confusion following the IRR as to the role of the GEC in the project management. This was a confusion created in the Project Document and carried through to the pre-IRR implementation. Such arrangements can and do exist in GEF projects but the Project Document did not set these out with enough clarity.
Recommendation 9 - Assign M&E of project indicators to someone. M&E is an ongoing task and although not a full-time position, it does take time and resources to collect information on all indicators and to make it available to project partners. Somebody should be made responsible for this (i.e. this task should be included in somebody's TOR).	UNDP will determine the responsible party. PMU established with direct assistance to NIM. PM and Project Assistant appointed on UNDP Contracts	The TE is of the opinion that the M&E activities were largely carried out through the UNDP Project Manager and since the Contract has expired these will be carried out by the Programme Officer until the end of the project.
Recommendation 10 - Improve engagement and uptake of results with the private sector. There has been relatively little engagement with the private palm oil and tourism sector to date to facilitate greater private sector linkage with the Project. In the original project design, the private sector was to be largely engaged throughout the creation of specific ecotourism schemes and have a prominent role in the demonstration site project in Sabah. During the workshop, additional stakeholder groups like the angler's association were mentioned. The IRR team sees huge potential with respect to follow-up mainstreaming activities and spin-off projects. This was bolstered by interviews with the original UNDP-CO Program Officer present during the design phase who stressed the private sector and associations offer additional conduits for mainstreaming biodiversity into riverine habitats and towards financial sustainability if targeted correctly and early in the project. It is suggested to identify 'champions' among private sector groups involved with the Project and explore ways to support them in promoting the project results.	This scope of work falls under the Consultant.	Yes, and no. The Consultant (assuming that this is GEC and FS) cannot be made responsible for establishing public-private partnerships. This is a role for government.

<p>Recommendation 11 - Develop a framework for capturing results, experiences and lessons learned by this foundational project. Since this is the first mainstreaming project in Malaysia and therefore is a foundational initiative, it ought to consider designing or leveraging a formal system for capturing experiences and lessons learned, to ensure that these can be shared and replicated in other river basins nationally and in the region.</p>	<p>This scope of work falls under the Consultant.</p>	<p>Yes, and no. There is no specific learning process to capture experience from the project. The individual (Outcome 1 & 2) Contractors will be able to produce lessons learned (from the limited time available) but this will not necessarily capture the statutory agency experience and perspective and it will be very focused on each Contractors role in producing an output(s).</p>
<p>Recommendation 12 - Develop a change management plan to support mainstreaming efforts. A change management plan can be the difference between project success and failure. The project should consider several change management concepts shared during the mission when discussing project & program best management practices.</p>	<p>This scope of work falls under the Consultant.</p>	<p>No – this can be facilitated by a Consultant but it needs to be internally driven in a mainstreaming project. There is a sense of outsourcing difficult and challenging activities which needed to be internally addressed within the institutional actors.</p>

Annex 18a Upper Kinta River Basin

This sub-component involves a range of local stakeholders with emphasis mainly on Orang Asli (OA) communities. Kampung Pawong, an Orang Asli village located above dam and adjacent to Simpang Pulai Highway was engaged and empowered through first phase to support slope erosion monitoring and control in the upper catchment using bio engineering concept at FT KM 45, Jalan Simpang Pulai Highway, Lojing (FT 1845). **Figure 2.1** to **Figure 2.5** highlights the issues and the condition of the project sites. In addition, Kg Chadak, Kg Tonggang, Kg Suluh, Kg Makmur, Kg Tonggang and Kg Choh, located below the Sultan Azlan Shah Dam are the communities engaged and being empowered on environmental awareness as well as river and pollution monitoring.

[illegible]

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After demo



Open Classroom at Sungai Kinta Source



KAMPUNG PAWONG

Kampung Pawong is located at Lebuhraya Simpang Pulai – Cameron Highlands, Perak (coordinate: 4.5549895, 101.3017673). Kampung Pawong is one of the village for Orang Asli from Semai tribe in Perak. Kampung Pawong has 4 subs village that are of Kampung Jantung Baru, Kampung Chiduk, Kampung Pawong Lama and Kampung Pawong Baru. The number of population is approximately 400 people with the percentage of 50% men and 50% women. As of jobs, many different kind of jobs were done by the villagers there. Most of eldest are involved in taking care of their own orchard, youth in quarry sector in Simpang Pulai while most women in agriculture and farming sector at Cameron Highlands. Other than that, forest products are still sold by most of the villagers along the highway such as honey, bamboo shoots (*rebung*) and hand-made nature crafts. Furthermore, average monthly income of Orang Asli in Kampung Pawong is from RM 100 – RM 1.200. Lastly, the village of Kampung Pawong are managed by Jabatan Kemajuan Orang Asli (JAKOA) Kinta-Kampar District.

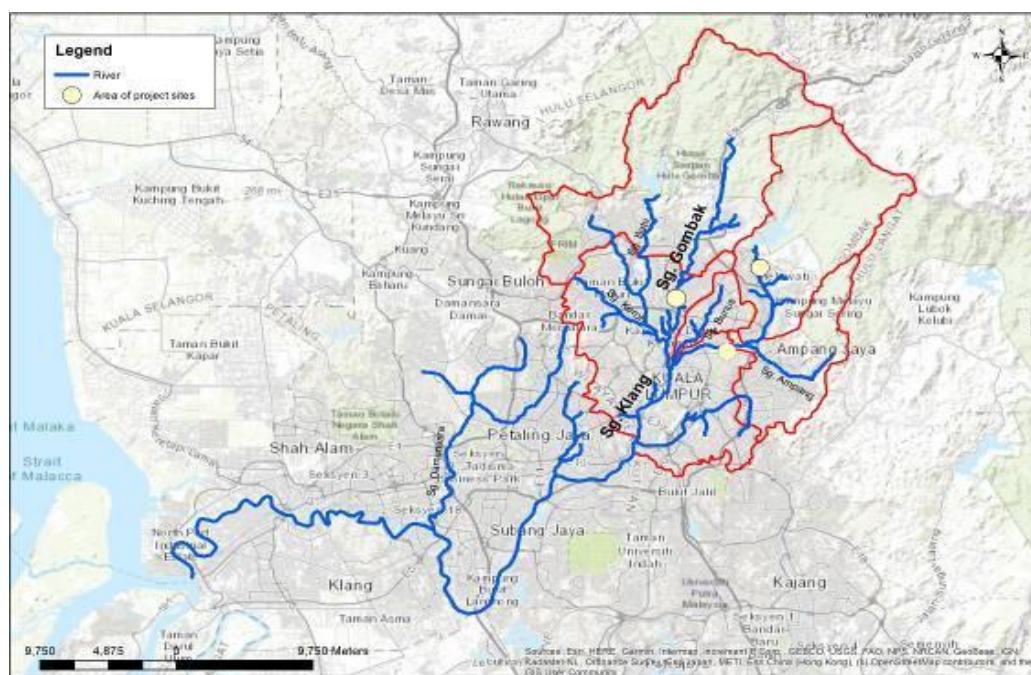
Nursery at Kg Pawong



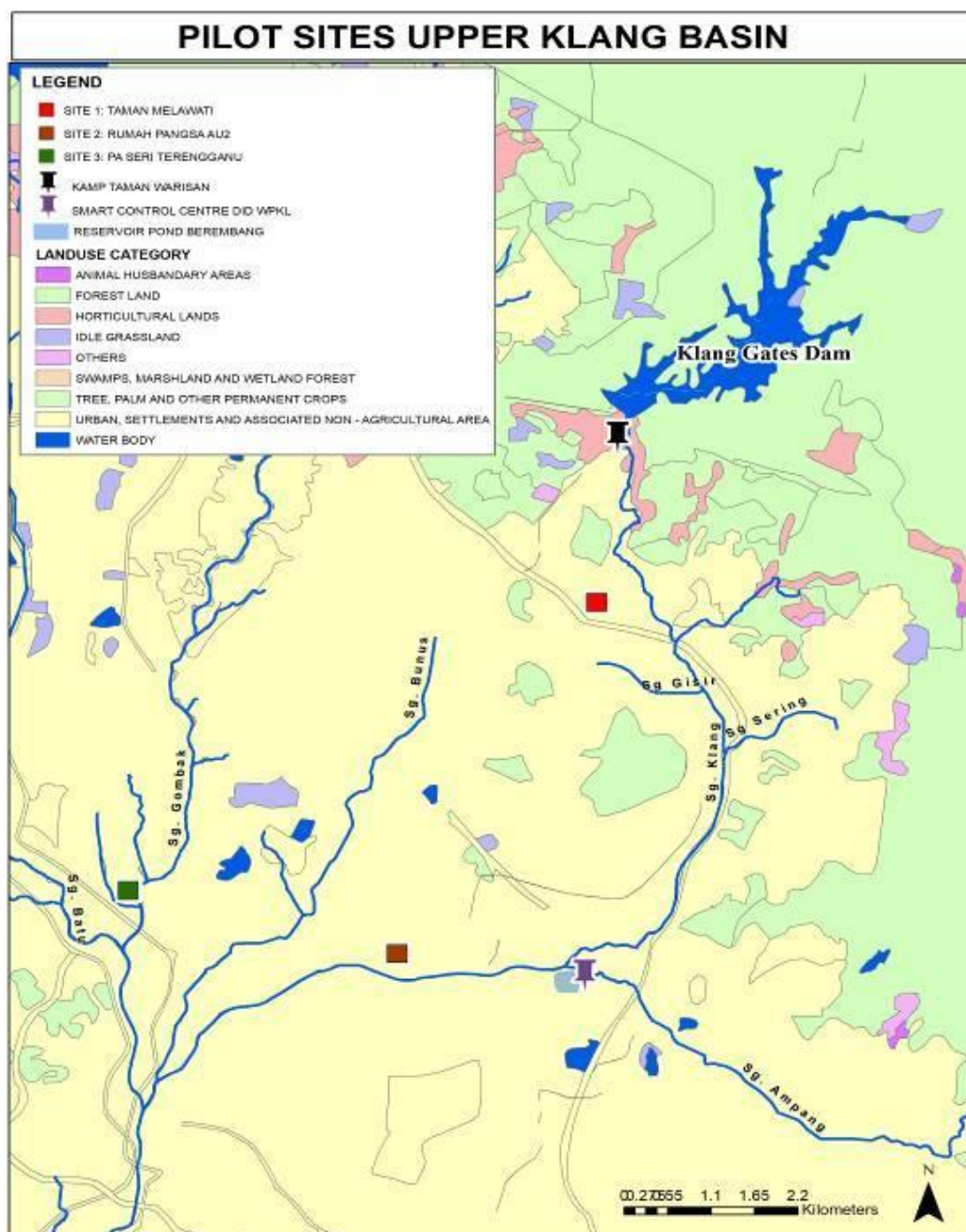
Annex 18b Klang River Basin

The Klang River flows through Kuala Lumpur and Selangor and eventually flows into the Straits of Malacca. The Klang River originates in the highlands, 25km northeast of Kuala Lumpur with the headwater catchments still pristine; located between Genting Highlands and the Ampang Hills of the Main Range Ridge; part of the Selangor Heritage Park. There are 11 major tributaries i.e. the Gombak River, Batu River, Kerayong River, Damansara River, Keroh River, Kuyoh River, Penchala River and Ampang River. It is approximately 120km in length and drains a basin of about 1,288km². The upper portion of Klang River Basin provides water supply (with two major dams Batu Dam and Klang Gates Dam) to the people of Klang Valley. The dams also mitigate floods at the in the urban areas. It is the most urbanized and fastest growing region in the country with the highest rate of urban growth region in Malaysia, encompassing the Federal Territory of Kuala Lumpur and includes part of the state of Selangor.

The Klang River Basin



The work is focused on the urbanised portion of the Upper Klang Basin and currently integrating riverine biodiversity management into the implementation as well as follow up of river management projects including the River of Life (ROL) Programme, ROL Public Outreach Programme (POP). This includes adoption of key river stretches by local communities, the physical enhancement of riverine habitats and the introduction of measures to help control alien invasive aquatic fish species. The project through first phase incorporated biodiversity into the existing community based river management and adoption initiatives undertaken in selected areas. By connecting the communities and the initiatives undertaken, both the riverine ecology and people will be the beneficiaries by promoting the connectivity between people and the ecosystem.



Taman Warisan, Melawati Site



AU2, Taman Keramat



PA Seri Terengganu



Provision of Education Centre for River Rangers in Klang Town



Downstream of Klang River

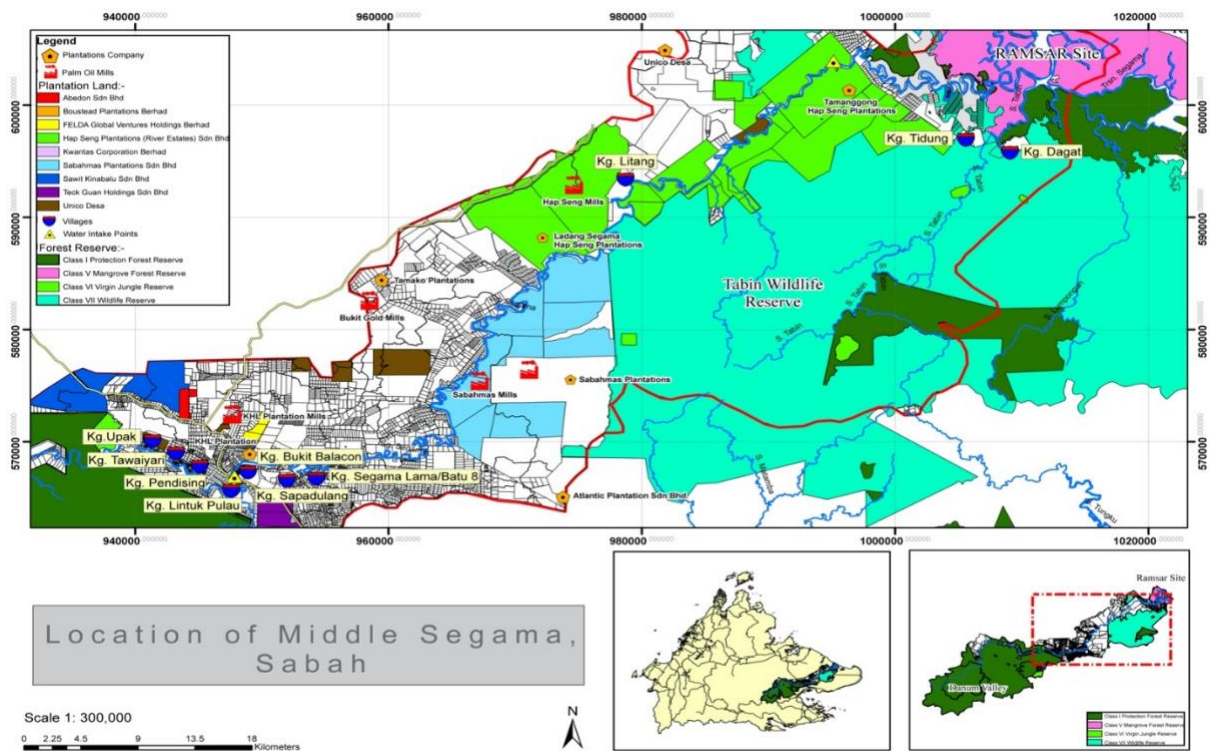


Annex 18c Segama River Lahad Datu, Sabah

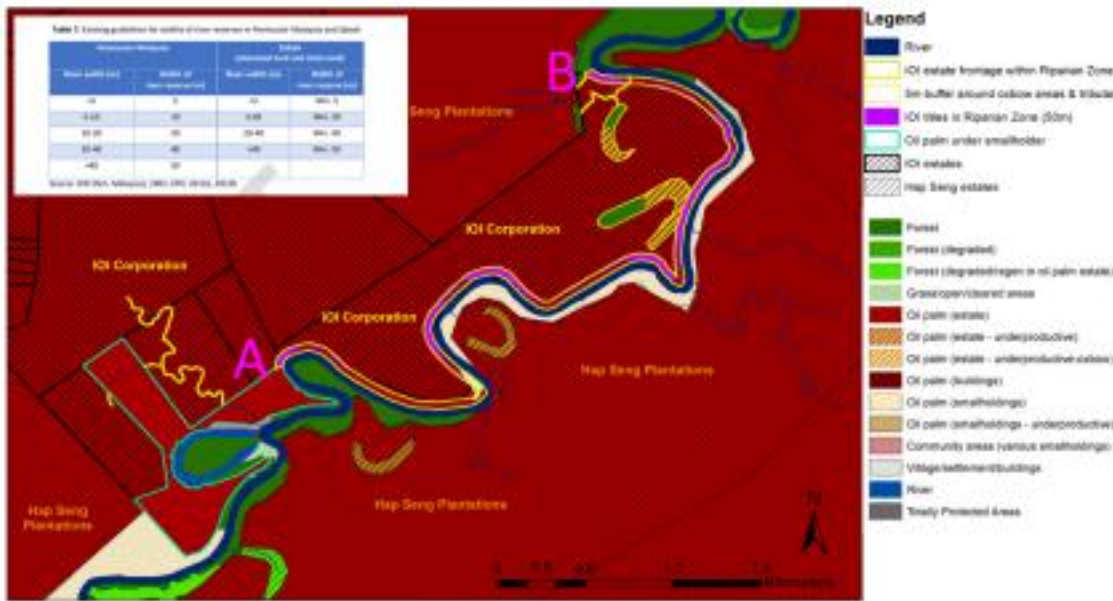
Segama river the second longest in Sabah covers an area of 2,540 sq. km. The source of the river originates at up-stream of Segama mountains at west and flows about 350 km before channelling into Sulu Sea. There are about 50 tributaries flow into Segama River which passes through few protected areas and wildlife reserves. GEF project activities focuses on middle Segama region, involves 7 villages. Along the way, the riverbank is dotted with oil palm plantations and in some stretches sand mining is in operation.

Middle Segama Region

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Potential reforestation areas for Riparian Zones replacement & oxbow lake restoration



Meeting with Women's Association



Sand mining activity



Oil Palm plantation & Soil Erosion



Sungai Segama Visit

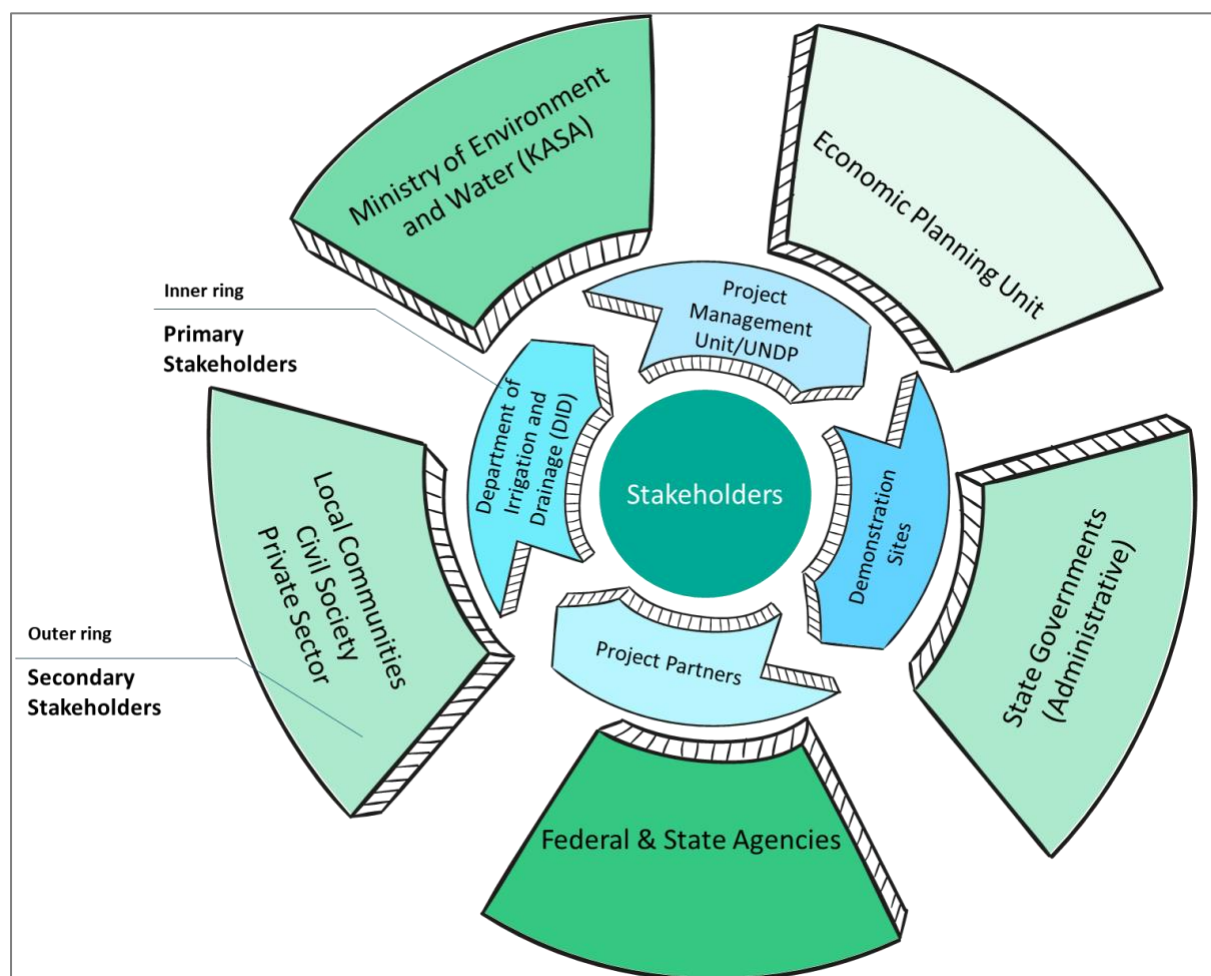
Annex 19 Stakeholder report

Stakeholders' Engagement

1. Participation of project beneficiaries and key stakeholders in all stages of the project cycle is a prerequisite in the project design and implementation. As shown in Figure ?, essentially, there are two groups of stakeholders—primary and secondary. Primary stakeholders are project beneficiaries who are likely to be directly affected by the Mainstreaming Biodiversity Conservation into River Basin Management (MBCRBM) project, and those who are directly involved in its implementation. Included in this group are stakeholders with direct managerial authority, which will be integral to determining the success of the project.

2. The secondary stakeholders are actors and institutions that may have the authority influencing the implementation of the project. They may for example function in roles in River basin management as regulators, policymakers, activists and opinion-formers. Some of these are members of the NSC while other may influence the project indirectly through their executive, bargaining and positional powers.

Figure ? : Stakeholders Engagement



3. The Project Document exhaustively identified the project’s stakeholders and describe their mandates and their roles within the project. However, as the result of the general election’s outcome in mid-2018, the portfolio of two key agencies with executing power has been changed. The signatory to the Project, the Economic Planning Unit (EPU), and the executing agency, Ministry of Environment and Natural Resources (MENR), both were renamed as Ministry of Economic Affairs (MEA) and Ministry of Water, Land and Natural Resources, respectively. In early 2020, the federal administration was subjected to another restructuring, whereby MEA was reinstated as EPU, whilst the functions of water and river management was placed under a newly created ministry known as Ministry of Environment and Water (KASA).

4. The newly restructured administrative structure indeed does not bode well for achieving the objective of the Project of mainstreaming biodiversity in river management, as the functions of managing biodiversity related matters and management of water resources were split into two separate ministries. These institutional complexities at federal level compounded further the issue of ownership in which the project was lacking severely from the beginning and challenging any potentiality seeking policy cohesion between federal agencies and related state departments.

5. During the TE mission, the team attempted to meet all key stakeholders with the aim of getting their feedback and comments regarding project achievements and project usefulness. However, travel restrictions imposed due to Covid Pandemic impeded the direct participation of International Consultant in the stakeholders’ consultation processes and the Team had to rely on

alternative means. Amidst of Covid imposed restrictions, the Team tried to make the best use of virtual connections to reach out to the key stakeholders with the attendance of National Consultant mostly, whilst the International Consultant was connected from remotely. From beginning of Nov 2021, Malaysian government lifted local travel restrictions, therefore, this allowed the National Consultant to make visits to the demonstration sites and meet-up with project partners and local communities involved in the project implementation.

6. Based on the TE team’s assessment, the Primary Stakeholders, who have been directly involved in the project implementation from an IA and EA perspective and stakeholders with direct managerial authority (the Department of Irrigation and Drainage; Project Management Unit; UNDP Country Office; demonstration sites; Project Partners and NSC members), which have been integral to determining the success of the project. Secondary Stakeholders include actors who have been /will be instrumental to the long-term sustainability and replication of project results. This group wields considerable authority through policy levers, development frameworks, legislation and decision-making and can be considered enablers of the project (KASA, EPU, UPEN, State government entities, CSOs, participants at demonstration sites) and who have taken part in demonstration activities, awareness raising and capacity building through MBCRBM interventions. (The list of stakeholders interviewed in in Annex..)

Observations

Component 1.

Component 1 relates to: An operational institutional framework and capacity are established for strengthened management of riverine biodiversity in production landscapes. The related outputs reduced from five to two after IRR and focusing on i) developing guidelines and best management practices (BMPs) for riverine biodiversity management; and ii) improved capacity of key agencies. The process of addressing both outputs entailed comprehensive institutional and legal review; capacity needs gap, review of financing options and national action plan.

The comprehensive analysis of policy matters relating to mainstreaming biodiversity into river management is crucial to formulate the strategic direction for institutionalizing the agenda amongst the relevant federal and state agencies. Though the Project gained accelerated momentum after IRR (since late 2019) however, given the short timeframe (about a year) to produce the analysis and constrained by Covid restrictions, the quality of the expected outputs to contribute to the achievements of Project’s objectives remain questionable. At the time of evaluation, the consultancy was still on-going, the resource persons expressed confidence of delivering outputs relating to institutional and legal review, capacity needs analysis and review of financing options.

For the BMP and guidelines, however, the Project may only be able to come-up with outline framework establishing the processes for developing detailed one at a later stage after the Project. Firstly, it was affected by the sequence of implementation of the two components. The original plan was Component 1 to come-up BMP options for testing the feasibility on the demonstration sites to provide feedback and lessons to strengthen the final output. However, Component 2 started much earlier; partly due to the delay in procuring the consultancy services for Component 1. Though this bottom-up process was seen plausible, but the approaches and methods demonstrated at the site levels does not able to produce constructive lessons and feedbacks that can be translated into BMPs and guidelines for output under Component 1.

Sustaining the outputs and impacts from Component 1 after the Project is questionable. DID may accept the BMP framework, but it does not have any legal mandates to ensure implementation, and

DID also lacks resources, particularly competent manpower to nurture change of mind-set moving towards adopting soft nature-based solutions.

Though, there have been some positive outcomes from NSC on the possibilities of merging the BMP and guidelines with the existing schemes such as MASMA (*Manual Saliran Mesra Alam*) in the absence of legal mandates for DID, but it might be a challenge to achieve policy cohesion at the higher level considering the fragmented administrative structure with regard to biodiversity mainstreaming and river basin management amongst the policy-making federal ministries.

Institutional bureaucracy at the IA in-terms of decision making has been major challenge to drive through the project, further to non-performance of the Project at first 3 years and Covid impediments that affected the performance severely. Lack of knowledge, competency, and experience in DID as IA for GEF funded project and river biodiversity and its related management and conservation plans are out of scope of its core business. DID’s focus is mainly on hard-engineering solutions to address flood mitigation and river management – factors affecting commitment and buying-in the objective of the Project.

The nature of engagement of Fanli in the project is also raising some concerns which seems not consistent with the norms of the usual procurement procedures practised. Fanli together with RBM the company finally was awarded the contract was in contention for the job. Though Fanli’s proposal was assessed as value for money and meeting the competency requirements but for some reasons its bid was not accepted. However, once RBM was awarded the contract, the team proposed by RBM removed and Fanli was reinstated into RBM’s contract. Does not reflect as a transparent procurement process. The “sub-contractor” opines that UNDP should have exercised its procurement procedures that would have assured efficiency and efficacy in-terms of resource use.

Component 2

Component 2 relates to: Best management practices for critical riverine habitats are demonstrated, enhancing biodiversity conservation status and reducing threats. This component was implemented in three different sites with the appointment of Global Environment Centre (GEC) and Forever Sabah (FS), as project partners in February 2020. This indicates the project was operating at height of Covid pandemic imposed restrictions. GEC was responsible for implementing project related activities in Kinta River Basin in Perak; and Sungai Klang Basin which cuts across Federal Territory of Kuala Lumpur and the State of Selangor; whilst FS given the responsibility for Segama River Basin in Lahad Datu Sabah.

Upper Kinta River Basin, Perak

The Upper Kinta River Basin (Perak) covers area of about 18,000 ha above Ipoh city in Perak. The focus is on the management of the upper catchment of Sg Kinta that is important for biodiversity conservation and water supply purposes. The project aims to improve understanding and the status of riverine biodiversity and improve the conservation of riverine biodiversity through strengthened watershed management, especially through reduction of sediment loading from highway and agro-tourism developments, as well as strengthening communication between the dam operator, government agencies, private players and local communities to ensure sustainable land uses.

GEC has already been working at this site in collaboration with other parties before the interventions through MBCRM project in 2020 utilizing GEF funds. The three activities specifically shown under GEF project include i) open classroom established at the source of Sungai Kinta; ii) demonstrating slope protection techniques using bio-engineering methods at a site along KM 46 of Simpang Pulai Cameron Highlands highway; and iii) establishment of nursery at Kampong Pawong, an orang asli settlement.

The rest of the reported activities and reports produced appears to be extension and outputs of already on-going activities.

At the outset, the activities were heavily focused on education and awareness raising regarding river biodiversity, which also has been reinforced firmly in GEC’s deliverables proposal. Though enhancement of relevant knowledge is important however the impacts arising from such interventions are hard to ascertain unless it is anchored continuously amongst the key decision-making authorities. In this regard, it is hard to draw any relevant linkages from the open classroom at Sungai Kinta source to the overall objective of mainstreaming biodiversity into Kinta river management.

The pilot site created at km 46 of the highway was for demonstrating bio-engineering methods for slope protection and stabilization mitigating the effects of sedimentation in Sungai Kinta from soil erosions and run-offs. The methods to prevent erosions from degraded and bare slopes include planting of various types of trees and plants and slopes covered with coconut-coil mat were in practice for a long-time, but for the past few decades the agency responsible for roadside landscape management the Public Works Department (JKR) heavily depended on hard-engineering solutions. The methods demonstrated through GEF Project’s interventions were helped to revive the old methods under the repackaging as bio-engineering solutions.

Nevertheless, the effectiveness of the methods in-terms of cost and reducing the sediment loads into river is yet to be ascertained to provide concrete rationales for the agencies like PWD to consider the bio-engineering methods as viable alternatives to the conventional hard-engineering ones. The commitments shown by PWD Director, and the expansion of membership of the coordinating committee headed by DID Perak consisting of a number of state agencies at Perak State level are positive steps moving forward for institutional strengthening. However, to what extent the lessons and knowledge gained from GEF’s Project intervention will be absorbed, sustained, and developed into a strategic plan for the integrated management of river basin is not made clear yet.

The local community “orang asli” from Kg Pawong is engaged by GEC to implement GEF project activities at the site. The community is not directly linked to Sungai Kinta for income generation, food sources or to meet any other needs. The involvement of local community “orang asli” from Kg Pawong in the project is limited to hiring them for paid services to carry-out project related activities. A nursery has been established in the village aiming at creating additional income generating opportunity by supplying saplings and seedlings for tree planting at slope stabilization sites. Therefore, the real incentive for them to be involved in the project is for income, and their sustained involvement after the project closure is not assured.

The value of the biodiversity assessment conducted within a short period of time at the upper basin of Kinta River is not clear – how it will fit into the larger scheme of mainstreaming biodiversity in the management of Kinta River.

Klang River Basin (Federal Territory/Selangor)

The Klang River flows through Kuala Lumpur and Selangor and eventually flows into the Straits of Malacca. It is approximately 120km in length and drains a basin of about 1288km², runs through 9 local authorities between the two States. The upper portion of Klang River Basin provides water supply (with two major dams Batu Dam and Klang Gates Dam) to the people of Klang Valley. The work is focused on the urbanised portion of the Upper Klang Basin and currently integrating riverine

biodiversity management into the implementation/follow up of river management projects including the River of Life (ROL) Programme, ROL Public Outreach Programme (POP).

Specifically the Project was focusing on 3 sites: Taman Warisan, Melawati; Rumah Pangsa AU Keramat & PA Seri Terengganu, Gombak all at up-stream of Klang River; and GEC collaborating with a NGO River Rangers of Sg Klang, in the town of Klang at the downstream before the Klang River joining the Straits of Malacca. As part of evaluation National Consultant visited Taman Warisan Melawati; Rumah Pangsa AU Keramat and Klang.

From the interaction with the stakeholders associated with Klang River activities, it is observed that GEC has established commendable good rapport with the local communities and is able to mobilize them at the specific locations. The communities remain committed, championed by individuals and/or a group of people are enthused to continue with their involvement. But the future is not assured without wider mobilization of community and key stakeholders, particularly government agencies & authorities. Though consultations have been held between DID, and local authorities, coordinating committee has been established chaired by DID Wilayah, however, no firm plans are emerging for continuous engagement of the communities, institutionalizing mainstreaming of biodiversity in river Klang management.

GEF project funded activities in these demonstration sites mainly focused on education and awareness raising and the emphasis on the community engagement. GEF Project intended to complement other on-going project such as River of Life (ROL) and activities at the sites were add-on and extension of the on-going community-initiated programmes with the support of GEC which started about 7 -10 years ago. Under these circumstances it is a challenge for the evaluators to distinguish GEF project’s contributions and additionality; and draw the relevance to the achievement of bigger objective of mainstreaming biodiversity. The activities observed at demonstrations sites such as building eco-trail along the bank of river in Taman Warisan; displaying signages for flora and fauna; planting trees for a stretch of 800m in Taman AU2 Keramat; and providing a cabin as an education centre for River Rangers of Klang River – all are important for education and awareness raising; and for public engagement but in the context of GEF project’s objective it adds little value.

Considering the Klang River flows through two states’ territories and nine local authorities stretching more than 120 km there was a great opportunity for GEF project to create additionalities by bringing these authorities as well other federal and state agencies together to take the Klang River Basin management as a whole. This would have provided a constructive platform for institutionalizing the lessons and experienced gained and roles of civil societies from the on-going activities amongst the respective authorities. Instead, the Project continued to focus on community engagement at demonstration sites and analysis at the some stretches of the river; and without the support of the agencies responsible for water resource management and enforcing laws, it is difficult for community initiatives to make any meaningful impacts in the larger objective of mainstreaming biodiversity in Klang River Basin.

Segama River, Lahad Datu Sabah

The third demonstration site is Segama River, Lahad Datu Sabah and Forever Sabah (FS) was appointed in April 2020 to implement GEF supported project activities. Contrary to the GEC’s activities in Klang River and Kinta River; activities at Segama River were the products of GEF project. FS has taken the initiative to review the original scope of work in SRF, targets and indicators to develop an action plan that is feasible to be implemented and achieved within the short timeframe in the environment of

Segama River landscape. During the evaluation mission the project activities are still on-going. Due to the Covid travel and movement restrictions, though some preliminary and preparatory works have been completed, however, progress at the demonstration sites have been severely constrained.

The Segama river forms an integral part of the daily lives of the villagers living along and surrounding of the riverbank. Some villagers depend on the river for fishing, sports fishing and other recreational activities; and others are oil palm or rubber smallholders whose plantations are right at the bank of river. Besides, few plantation companies and a sand mining company operating their businesses in the landscape of the river.

FS taking an integrated approach, looking at Segama River Basin as a whole, from the headwaters down to the coast. The strategy is to identify hotspots along the river for targeted interventions with the support of diverse stakeholders including communities, private sectors and government agencies, and private sectors particularly plantation companies. In this regard, FS has successfully engaged communities from seven villages along Segama River, DID Sabah and few plantation companies.

Preparatory works for engaging communities including socializing the project’s aim; framework for community participation under Indigenous Community Conserved Areas (ICCA) concept; training and awareness raising amongst the villagers. During the evaluation mission there weren’t any tangible activities have been demonstrated due to Covid restrictions. Some of the incomplete key works include riparian restoration works with communities; developing protocols for community participation in riparian conservation and restoration; cataloguing Best Management Practices; partnering with government agencies and sand mining company for compliance with BMPs; restoration of abandoned oil palm plantations. To what extent FS would be able to accomplish these tasks within the project period is not clear.

Commitments from the plantation sectors is encouraging. Without GEF project’s intervention, some companies already embarking on their own initiatives in some riparian restoration programmes (for example IOI targets about 30 hac for rehabilitation). Few areas have been identified for riparian restoration, but actual work have not been started yet. IOI opines that joining hands with FS, community and DID would provide further impetus for their programme.

Institutional structure at Sabah, whereby both river and water resources management is placed under DID Sabah is another strong element that would able to assure realizing the Project’s objective in the future at least in Sabah’s case.

Some of the activities such as formation of Women’s Association, a biogas plant at one of the villages may produce some results at the site and local levels and fulfilling SRF targets, but not having relevance to the overall objective of the Project.

Though the expected key activities still underway and the results are yet to be seen, however, the approach taken by FS, overall providing some hope for the sustainability of Project’s aim in the future.

4. FS taking a medium-term outlook beyond the Project.
5. Approaching the issue under the concept of ICCA may entail for greater understanding and commitments from the villagers. Developing appropriate frameworks and having MOUs possibly assure their continuous participation.

6. Commitments from DID and plantation companies very encouraging, enhancing the chances for multi-stakeholders engagement and institutionalizing the efforts into government programme.

Annex 20 Scenario planning

This TE has noted the absence of a cognitive tool or mechanism support the less-tangible outcomes of the project. The purpose of such a tool is to strengthen the process through which individual and institutions understand the system which they are managing. The TE recommends scenario planning. Scenario planning¹¹¹ is an approach which can be applied to complex situations and also as a means to affect the cognitive processes of participants, in other words, it can change the way people think about a problem.

Scenario planning is a planning methodology that has its origins in post-World War II military thinking where strategic military planners used scenarios to examine the threats posed to the Western Alliance by the Warsaw Pact countries. It was later applied to business planning by Pierre Wack at the multinational corporation, Shell Oil, to examine the threats and opportunities faced by Shell in the energy sector during the early 1970's. The use of scenarios greatly assisted Shell in its business operations during the 1973 “oil crisis” resulting in Shell considerably improving its own position in the oil industry during a period of great uncertainty.

Scenarios were also used as a tool for conflict resolution during South Africa's transition from Apartheid to a new democratic disposition in the early 1990's. In this instance, the use of scenarios firstly assisted in convincing senior policy makers in the (old) South African government of the inevitability of change and secondly assisted the range of political stakeholders in visioning the future of a democratic South Africa and the possible consequences of not accepting a peaceful and democratic transition to the “new” South Africa.

In the environmental sector the use of scenario planning is a relatively recent development. Scenario planning was used in the Millennium Assessment report to evaluate global environmental threats and highlight the need for alternative actions to prevent catastrophic environmental and ecological events.

The core of scenario planning is the identification of those elements that are shaping events or systems. These elements, known as “drivers”, interact with each other often at different physical and temporal scales. Most conventional planning systems are based on the assumption that drivers are constant (or predictable) and yet because of their interaction drivers are invariably in a state of change; and this is often unpredictable. Sometimes this change is quick and at other times the change may be slower. Scenario planning is based on understanding what constitutes the current system drivers and the cause and effect relationship between the drivers. This understanding also helps to understand the scale (both physical and temporal) and impact that various drivers have on a system. Once the drivers are identified and their relationship understood, scenario planning provides a methodology for examining how the drivers might possibly interact in the future. Since driver interactions in socio-political, economic and environmental systems are complex, the scenario planning process attempts to analyse possible and plausible future driver relationships rather than creating predicted futures.

Scenario planning does not replace conventional planning. Rather it helps the participants to place their plans in the complex and unpredictable context of the system and project those plans into the future. For a country with numerous environment projects operational at any one time, scenario planning, as a donor-government initiative, could serve to bring these initiatives together.

¹¹¹ Scenario planning has already been successfully used in the UNDP-GEF MPCP in South Sinai to assist in the development of a CBNRM system and has also been used for protected areas policy development and management planning in the UNDP-GEF BCPAM project in Syria.

Annex 21 Lessons from the IRR

Lesson 1: Where possible, mainstreaming projects should take the path of least resistance and utilize existing levers and national consultation processes;

Lesson 2: Design mainstreaming interventions with a longer-term time horizon and a resource envelope to match in order to ensure changes take hold and are sustainable post- project;

Lesson 3: the whole is greater than the sum of its parts and therefore; key emphasis and effort needs to be put into greater connectivity between individual components, not vice-versa;

Lesson 4: there needs to be continuity between key stages of GEF project incubation to maximise institutional memory, preserve rationale for the underlying intervention logic and implementation arrangements, and ensure action items are undertaken in a timely manner;

Lesson 5: inception workshops are essential within 3 months of GEF approval, as they consolidate the mutual understanding and next steps of the project and formalize operations. All projects require an inception period; complex projects with multiple stakeholders require one even more;

Lesson 6: GEF projects need strong management teams to sustain momentum;

Lesson 7: Projects need to spend money to deliver on their key commitments and objectives. Projects that are behind schedule need to spend funds even quicker to make up for lost time;

Lesson 8: There are basic management concepts that are taken for granted within the UN universe, yet need to be “de-mystified” with external partners to harmonise expectations and ensure common understanding;

Lesson 9: In retrospect, in-kind co-financing should not be earmarked to foundational components of any project, especially those poised for demonstration value; these should be adequately resourced through the core GEF grant;

Lesson 10: Improve engagement and uptake of results with the private sector and additional stakeholder groups.

Annexed in a separate file: TE Audit Trail

- *Annexed in a separate file:* relevant terminal GEF/LDCF/SCCF Core Indicators or Tracking Tools, as applicable