

BIODIVERSITY CONSERVATION IN MULTIPLE-USE FOREST LANDSCAPES IN SABAH, MALAYSIA FINAL REPORT

(December 2019)





BIODIVERSITY CONSERVATION IN MULTIPLE-USE FOREST LANDSCAPES IN SABAH, MALAYSIA

GEF Project ID (PIMS) #: 4182 UNDP Project ID (PIMS) #: 4186

FINAL REPORT (December, 2019)

Prepared by:

Jeflus S Sinajin (Project Manager)

Table of Contents

		Page			
List	of Tables	ii			
List of Figuresi					
List	of Annexes	ii			
Abbi	reviations	iii			
Exec	cutive Summary	iv			
1.0	PROJECT INFORMATION	1			
1.1	Project Data	1			
1.2	Project Timing and Milestones	1			
1.3	Project Landscape and Significance	2			
1.4	Project Commencement	4			
1.5	Project Inception Phase	4			
2.0.	PROJECT PERFORMANCE AND KEY RESULTS	6			
2.1	Objective and/or Outcome Level	6			
2.2	Output Level	9			
3.0	IMPLEMENTATION REVIEW	13			
3.1	Project Governance/Management Arrangement	13			
3.2	Partnership	13			
3.3	National Ownership and Sustainability of the Project Results 1				
	3.3.1 National Ownership	15			
2 4	3.3.2 Sustainability of the Project Results	15			
3.4	Monitoring, Evaluation and Reporting	17			
	3.4.1 Mid-Term Review	17			
	3.4.2 Terminal Evaluation	21			
4.0	PROJECT FINANCIAL ANALYSIS	26			
5.0	BEST PRACTICES AND SUCCESS STORIES	31			
5.1	Well Managed Forest	31			
5.2	Mainstreaming Biodiversity	31			
5.3	Research	31			
5.4	A Platform Created				
5.5	PES Concept and Conservation Finance				
5.6	Piloting PES at Community Level				
5.7	Key Environmental Policy Goals	33			
6.0	LESSONS LEARNED (ISSUES/CHALLENGES, ADAPTIVE	34			
	MANAGEMENT AND MANAGEMENT RESPONSES)				
6.1	Issues/Challenges	34			
6.2	Adaptive Management				
6.3	Management Responses				

List of Tables

Table 1.1	Project timing and milestones			
Table 3.1	Evaluation Ratings			
Table 4.1	Budget and actual expenditure	26		
Table 4.2	Budget by Prodoc and AWP and Actual Expenditures	27		
Table 4.3	Project Co-Financing			
Table 4.4	List of Audits and Relevant Financial Monitoring Reports	29		
Table 4.5	Research and Consultancies: Budget Allocation Versus Actual Expenditure by Component	30		

List of Figures

Figure 1.1	MFL Project location	3
Figure 2.1a	Protected areas in 2012	7
Figure 2.1b	Protected areas in 2013	7
Figure 2.1c	Protected areas in 2016	7
Figure 2.1d	Protected areas in 2019	7
Figure 3.1	Project adopted management arrangements	14

ANNEXES

ANNEX 1	PROJECT	ACHIEVEME	ENTS T	OWARDS	PROJECT	39
	OBJECTIVE,	OUTCOMES A	AND OUTP	UTS		
ANNEX 2	MTR RATIN	GS & ACHIEV	EMENT SU	MMARY		83
ANNEX 3	UNDP/GEF	MTR MANA	GEMENT	RESPONSE	& KEY	87
	ACTIONS TA	KEN				
ANNEX 4	UNDP/GEF	TERMINAL	EVALUAT	ΓΙΟΝ ΜΑΝ	AGEMENT	98
	RESPONSE A	AND TRACKIN	[G			
ANNEX 5	RISK ASSES	SMENT AS OF	SEPTEMB	ER 2019		105

ABBREVIATIONS

APR	Annual Progress Report	NNL/NG	Not Net Loss/ Net Gain
AWP	Annual Work Plan	NRO	Natural Resources Office
FMP	Forest Management Plan	PA	Protected Area
FSC	Forest Stewardship Council	RSPO	Roundtable for Sustainable
	-		Palm Oil
DaMaI	Danum Valley, Maliau Basin	PES	Payment of Ecosystem
	and Imbak Canyon		Services
EPD	Environmental Protection	PMU	Project Management Unit
	Department		
FR	Forest Reserve	ProDoc	Project Document
GoM	Government of Malaysia	RBJ	Rakyat Berjaya Sdn Bhd
HCV	High Conservation Value	SEPU	Sabah Economic Planning
			Unit
HoB	Heart of Borneo	SFMLA	Sustainable Forest
			Management Licence
			Agreement
IC	International Consultant	SRF	Strategic Results Framework
ILMP	Integrated Land-use	SWD	Sabah Wildlife Department
	Management Plan		
INIKEA	Innoprise-IKEA Tropical Forest	ToR	Terms of Reference
	Rehabilitation Project		
IR	Inception Report	TWG	Technical Working Group
LC	Local Consultant	YS	Yayasan Sabah/Sabah
			Foundation
MFL	Biodiversity Conservation in	TE	Terminal Evaluation
	Multiple-use Forest landscape		
MoFS	Ministry of Finance Sabah	UMS	Universiti Malaysia Sabah
MoU	Memorandum of Understanding	UNDP	United Nations Development
			Programme
MTR	Mid-Term Review	VJR	Virgin Jungle Reserve
NFM	Natural Forest Management		

NGO Non-Government Organisation

Executive Summary

The "Biodiversity Conservation in Multiple-use Forest Landscapes in Sabah, Malaysia" project (hereafter called **MFL Project and/or the project**) is a GEF funded project managed by the United Nations Development Programme (UNDP) Malaysia and implemented by the Sabah Forestry Department (SFD), between June 2012 and December 2019. The MFL Project focused its activities within the 261,264 ha landscape, which is under Yayasan Sabah (YS) Sustainable Forest Management Licence Agreement (SFMLA) Area. The MFL Project landscape is a contiguous block that forms an important connecting land mass between three sizeable and globally significant protected areas namely, Maliau Basin Forest Reserve, Danum Valley Forest and Imbak Canyon Forest Reserve.

In this Final Project Report, it focuses on project performance and key results, implementation review, project finance, best practices and success stories and lessons learned including issues/challenges, adaptive management measures and management response.

Project Title: Biodiversity Conservation in Multiple-use Forest Landscapes in Sabah, Malaysia **GEF Project ID**: 4182 UNDP Project ID: 4186 Country: Malaysia **GEF Focal Area/Strategic Programs: Biodiversity**; GEF-4 BD-SP1: Sustainable Financing of Protected Area Systems at the National Level **BD-SP3:** Strengthening Terrestrial Protected Area Networks BD-SP4: Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity Operational Program OP#3 (Forest Ecosystems) Executing Agencies: Ministry of Water, Land and Natural Resources (KATS) Malaysia; Sabah State Economic Planning Unit Implementing Agency: Sabah Forestry Department **Other Partners**: **Other Project Partners**: Sabah Foundation

Based on the Project Document signed on 22 June 2012, the total budget for the MFL Project was USD 23.9 million, which comprised of the following:

- (a) USD 4,400,000.00 from GEF;
- (b) USD 15,000,000.00 from the SFD (State Government);
- (c) USD 4,400,000.00 from Project Partner (Sabah Foundation); and
- (d) USD 100,000.00 from WWF (Malaysia)

Project Key Achievements

For **Outcome 1** of the project, there were several important accomplishments, which helped to establish an enabling environment for mainstreaming of biodiversity conservation in multipleuse forest landscapes. One of the major achievements was the adoption of the newly minted Sabah Forest Policy 2018, which was launched by the Sabah Chief Minister on 3rd December, 2018. The project has been influential in the formulation of the 2018 Forest Policy, and at the same time, has contributed to the achievement of a number of its stated objectives. The MFL Project also influenced State-wide policy decisions (Sabah Forest Policy) for conservation, e.g., proposed policy on Managed Retention as a "transitional" measure which could ultimately lead to adoption of a NNL/NG policy, which provides a well-considered road map on how Sabah can implement a NG Program.

Another achievement with regards to Outcome 1 is that the State Government has successfully gazetted approximately 156,586.37 ha within the MFL Project landscape as Class VI Virgin Jungle Reserve (VJR – 7,309 ha) and Class I Protection Forest Reserve (149,277.37 ha) – totally protected areas respectively. This means that from an original 18,517 ha of protected area at the start of the MFL Project, some 156,586.37 ha were established as Class 1 Forest Reserve and Virgin Jungle Reserve by the end of the project. Consequently, fragmentation of important wildlife habitat was reduced and habitat connectivity was restored, that is, the three renowned conservation areas namely Maliau Basin, Danum Valley and Imbak Canyon are now connected (north – south – west – east) with the gazettement of these 156,586.37 ha as totally protected areas.

Many initiatives for monitoring and enforcement at the district level were strengthened. Regular field monitoring and surveillance on all activities for wildlife (e.g. by Empayar Kejora) and against poaching were effectively carried out by the field staff of Yayasan Sabah (YS) and its Joint Venture partners, the Sabah Forestry Department (SFD) and the Wildlife Department under a task force called Protect Team. In addition, forest restoration, enrichment planting, silviculture treatments, monitoring and controlling by the SFD and YS and its JV partners particularly within the MFL Project area were carried out in accordance with the respective Annual Work Plan (AWP).

Actions have been taken on the capacity limitation of the SFD and YS staffs and other related stakeholders relating to the contemporary theory and practice for developing a multiple-use forest landscape planning approaches (Output 1.3) of which various trainings have been provided by the consortium of scientists, as well as, conducted by HUTAN, WWF Malaysia and the Sabah Forestry Department (SFD) during the MFL Project period.

For **Outcome 2**, a number of notable achievements were realized. Site-level efforts largely succeeded in modeling improved management for biodiversity conservation based on research evidence from the biodiversity related studies (i.e., landscape and ground level studies for

improving habitat connectivity). Also, there were a number of key scientific discoveries made. Among the most interesting of these, is the result of airborne Light Detection and Ranging (LiDAR) technology and geospatial mapping. The 10-Year ILMP (2020 - 2029) was prepared, which presents a clear roadmap for the way forward in the management of the MFL Project area.

In line with the MFL Project financial sustainability objective, three important reports were completed for **Outcome 3**. These are (i) Recommendations for State-level Policy on Payment for Ecosystem Services (PES) and Ecosystem Conservation Programme, (ii) Guidelines for Operationalising Proposed Ecosystem Conservation Programme, and (iii) Willingness of Visitors to Sabah to Contribute towards Ecosystem Conservation Fee. Following this, the concept of PES and Conservation Finance was approved by the Sabah State Cabinet; and progress is being made toward drafting of a legal enactment known as "Ecosystem Conservation Fee Enacment".

MTR Assessment and Rating

The MTR analysis of progress towards project objective and outcomes was based on the results of the review of project related documentation, consultant reports, focus group forums, consultations, and field visits to an indicative range of locations and activities that were being implemented. Despite 2½-year delay, slow start-up phase, and significant difficulties related to land-use allocations, mobilising qualified and competent project management staff, the MTR Team rated the project as moderately satisfactorily. Their overall conclusion was that the MFL Project would achieve a credible proportion, but certainly not all, of the projects ambitious, large-scale and cutting-edge biodiversity conservation focused objectives, outcomes and outputs. In their report, they have given several key recommendations.

Terminal Evaluation Assessment and Ratings

According to the Terminal Evaluation (TE) Team, the project has been effective in bringing about a number of significant changes that can help to ensure the mainstreaming of biodiversity conservation in Sabah. Some of the key project accomplishments have included: (i) improved habitat connectivity, linkage with protected areas, and reduction in fragmentation on lands within the project area, brought about through reclassification of large land areas to Class 1 Protection Forest Reserve Status; (ii) production of significant scientific findings through cutting-edge field research; (iii) completion of an integrated management plan (ILMP) for the multiple-use forest landscape; (iv) improved cooperation and collaboration among stakeholders; (v) greater awareness and knowledge of the importance of preserving biodiversity in multiple-use forest landscapes, especially within the private sector; (vi) pilot-testing and promotion of payment for ecosystem services (PES) as a viable sustainable financing mechanism, and approval of PES and the conservation finance approach by the Sabah State Cabinet; (vii) drafting of an enactment for an ecosystem conservation fee, for adoption by Sabah State government; and (viii) facilitating a conservation approach based initially on managed retention of Sabah's forests, and moving towards adoption of a "no net loss/net gain" policy for Sabah's forest lands.

Based on the extensive factual evidence gathered during the course of the terminal evaluation, and recognising the significant progress that has been made in mainstreaming biodiversity conservation in multiple-use forest landscapes in Sabah, as a result of project interventions, the project was given an overall rating of *Satisfactory* (S). The TE Team provided six (6) key recommendations, which have emerged as a result of their TE.

Project Finance

Actual spending was around USD 4,098,745 or 93.1% of the project budget as of 9th December 2019 as shown below. Overall, the funding commitment for co-financing was met. A total of USD 20,519,039 was contributed, slightly more than the planned co-finance of USD 19,500,000.

Financing					
	At Endorsement	At Completion	Balance/Committed		
	(US\$)	(US\$)**	(US\$)		
	GEF Final	ncing			
GEF Trust Fund	4,400,000	4,098,745	301,255		
PPG *	100,000	100,000			
Sub-Total GEF	4,500,000	4,198,745			
	Co-Financi	ng***			
PPG*	130,000	130,000			
GoM (in kind)	19,400,000	20,411,460			
WWF (Malaysia)	100,000	105,566			
Sabah Wildlife Department		2,013			
Sub-Total Co-Financing	19,630,000	20,649,039			
TOTAL PROJECT COST	24,130,000	24,847,784			

Note: * Request for Project Preparation Grant Document, 3rd June 2010 ** Project expenditure as of 9th December 2019 *** Co-finance based on average 2012 (project start date) exchange rates

Best Practices and Success Stories

The project has largely fulfilled its function of demonstrating best practices for strengthening mechanisms to protect ecological functioning and integrity in the multiple-use forest landscape in Sabah. It has many key project accomplishments and thus, been effective in bringing about a number of significant changes that can help to ensure the mainstreaming of biodiversity conservation in Sabah. In addition, there are many exciting opportunities to carry forward lessons from the MFL Project

Issues and Challenges

The MFL Project was conceived as a model to catalyze innovation in processes and increase management know-how in achieving an optimal balance across potentially competing issues, one which maximizes economic, social and environmental benefits to society. So, based on careful review of the MFL Project progress and stakeholder consultations conducted during the course of the terminal evaluation, several key issues and challenges lessons were captured by the TE Team that could be utilized to support and guide the implementation of future related projects and initiatives. These lessons learned include:

- Proper planning and preparation for the utilization of research data is essential.
- A clear vision and strategic direction are critical for effective project design and implementation.
- An initial period of socialization may help to reduce delays later on, and make project start-up processes smoother.
- A high level of commitment and engagement from concerned agencies (and other stakeholders) is essential for project success.
- The private sector can play an important role in biodiversity conservation, especially in a multiple-use landscape setting.
- To ensure success in carrying out complex multi-dimensional projects, experienced leadership is required.

Adaptive Management

The management re-evaluated and reaffirmed the project's relevance within the target landscape due to land-use changes as part of an adaptive management. This led to the setting up of the Technical Working Group (TWG) on Biodiversity, which conducted a rapid assessment of the project landscape. The Rapid Assessment reviewed the Original Plan (2011), the Current Plan (2013) and proposed a TWG Plan (2014).

Management Response

The MTR Team and the TE Team came up with a series of recommendations, which could be applied when decisions are being made about the formulation of new projects or initiatives for mainstreaming biodiversity conservation, especially when these are within the context of a multiple-use forest landscape environment that required management response. Actions had been taken to the recommendations from the MTR Team of which many had been completed while others are still on-going. In the case of the recommendations from the TE Team, all actions will be carried will be taken with a timeframe of 5 years commencing in 2020.

1.0 PROJECT INFORMATION

1.1 Project Data

Project Title: Biodiversity Conservation in Multiple-use Forest Landscapes in Sabah, Malaysia GEF Project ID: 4182 UNDP Project ID: 4186 Country: Malaysia Executing/Implementing Agencies and Other Project Partners: Executing Entities: Ministry of Water, Land and Natural Resources (KATS) Malaysia; Sabah State Economic Planning Unit Implementing Entity: Sabah Forestry Department Other Project Partners: Sabah Foundation

Based on the Project Document signed on 22 June 2012, the total budget for the MFL Project was USD 23.9 million, which comprised of the following:

- (e) USD 4,400,000.00 from GEF;
- (f) USD 15,000,000.00 from the SFD (State Government);
- (g) USD 4,400,000.00 from Project Partner (Sabah Foundation); and
- (h) USD 100,000.00 from WWF (Malaysia)

1.2 Project Timing and Milestones

The MFL Project officially started on 22 June 2012, that is, the date of signing the Project Document but was delayed almost 2¹/₂ years. The closing date was on June 2018 but was extended (with no coast) to 21 December 2019. This constitutes the end date of the MFL Project. The duration of the MFL Project is therefore approximately 7¹/₂ years. Table 1.1 below shows the timing and milestones of the MFL Project.

Year Sequence	Major Events	Comments		
Year 1	Project Document signed on	Effective project start-up date.		
June 2012 – May 2013	22 June 2012.			
Year 2	Inception Workshop on 24	12 months following Project		
June 2013 – May 2014	July 2013 and Strategic	Document signature.		
	Framework Workshop in			
	October 2013.			
Year 3	Inception Report completed	5 months after Inception Workshop.		
June 2014 – May 2015	on 31 December 2014.			
Year 4		1. Landscape-level planning and		

June 2015 – May 2016	2015 Work Plan formulation	monitoring.
		2. On-the ground conservation
		actions.
		3. Rules setting/enforcement related
		to production (forestry and agro-
		forestry activities).
		4. Financial management and baseline
		revenue calculation.
		5. Economic modeling.
Year 5	11 – 23 June 2017 Mid-term	The MTR Inception Report was
June 2017	Review Field Work	discussed and validated prior to the
		MTR field mission.
July 1 – 30 2017	Draft MTR Report	
Year 6	MFL Project scheduled to end	MFL Project was extended for 1 ¹ / ₂
	in June 2018	years (cost free); scheduled to end on
		21 December 2019.
Year 6	MTR Report Finalised;	MTR Report completed in January
January 2018	Preparation of 10-Year (2020-	2018.
	2029) Integrated Landscape	
	Forest Management	
Year 7 (Extension)	Terminal Evaluation (TE)	
July 2019	Review and Fieldwork	
	TE Report Finalised in	
	December 2019	

1.3 Project Landscape and its Significant

The MFL Project landscape/area is located near the east coast of Sabah between latitude $4^{\circ}N$ and $5^{\circ}N$ and longitude 110° 2'E and 110° 3'E (see Figure 1.1). It is within Yayasan Sabah (YS) Sustainable Forest Management Licence Agreement (SFMLA) Area.

The 261,264 ha MFL Project landscape is a contiguous block that forms an important connecting land mass between three sizeable and globally significant protected areas namely, Maliau Basin Forest Reserve (58,840 ha), located to the west of the MFL Project area; Danum Valley Forest Reserve (43,800 ha) to the east and Imbak Canyon Forest Reserve (16,750 ha) to the north. Both of these protected areas are formerly known as Maliau Basin Conservation Areas, Danum Valley Conservation Areas and Imbak Canyon Conservation Areas respectively.



Figure 1.1: MFL Project location

The MFL Project landscape is highly significant in terms of global biodiversity. Six out of seven of Sabah's globally threatened fauna species are present within the MFL Project landscape. Its Lowland Mixed Dipterocarp Forests are particularly rich in species diversity, with 814 species of woody plants of 1 cm diameter and larger found in a 50 hectare area. Endemic, rare and threatened species within the MFL Project landscape include the protected gaharu timber (*Aquilaria borniensis*). About half of the pygmy elephant population in Borneo currently lives in the central forest reserves area of Sabah of which the MFL Project is partly located. Orangutans also share the same habitat.

The significance of these forests will be critical to the persistence of the long-term global benefits generated by the MFL Project landscape, in particular their ability to support high levels of biodiversity while helping to mitigate climate change. The MFL Project landscape also provides connectivity and buffers critical storehouses of biodiversity found within neighboring protected areas particularly Danum Valley, Maliau Basin and Imbak Canyon (DaMaI) and the downstream conservation initiatives as well. The MFL Project landscape comprises main catchments and headwaters for some of the most important waterways in Sabah, particularly the Kinabatangan and Segama Rivers that flow into the Sulu Sulawesi Marine Eco-region. This latter function becomes of special importance within a context of climate change, when ecosystem

resilience cannot be maintained by focusing on relatively small and increasingly isolated protected areas, but instead requires a matrix of compatible surrounding land-uses. Potential climate change impacts on species composition and ecosystem function further increase the importance of these interconnecting landscape areas for the ecological sustainability of the conservation areas.

1.4 Project Commencement

The effective MFL Project start- up date was on 22 June 2012, that is, upon the signing of the Project Document (ProDoc). However, following several unsuccessful attempts to recruit a full-time Project Manager, project team members were eventually recruited as follows:

- Project Assistant was contracted on 1 April, 2013; and
- An Interim Project Manager was contracted on 10 June 2013; he was designated Project Manager in January 2014.

Besides that, there was also a number of other often generic and reasonably common project mobilisation delays. At the time of the Inception Workshop in July 2013, the proposed land-use allocations within the MFL Project landscape have been substantially changed. These changes, especially the inclusion of oil palm and the new concept of mosaic tree plantations, neither of which had been mentioned as land-uses in the original Project Document, raised serious concerns within the UNDP, GEF and among other Sabah MFL Project stakeholders regarding the feasibility of achieving the project's stated goal and objectives. As a consequence of mobilization delay, land-use changes and the concerns from the stakeholders, there was almost a 2½-year delay in the project implementation.

1.5 Project Inception Phase

The Inception Workshop was held on 24th July, 2013 and was attended by around 50 participants represented by different relevant stakeholders of the project (Plate 1.1). There were several modifications in the project design made at the output level during the Inception Phase. Revisions of the Strategic Result Framework (SRF) to accommodate changes to outputs in the framework were also made. However, no corresponding revisions in indicators or targets were developed to set goals specific to the new



Plate 1.1: Participants representing different stakeholders during the inception workshop

outputs; also, a number of targets and indicators seemed to be mismatched for the outputs that they correspond within the framework, and appeared to be more correctly matched with other outputs. While changes were made to the framework during the inception period, and reported in the Inception Report, there was no final version of the SRF adopted as the "official" framework for the MFL Project.

The Inception Report was supposed to be finalised by 31 December 2013, or approximately six (6) months following recruitment of the Interim Project Manager. However, due to the need to assess changed circumstances within the MFL Project landscape, it was agreed that the Inception Phase would be extended until 30 June 2014. Consequently, the preparation of the Inception Report (IR) was delayed for almost twelve (12) months while the commencement of the MFL Project was delayed for almost 2½ years as the result of the land-use changes and the subsequently decision to conduct the ground assessment by the Technical Working Group (TWG).

2.0 PROJECT PERFORMANCE AND KEY RESULTS

2.1 Objective and/or Outcome Level

The MFL Project objective is "to institutionalize a multiple-use forest landscape planning and management model which brings the management of critical protected areas and connecting landscapes under a common management umbrella, implementation of which is sustainably funded by revenues generated within the area". This objective can be achieved through three interconnected and complementary components. The first component focuses on strengthening Sabah's policy framework to mainstream biodiversity and to finance its conservation within the multiple-use forest landscape, along with support to improved institutional capacity. The second component involves demonstrating how to operationalize the multiple-use forest landscape management concept, with lessons learnt to be made available for replication throughout Sabah and elsewhere. The third component focuses on developing innovative sustainable financing options appropriate to the land-uses within the MFL project landscape.

After a 2½-year delay, the implementation of the MFL project was accelerated in 2015. The following is the achievement summary. The details can be referred to in **ANNEX 1**.

Wildlife Habitat Fragmentation Reduced and Connectivity Restored

In line with the Sabah Forest Policy, the TWG recommendations and the MFL Project objective, the State Government has successfully gazetted approximately 156,586.37 ha within the MFL Project landscape as Class VI Virgin Jungle Reserve (VJR – 7,311 ha) and Class I Protection Forest Reserve (149,277.37 ha) – totally protected areas respectively. This means that from an original 18,517 ha of protected areas at the start of the project (see Figure 2.1a), some 99,142 ha was gazetted as totally protected areas in 2013 (Figure 2.1b) and then increased to 150,968 ha in 2016 (Figure 2.1c) and at the final project the total area as totally protected area was 156,586.37 ha (Figure 2.1d). As a result of this, fragmentation of important wildlife habitat was reduced and habitat connectivity was restored, that is, the three renowned conservation areas namely Maliau Basin, Danum Valley and Imbak Canyon are now connected (north – south – west – east) with the gazettement of these 156,586.37 ha as totally protected areas. Collectively, this area which contains six out of seven of Sabah's globally threatened fauna species represents an epicenter of high biodiversity importance within the "Heart of Borneo" global biodiversity hotspot. In other words, genetic, species and ecosystem diversity are conserved within the MFL Project landscape including adjacent protected areas. Further details can be referred to in **ANNEX 1**.



Biodiversity Mainstreaming Enhanced

The planned land-uses reflect the project's strategy to integrate and mainstream biodiversity. The integration of biodiversity concerns landscape planning and development was further enhanced with the enabling policies (Outputs 1.1 and 1.2), which have been formulated and in place. This accomplishment significantly contributes to global habitat connectivity, one of the objectives articulated under CBD's Aichi Biodiversity Target 11.

Overall, the MFL Project has taken a major step toward ensuring that biodiversity in the Class 1 Protection Forest Reserve areas are protected. Equally important is the fact that these forest reserve areas joined together previously-isolated conservation areas.

Wildlife Populations

High Conservation Value assessment carried out in the MFL Project landscape predicted that the project area is in a medium suitability area that varies from medium to high for clouded leopard and sun bear. However, there is insufficient data to confirm the number of both species within the project area. Nevertheless, indirect observations supported by evidence from the scientific literature highlighted the presence or likely presence of both species. The population of orangutans within the project area is increasing, that is, the orangutans are moving into the MFL Project area as the forest recovers especially when more areas had been planted under the mosaic concept in Empayar Kejora areas. WWF-Malaysia has also been tracking elephants in the project area and suggests that elephant population data was reasonably good and that there are healthy populations. They estimated 300 elephants in the project area.

Impacts on Biodiversity Avoided and Minimised

The Sabah Government is committed in formulating a policy to implement No Net Loss (NNL) of biodiversity within the project landscape or neighbouring areas. The NNL is in fact being incorporated in the Sabah Environmental Policy, the Sabah Forest Policy 2018 and the draft policy on "*Managed Retention of Sabah's Forests: Moving Towards Biodiversity Net Gain*".

Management Based on Technical, Economic and Financial Feasibility

Project landscape is being managed in a manner that demonstrates the technical, economic and financial feasibility of the new management approach. For example, Mount Magdalena Forest Reserve (formerly known as Northern Gunung Rara Forest Reserve – 61,330 ha), which is within the MFL Project area was certified under Forest Stewardship Council (FSC) certification in May 2015, which indicates that the protected forest reserve is managed under a well-managed forest in accordance with sustainable forest management principle.

Enabling Policy and Regulatory Environment

Achieving Biodiversity Net Gain may not be feasible for Sabah in the first few years, so Sabah would build towards a policy of "managed retention" of biodiversity, which can achieve a specific conservation target that considerably exceeds the CBD's Aichi targets. This will build capacity in government and developers; and in a few years, Sabah will likely be in a better position to implement a Net Gain policy, which then ready to facilitate expansion / replication of the model to other forest landscapes in Sabah.

Enhanced Capacities and Experience

The Sabah Forestry Department NGOs had conducted several trainings during the period of the project to enhance capacity and technical knowledge on key thematic issues (Forest Protection, Forest Enforcement, Accounting, REDD Plus, Biodiversity, etc.) where some of which were supported by the MFL Project. Efforts are being made to strengthen the institutional, systemic

and individual capacities of the Sabah Forestry Department to implement adaptation- and mitigation-related actions.

Sabah Forest Department investment in Class 1 Protection Forest Reserve at least 25% more than the baseline

On a state level in 2015, the SFD has budgeted RM 25 million towards the protection of all Class 1 - Protection Forest Reserves totaling 1,260,098 ha that equates to an average of RM 19.80/ha annually. With respect to the MFL project area alone, the cumulative amount spent by the SFD as of September 2019 was RM 13.935 million while YS/RBJ and INIKEA is approximately RM 9.317 million and RM 14.198 million respectively. This showed that the SFD investment in Class 1 Protection Forest Reserve was about 25% more than the baseline.

2.2 Output Level

Component 1: An enabling environment for optimized multiple use planning, financing, management and protection of forest landscape

For **Outcome 1** of the project under Output 1.1, there were several important accomplishments, which helped to establish an enabling environment for mainstreaming of biodiversity conservation in multiple-use forest landscapes. One of the major achievements was the adoption of the newly minted *Sabah Forest Policy 2018* (*Plate 2.1*), which was launched by the Sabah Chief Minister on 3rd December, 2018. The project has been influential in the formulation of the 2018 Forest Policy, and at the same time, has contributed to the achievement of a number of its stated objectives.

Another accomplishment under Output 1.1 is the policy on *Managed Retention of Sabah's Forests: Moving Towards Biodiversity Net Gain.* The MFL Project influenced State-wide policy decisions (Sabah Forest



Plate 2.1: Sabah Forest Policy 2018

Policy) for conservation, e.g., proposed policy on Managed Retention as a "transitional" measure which could ultimately lead to adoption of a NNL/NG policy. The goal of "Managed Retention" approach is to conserve at least 30% of forest biodiversity. This uses simple metrics based on multipliers designed to ensure there is no breach of a minimum conservation threshold. This is set to retain and formally conserve a certain level of intact natural forest area and is a different goal from 'Biodiversity Net Gain'.

Under Output 1.2, a new State-level Policy on Payment for Ecosystem Services (PES) and Ecosystem Conservation Programme was formulated and completed. The objectives of this policy are to:

- i) Strive towards the sustainable management, maintenance and enhancement of ecosystem services; and
- ii) Promote and encourage the development and implementation of PES programmes and activities through the concerted effort of the State government, local authorities, private sector, non-governmental organisations and civil society.

Capacity Building

Actions have been taken on the capacity limitation of the SFD and YS staffs and other related stakeholders relating to the contemporary theory and practice for developing a multiple-use forest landscape planning approaches (Output 1.3) of which various trainings have been provided by the consortium of scientists, as well as, conducted by HUTAN, WWF Malaysia and the Sabah Forestry Department (SFD) during the MFL Project period. These trainings were generally short courses of a few days duration. Participants attended the training - consisting the SFD senior officers from the managerial, planning level to the forest rangers/ guards who work on the ground, Sabah Parks, SEPU, EPD, Sabah Wildlife Department, MoF, UMS, YS/RBJ, SFMLA Holders, NGOs, Ministry of Tourism, etc.

Monitoring and Enforcement

Many initiatives for monitoring and enforcement at the district level were strengthened. Regular field monitoring and surveillance on all activities for and against poaching were effectively carried out by the field staff of Yayasan Sabah (YS) and its JV partners, the Sabah Forestry Department (SFD) and the Wildlife Department under a task force called Protect Team. In addition, a task force has been set up for the Tawau Region (Tawau Anti-Poaching Task Force) and the DaMaI Monitoring Team led by YS and the SFD not only to facilitate anti-poaching efforts, such as patrolling and roadblocks at key hotspots in the region but also on the key ecological attributes, that is, climate and hydrological data; forest structure; landscape mosaic and ecological integrity.

Component 2: Multiple-use forest landscape planning and management system demonstrated at pilot site

10-Year ILMP

For Outcome 2, a number of notable achievements were realized. Site-level efforts largely succeeded in modeling improved management for biodiversity conservation based on research evidence from the biodiversity related studies (i.e., landscape and ground level studies for improving habitat connectivity). The 10-Year ILMP (2020 - 2029) under Output 2.2 presents a

clear roadmap for the way forward in the management of the MFL Project area. The plan which was approved by the SFD on 14th November 2019 sets out the shared vision, as well as, the overarching strategies and several key actions. It highlighted a total of 24 interventions grouped under three Strategies that relate to a) fine-tuning of production areas, b) enhancing biodiversity conservation, and c) strengthening community forest. However, because the delivery of the plan was quite late, there will not be an opportunity to test and assess its effectiveness before closure of the project in December 2019.

Biodiversity related studies





Site-level efforts largely succeeded in modeling improved management for biodiversity conservation based on

research evidence from the biodiversity related studies (i.e., landscape and ground level studies for improving habitat connectivity).

Research supported through the project made some ground-breaking discoveries. As part of GEF-supported initiatives for targeted research, a number of key scientific discoveries were made. Among the most interesting of these, the result of airborne Light Detection and Ranging (LiDAR) technology and geospatial mapping, was the determination that, per hectare, the above-ground carbon storage in Sabah's unlogged forests exceeds that found in the Amazon and Congo Basins.

Component 3: Sustainable financing of protected areas and associated forest landscape areas demonstrated at the pilot site

Approved Cabinet paper to formulate PES and Conservation Finance mechanisms and Conservation Fee Enactment

In line with the MFL Project financial sustainability objective, the following three important reports were completed:

- i. Final Report: Recommendations for State-level Policy on Payment for Ecosystem Services (PES) and Ecosystem Conservation Programme was formulated and completed.
- ii. Draft Final Report: Guidelines for Operationalising Proposed Ecosystem Conservation Programme was completed. This document provides guidelines for operationalising the proposed Ecosystem Conservation Programme (ECP), which is funded by the monies

collected from the proposed Ecosystem Conservation Fee during its initial implementation.

- iii. Final Report on "Willingness of Visitors to Sabah to Contribute towards Ecosystem Conservation Fee" was completed. The study provides information on whether visitors are willing to pay the proposed ecosystem conservation fee, the amount they are willing to pay and the preferred method of payment and other related information.
- iv. Cash-Flow Analysis Report: Collection of Proposed Ecosystem Conservation Fee and Starting-up Ecosystem Conservation Programme Office. The objective of this report is to present cash-flow analysis for collecting the proposed Ecosystem Conservation Fee (ECF) and initial operation of an office for the proposed Ecosystem Conservation Programme (ECP office) in order to guide decision-making.
- v. Final Draft on "Ecosystem Conservation Authority Enactment 2020" was completed. The Enactment is to make provisions for establishment of the Ecosystem Conservation Authority for the purpose of and in relation to the sustainable financing or funding of conservation, management, protection and rehabilitation of the ecosystem and natural resources and for matter connected therewith.

Case study on developing PES

The MFL Project could not pilot-tested the establishment of a scheme for payment for ecosystem services (PES) within the MFL Project landscape due to the absence of local communities; and instead, pilot-tested it in the Babagon sub-catchment.

This case study is one of three case examples for PES, which was developed under the component on "Development of State-level policy options and mechanism for payment for ecosystem services (PES)". The objective of this case study is to develop PES options for the Babagon sub-catchment within the context of establishing a water conservation area. In this pilot project, community members are to be paid for maintaining watershed quality and functionality, so that water resources are preserved.

A MoU on empowerment for Conservation of Babagon Catchment Area by way of introduction PES was signed between the State Government represented by the SFD and the Department of Irrigation and Drainage (DID) and the local communities of Kg. Kolosunan, Kg. Tampasak and Kg. Babagon Toki Community on 18/06/2019 at Kg. Kolosunan.



Plate 2.3: PES workshop at Kg. Kolosunan

3.0 IMPLEMENTATION REVIEW

3.1 Project Governance/Management Arrangement

The ProDoc sets forth a project management structure, which included the establishment of three "task forces," one for each of the project components. The purpose of establishing the task forces was to bring together three groups of people with expertise specifically relevant to each of the three components, who could act as advisors to guide the respective activities within each of the components. However, at the start-up of the project, it was found out that it was difficult to enlist experts having the requisite skills and knowledge to serve on these bodies. Therefore, an adaptive action was taken to shift to a different management structure to overcome the obstacles that were encountered.

In place of the task forces, a technical working group (TWG) was created. This group basically served the same technical oversight function as intended for the three task forces, but with a narrower focus, that is, to advise the Project Board on biodiversity issues. The TWG operated for several years, but following the Mid-Term Review recommendation, it too, was dissolved, and replaced by an Expert Group. Their role was to support and facilitate the biodiversity elements of the project, and to review consultant reports.

The revised management structure that was adopted for the project and showing these various advisory bodies is shown in Figure 3.1.

3.2 Partnership

The project had undertaken stakeholder engagement more than 180 events comprising trainings, workshops, conferences, consultations and meetings. The project received strong support from various stakeholders and established multisectoral partnerships through project activities and monitoring. The partnerships were developed through various platforms and levels including the Project Board; Project Management Unit; Technical Working Group; Expert Group; and training and research activities. Chief among these is the Sabah Forestry Department (SFD), which serves as the main agency responsible for developing and managing the implementation of the project. In line with its commitment to GEF as the Operational Focal Point in Malaysia, the national agency responsible for overall project governance, administrative and technical advice, is the Ministry of Water, Land and Natural Resources (KATS - formerly Ministry of Natural Resources and Environment [NRE]). At the state level, the State (of Sabah) Economic Planning Unit (SEPU) was responsible for advising on governing policy matters, regulations, procedures and budgetary matters in the facilitation and delivery of the project. Yayasan Sabah (YS; the Sabah Foundation) was responsible for implementing most of the project activities at the site level with guidance from the SFD.



Figure 3.1: Project adopted management arrangements

WWF-Malaysia has been a member to the Project Board since the project started. They also actively participated in project's activities on No Net Loss/Net Gain and Payment for Ecosystem Services (PES)/Conservation Finance. In addition, the project had the opportunity to leverage stakeholder engagement through other initiatives that contributed to the project outcomes through partnership arrangements. For example, the project received supports from other non-governmental organizations (NGOs), including South East Asia Rainforest Research Partnership (SEARRP), HUTAN, Land Empowerment Animals People (LEAP) / Forever Sabah, Borneo Rhino Alliance, Danau Girang Field Centre, Sabah Environmental Trust and Living Landscape Alliance and UMS as members of the Expert Group to discuss and deliberate the various deliverables produced by a specific consultant.

The project worked closely with the local communities in Kg. Mukandut to monitor the water catchment area from illegal encroachment. Some of the local communities in Kg. Mukandut are working with YS's Joint Venture Partners. The project also indirectly has collaboration with NGOs (Forever Sabah and Partners of Community Organizations - PACOS) and the Department

of Drainage and Irrigation on the development of state-level policy options and mechanisms for Payment for Ecosystem Services (PES) with indigenous peoples in the Babagon Sub-catchment area. The villages involved are Kg. Kolosunan, Kg. Babagon Toki, Kg. Tampasak, Kg. Kipouvo, Kg. Kibunut and Kg. Wangkod.

The involvement of Rakyat Berjaya (RBJ) Sdn. Bhd. (Forest Division of the Sabah Foundation) as a Project Board member provided an important link to the private sector stakeholders active in the project landscape. As part of the Project Board and Project Management Unit, Yayasan Sabah, through its Forestry Division (which is registered as Rakyat Berjaya Sdn. Bhd.) continues to monitor the works carried out by their joint-venture partners and contractors operating in the project landscape.

There was no major gender focus in the project, and thus, women as a target stakeholder group were not effectively included. This was perhaps unavoidable, due in large part to the fact that no communities are located within the project area. Efforts under the project to address gender concerns were limited to recording sex-disaggregated data for participation of males and females in project sponsored functions (e.g., workshops and training).

3.3 National Ownership and Sustainability of the Project Results

3.3.1 National Ownership

During consultations, many respondents from government institutions of all levels, as well as, civil society voiced their strong support for and ownership of the project. Also, strong political will was demonstrated to secure the integrity of the project site through land use changes.

3.3.2 Sustainability of Project Results

Analysis of sustainability is predicated on consideration of the risks which form barriers to achieving the intended project result—the lower the risks, the higher the probability that project benefits will be sustained in the future. If one or more of the risk factors is too great, they can threaten the chances for the sustainability of project benefits. In the Terminal Evaluation (TE) analysis for the MFL project, the following risks are taken into account: (i) financial risks; (ii) socio-economic risks; (iii) institutional and governance risks; and (iv) ecological and environmental risks.

Financial Sustainability

There are several mechanisms that have been, or are being, developed or pilot-tested under the project, which can help to secure sustainable financing for biodiversity conservation efforts. These project initiatives have included (i) preparation of an ecological conservation fee enactment; (ii) testing of PES mechanisms; (iii) drafting of a policy related to PES; (iv) quantification of the management costs under the ILMP and provision of recommendations for meeting the costs; and (v) establishment of an interim committee on sustainable finance. These

efforts provided a framework and avenues for the project to continue its efforts towards financial sustainability.

Socio-economic Sustainability

The stakeholders through their moral involvement had voiced their strong support for and ownership of the project. Also, strong political will was demonstrated to secure the integrity of the project site through land-use changes. However, one clear weakness involved lack of "buyin" and understanding by managers and technical practitioners, in their interest and ability to use the valuable data that were produced through the research activities of the project. It is believed that this situation may have occurred because there was insufficient coordination between overseas scientists who came to do the research, and their local counterparts. A stronger component for training, technology transfer and knowledge-sharing should have been an integral part of the research program.

Institutional and Governance Sustainability

Risks in the area of governance can potentially threaten the sustainability of advances for improved biodiversity mainstreaming achieved by the Sabah MFL project. Other institutional risks also threaten sustainability. These include the fact that (i) changes in government may lead to changes or reversals in policies, rules, and regulations; and (ii) the rotation cycle in government Civil Service System weakens 'institutional memory' and disrupts continuity. Other legal, institutional, and policy factors are, however, more encouraging. The Sabah Forest Policy 2018 focuses on sustainable forest management, and is in line with the Aichi Biodiversity Targets and Sustainable Development Goals. This includes maintaining at least 50% of Sabah's land mass under forest reserves, achieving No Net Loss of biodiversity, and ensuring 30% of Sabah's land area are totally protected area by 2025. Additionally, in November 2018, the Sabah Legislative Assembly passed the Bill to amend Forest Enactment 1968 which came into effect on 1st January 2019. The amendment constituted insertion of "Reduce Emissions from Deforestation and Forest Degradation-Plus (REDD+)."

Together with the No Net Loss of biodiversity policy approved in 2019, Sabah is making good progress in strengthening the policy and legislative framework on forestry.

Ecological and Environmental Sustainability

Arguably, the premier achievement which has come about in the project landscape has been the placement of a much larger area of land under stronger protection to ensure conservation of the valuable biodiversity resources which are found there. This has been accompanied by improved connectivity with the three established conservation areas that are adjacent to the project site. This is expected to facilitate higher survivorship of many species, especially vulnerable megafauna such as, elephants and orangutans, which require large areas for foraging, establishing territories for mating, and general freedom of movement.

Despite these significant accomplishments, threats to ecological and environmental sustainability remain. Development pressures, encroachment into forest reserves, and wildlife poaching still continue to threaten environmental integrity within the multiple-use forest landscape. The planned Pan-Borneo Highway could increase ease of access of poachers to the area, and could also cut off wildlife migration routes.

3.4. Monitoring, Evaluation and Reporting

3.4.1 Mid-Term Review

Mid-Term Review Process

The MFL Project Mid-Term Review (MTR) field work was conducted on 11 - 23 June 2017. The MTR Team consists of: Mr Bruce Jefferies - MTR Lead Consultant; Ms. Tong Pei Sin, Biodiversity Specialist, and Mr Juan Luis Larrabure, Economist. The MTR analysis of progress towards project objective and outcomes was based on the results of the review of project related documentation, consultant reports, focus group forums, consultations (face-to-face), and field visits to an indicative range of locations and activities that were being implemented with support from the MFL Project Management. The MTR team collaborated and endeavoured to provide evidence based credible and reliable analysis and conclusions. This was collected and assimilated using a range of research and collaborative face-to-face interviews. A range of sources of primary data and information were examined during the MTR process. All data and information was rigorously analysed. Triangulation of results, i.e. comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, was used to corroborate and / or check the reliability of material.



Plate 3.1: From left: MTR Team visiting one of the mosaic planting sites; MTR Team and other stakeholders at the Project briefing; MTR Team courtesy call to former Chief Conservator of Forests (Datuk Sam Mannan).

MTR Team's Project Assessments Summary and Rating

Because of pre-emptive land-use decisions revealed during the Inception Workshop, the MTR Team concluded that the original design and strategy of the MFL Project became obsolete and this compromised primary the MFL Project objective. In order to determine a preferred option and formulate a viable future direction, a Technical Working Group (TWG) was formed. Despite the land-use allocations, the TWG determined that with significant modifications a restructured project could achieve the MFL Project's objective.

The MTR Team also concluded that the MFL Project management structure was unnecessarily complicated, with functions and roles between the Project Board (PB), TWG, PMU, consultancies and sub-contractors not coordinated as they should have been. The MTR Team recognised the TWG's positive contribution since its establishment but felt that the project management role and technical inputs of the PMU had somewhat been usurped by the role the TWG assumed. Although the current management arrangements were reasonably effective, the MTR Team concluded that there was room for innovation and improvement during the remaining period of the MFL Project.

The MTR Team also found out that there was a significant potential for confusion in terms of transparency and accountability, caused partly by excessive use of multiple consultancies and contracts. It was not always clear to the MTR Team that the stakeholders fully understood the objective and focal point for the MFL Project. This is to concentrate on the three globally significant conservation areas, and establishment, management and maintenance of viable connectivity corridors. The MFL Project was based around this logic.

The MTR Team acknowledged that the landscape-level biodiversity and forest quality assessment work was being carried out by a motivated and competent team. The MTR Team recognized that the outcomes from this should provide essential biodiversity conservation data and information for the preparation of the ILMP.

The MTR Team agreed that the process to translate the original ProDoc and produce the Inception Report was a useful example of adaptive management, which allowed the MFL Project to move ahead. The MTR Team also recognized that the planning framework inherent within the Open Standards for Conservation Action, and the "Miradi" software, had significant potential for establishing a collaborative process for preparing the ILMP. The software is a user-friendly program that allows nature conservation practitioners to design, manage, monitor, and learn from their projects to more effectively meet their conservation goals.

The MTR Team acknowledged that the methodologies associated with assessments of High Conservation Value (HCV) and High Carbon Areas (HCA) was robust; and the requirement for a third-party certification indicates transparency and sustainability. Further, the Team believed that over the mid to long-term, with judicious operational management, all Class 1 Protection Forest Reserves within the MFL Project area had potential for significant ecosystem restoration. The

Team recommended that these requirements are to be expressed, deliberated and prescribed in the 10-Year ILMP.

Overall, the MFL project was given a rating by the MTR Team as "**Moderately Satisfactorily**" despite the 2½-year delay, slow start-up phase, and significant difficulties related to land-use allocations, mobilising qualified and competent project management staff, and a number of other often generic and reasonably common project mobilisation delays, including the tyranny of distance, and travel times to the MFL Project site. The details can be referred to in **ANNEX 2**.

MTR Team's Recommendations

The MTR Team's overall conclusion was that the MFL Project would achieve a credible proportion, but certainly not all, of the MFL Project's ambitious, large-scale and cutting-edge biodiversity conservation focused objective, outcomes and outputs.

The MTR Team had given a number of key recommendations to be acted upon by the relevant stakeholders. The summary of the key recommendations are presented herewith.

Under Outcome 1: An enabling environment for optimized multiple use planning, financing, management and protection of forest landscapes

(i) The SFD, PMU, TWG and Project Board ensure that (i) the connectivity between the three globally significant protected areas is established and maintained and that connectivity corridors apply ecological best practices (ii) recognition of the intensive management, including robust patrolling systems, and maintenance that connectivity corridors (iii) the impact of logging on water quality and the management riparian zones and wildlife corridors is minimized and specifies the design of these areas in conjunction with ecological specialists (iv) integration of concessionaire activities into the wider conservation mandate and (v) expresses in prescriptive terms best practice management for all components of the planning process.

Under Outcome 2: Demonstration of multiple-use forest landscape planning and management system

- UNDP and the SFD postpone contracts for the implementation of SC-7, SC-8 and LC-5 until the management planning advisor(s) ToR have been formulated and work on the Integrated Conservation Management Strategy (ICMS) has been advanced.
- (ii) That steps be taken by the SFD to use, as far as possible, native species for production purposes to reduce the risk of introducing Invasive Alien Species.
- (iii) That UNDP and the SFD require that the budgetary provisions made for the 7 research assistants should be borne by the contractor.
- (iv) That UNDP and the SFD ensure that the requirement for a legal expert (originally under a consultancy entitled "Legal Expert" (IC-4), be carefully reviewed.

(v) That UNDP and the SFD review the contract of the consultancy "Economic Landscape Modeler" (IC-2) with ETH Zurich in order to reduce its scope to include <u>only</u> the formulation of a Master Plan for Eco-Tourism in the 3 protected areas.

Under Outcome 3: Sustainable financing of protected areas and associated forest landscape areas demonstrated at the pilot site

(i) That the SFD, with support from UNDP, should ensure under the consultancy entitled "State-level policy options and mechanisms for PES (SC-2) that the consultant Green Spider concentrate exclusively on the creation of the Conservation Fund and ensure that this fund be based on two income sources: (i) Green Fee paid by tourists and that it discriminates between foreign tourists and Malaysian visitors. (ii) a Water Levy paid by users. The SFD to approach Green Spider and request that they design and undertake a "pilot" exercise for the Conservation Fund.

Project Implementation & Adaptive Management

- (i) That the UNDP and the SFD postpone contracts for the implementation of SC-7, SC-8 and LC-5 until the management planning advisor(s) ToR have been formulated.
- (ii) That UNDP and the SFD require that the budgetary provisions made for the 7 research assistants should be borne by the contractor.
- (iii) The SFD, PMU, TWG and Project Board ensure that (i) the connectivity between the three globally significant protected areas is established and maintained and that connectivity corridors apply ecological best practices (ii) recognition of the intensive management, including robust patrolling systems, and maintenance that connectivity corridors (iii) the impact of logging on water quality and the management riparian zones and wildlife corridors is minimized and specifies the design of these areas in conjunction with ecological specialists (iv) integration of concessionaire activities into the wider conservation mandate and (v) expresses in prescriptive terms best practice management for all components of the planning process.
- (iv) That SFD consider reviewing its structure in order to provide expertise and contemporary approaches to protected area planning, management and biodiversity conservation.
- (v) That the UNDP and the SFD approach the Sabah Wildlife Department with a view to them actively contributing to the project.
- (vi) That the SFD take the necessary actions so that the unallocated areas within the MFL (tentatively set aside for palm oil plantations) be added to the Class 1 Forest Reserve system.
- (vii) That steps be taken by the SFD to use, as far as possible, native species for production purposes to reduce the risk of introducing Invasive Alien Species (IAS).

Sustainability

- (i) UNDP approves a one year no-cost extension for the project. This is to provide for the completion of ongoing activities and other priority interventions.
- (ii) The SFD circulate the Mosaic Planting for Forest Restoration (MPFR) guidelines to all project stakeholders for comments and that the SFD delay application for MPFR until the guidelines are finalized.

3.4.2 Terminal Evaluation

Terminal Evaluation Process

The Terminal Evaluation (TE) mission was carried out on 05- 20 July 2019 by a team of expert, which comprises of James T. Berdach, Lead Expert and Evaluator (International), Bee Hong Yeo, Environmental Economist (National) and Pei Sin Tong, Biodiversity & Forest Expert (National). The TE was conducted in accordance with the Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Project. The TE provided a comprehensive overall assessment of the project including a critical assessment of the project's administrative and technical strategic issues and constraints. The TE included consideration of (i) project implementation performance; (ii) results of implementation, including attainment of intended outcomes and higher-level project objectives; and (iii) lessons learned about project design, implementation, and management. Information-gathering was accomplished through three complementary processes: (i) review of project documents and other relevant reference materials; (ii) extensive consultations with various stakeholders including group consultations, face-to-face interviews and in some cases by telephone or Skype with key stakeholders; and (iii) visits to selected sites of interest in the project area. This enabled the members of the TE consultant team to make first-hand observations of existing biophysical and socioeconomic conditions within the project landscape. In addition to conducting visits to selected sites of interest by land, an aerial survey, covering the entire project area, was carried out by helicopter. Because the project area is quite large, with difficult access to many sites, the aerial survey enabled the TE team to get a broad general overview of the entire landscape, and especially, to make observations about the general characteristics and condition of forest cover.

Summary of Overall Results and Ratings

The TE's overall evaluation results are summarized in the ratings table shown in Table 3.1 below.

Project Performance Rating						
Criteria	Criteria Rating Comments					
Monitoring and Evaluation						
Overall quality of	Moderately	All required M&E tools and processes completed (e.g.				

Table 3.1: Evaluation Ratings

M&E	Satisfactory (MS)	inception review, PIRs, APRs, tracking tools, MTR, TE); also, project proponents indicated that METT was used in management plan preparation. However it is not clear to what extent findings of evaluation processes were employed to make any needed adjustments/improvements for adaptive management of the project.
M&E design at project start up	Satisfactory (S)	All required M&E tools and processes (e.g. inception review, PIRs, APRs, tracking tools, MTR and TE) were included as elements of the project M&E system.
M&E Plan Implementation	Moderately Satisfactory (MS)	All required M&E tools and processes completed. However, it is not clear to what extent findings of evaluation processes were employed to make any needed adjustments/improvements for adaptive management of the project.
	Implementing A	gency & Executing Agency Execution
Overall Quality of Project Implementation / Execution	Moderately Satisfactory (MS)	Overall rating is based on cumulative IA and EA ratings (see comments following for IA/EA execution).
Implementing Agency Execution (IA)	Moderately Satisfactory (MS)	In general, SFD, PB, PMU and other implementing partners carried out implementation and project management functions according to requirements; however, it was determined that better technical guidance was needed, e.g., for developing consultants' TORs, monitoring, reviewing/accepting research reports, integrating the consultancies and applying research findings in the management of the project landscape.
Executing Agency Execution (EA)	Moderately Satisfactory (MS)	UNDP Malaysia generally fulfilled its EA responsibilities; however, stronger guidance was needed in (i) identifying technical shortcomings of the IA, which required appropriate remedial actions to be taken; (ii) advising on standard administrative and financial procedures to be followed; and (iii) ensuring stronger linkages to other relevant initiatives at the national level (e.g., CBioD, REDD+, PA Financing).
		Outcomes
Overall Quality of Project Outcomes	Moderately Satisfactory (MS)	Outcome 1 : Key elements for establishing enabling environment were put in place (e.g., land use classification changes, influencing State-wide policy decisions, e.g., Managed Retention and approved Cabinet paper to formulate PES and Conservation Finance mechanisms and need for Conservation Fee Enactment); Outcome 2 : Site-level efforts largely successful in modeling improved management for biodiversity conservation based on research evidence from the biodiversity related studies (landscape and ground level studies, e.g., for improving habitat connectivity); Outcome 3 : The main outputs for Outcome 3 were the consultancy agreements for the Environmental Economist and Financial

		Data Specialist; some key financial data were presented but values of ecosystem services were largely absent.
		Weaknesses included (i) failure to encourage stronger sense of ownership for the important data produced through the project's research efforts—thus weakening continued use, integration and application of the data collected; (ii) long delays in project start-up, and in administrative processes (e.g., Project Manager selection process, consultant selection, contracting) adversely affecting project efficiency and effectiveness; (iii) failure to consider clear definition and broader range of options for sustainable financing; and (iv) Ecosystem values were not fully estimated for incorporation into the landscape-level management plan and communication to policy makers.
Relevance	Relevant (R)	Project highly relevant for achieving the objective of improved mainstreaming of biodiversity conservation at the state and national level as well as habitat connectivity at the landscape level.
Effectiveness	Satisfactory (S)	Strengths : land use classification for conservation strengthened, acceptance by the State Cabinet to work on Ecosystem Conservation Fee Enactment and PES mechanisms, management plan prepared.
		Weaknesses: persistent low awareness of biodiversity/ecosystem services among top level decision-makers; delay in preparation of management plan prevented testing its usefulness and effectiveness.
Efficiency	Moderately Satisfactory (MS)	Strengths : adaptive management approach followed (e.g., revisions to SRF at inception, cash flow arrangements through UNDP, selection of PES pilot site outside study area, changes in project management structure from ProDoc), leveraging of funding, timely and comprehensive reporting.
		Weaknesses: no evidence that SRF was used as a management tool, changes in management structure were ad hoc rather than adaptive, local capacity underutilized.
	-	Sustainability
Overall likelihood of Sustainability	Likely (L)	(Risk components are considered cumulatively) it appears likely that the project benefits can be sustained; highest risks are of an environmental nature and posed by continuing development pressures, especially in the forest sector; these are offset by advancements made under the project in securing a stronger institutional enabling environment to support
		improved management of forest lands and conservation of biodiversity resources, as well as potential interventions that

		could result in long-term sustainability of financial resources for conservation.				
Sustainability of financial resources	Likely (L)	It is anticipated that one or more of several mechanisms which have been developed or pilot tested under the project (e.g., conservation fee enactment, PES mechanisms) will come to fruition and help to ensure availability of sustainable financing for conservation.				
Socio-economic sustainability	Moderately likely (ML)	During consultations, many respondents voiced their strong support for and ownership of the project; also, strong political will was demonstrated to secure the integrity of the project site through land use changes; however, one clear weakness involved lack of "buy-in" and understanding by practitioners, to ensure the continued use of valuable data collected during research activities.				
Institutional sustainability	Likely (L)	Significant institutional framework elements have been put in place (e.g., significant increase in area of Class 1 Forest Reserves; amendment of Forest Enactment 1968, formulation of Sabah Forest Policy 2018; approval of PES policy; preparation of integrated landscape management plan).				
Environmental sustainability	Moderately Likely (ML)	Development pressures, encroachment into forest reserves, and wildlife poaching still continue to threaten environmental integrity within the multiple-use forest landscape; however new efforts to address wildlife poaching (e.g., SFD special force team; wildlife committees) have recently been initiated.				
		Impact				
Environmental Status Improvement	Minimal (M)	Wildlife corridors established, plots developed for biodiversity surveys, rehabilitation efforts all contribute to improving environmental status; however, development pressures, destructive and illegal practices still continue to threaten environmental integrity within the multiple-use landscape.				
Environmental Stress Reduction	Significant (S)	Key elements of an enabling framework put in place for reducing environmental stress, especially improved ecosystem connectivity; integrated management plan provides a roadmap for improved sustainable management in the project landscape.				
Progress towards stress/status change	Significant (S)	Good prospects for replication and scaling up, mainstreaming achieved, e.g., through policy actions such as amendment of Forest Enactment 1968, formulation of Sabah Forest Policy 2018, approval of PES policy.				
PROJECT RESULTS	SATISFACTORY (S)					

MFL Overall Project Results Rating

The above accomplishments and based on the extensive factual evidence gathered during the course of the TE; and recognising the significant progress that has been made in mainstreaming biodiversity conservation in multiple-use forest landscapes in Sabah as a result of project interventions, the MFL Project was given an overall *Satisfactory (S)* rating by the TE Team.

TE Key Recommendations

The key recommendations which have emerged as a result of this terminal evaluation are as follows:

- i. Undertake measures to replicate better ecological connectivity, as demonstrated in the project area.
- ii. Take steps to ensure that research data is given relevance through continuing application and dissemination.
- iii. Uphold the ban on oil palm plantations in permanent forest reserves; confine plantations to previous agricultural or degraded lands.
- iv. Strengthen the role of the private sector in biodiversity conservation, within multiple-use forest landscapes.
- v. Adopt measures to improve the efficiency of project design, implementation, and management functions (reference to TE reports, socialization period at project start-up, project performance canvas, time allocation for the procurement of consultants, communication strategies, Knowledge management and capacity building).
- vi. Link lessons learned from the Sabah MFL project with other related initiatives.

4.0 PROJECT FINANCIAL ANALYSIS

Project activities and expenditures were guided by the approved Annual Work Plans. Table 4.1 and Table 4.2 show comparisons between budgeted and actual expenditures. Actual spending was around USD 4,098,745 or 93.1% of the project budget as of 9th December 2019 (Table 4.2). Annualized project expenditure was low for the first three years (1.6%, 2.4%, 11.9% of the total budget) and peaked in 2016 (37.6%) while again dropping back, to 12.2%, in 2018 (Table 4.2). The MFL Project will have a remaining balance of funds by the end of the project, which amount approximately USD301,255. This balance, however, were already committed for a list of activities to be implemented in the remaining project period and in early 2020.

Overall, the funding commitment for co-financing was met (Table 4.3). A total of USD 20,519,039 was contributed, slightly more than the planned co-finance of USD 19,500,000. The co-financing contribution from YS was higher than from the SFD; however, this is the opposite of what was projected in the ProDoc.

Year	Pro Doc Budget (USD)	AWP Budget (USD)	Actual Expenditure (USD)	% Actual Expenditure of Annual Budget (AWP)	Cumulative (USD)
2012	-	-	8,244	_	8,244
2013	372,250	654,417	70,515	10.8	78,759
2014	1,463,250	865,000	107,069	12.4	185,828
2015	1,134,750	645,425	522,921	81.0	708,749
2016	867,250	2,217,468	1,654,334	74.6	2,363,083
2017	425,250	979,332	867,691	88.6	3,230,774
2018	137,250	834,527	537,370	64.4	3,768,144
2019*		632,034	330,601	52.3	4,098,745

Table 4.1: Budget and actual expenditure

Note:

- The above table was built upon financial tabulation compiled as part of the project.
- Budget data represent proposed expenditure based on the Annual Work Plans.
- Actual expenditure was obtained from annual Combined Delivery Reports.
- The GEF expenditure for 2019 reflects data as of 9th December 2019.
| Items | Year | | | | | | Total | | |
|-------------------|-------|---------|-----------|-----------|-----------|-----------|---------|---------|-----------|
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019* | |
| Outcome 1 | | | | | | | | | |
| Prodoc Budget | - | 82,000 | 290,000 | 171,000 | 19,000 | 19,000 | 19,000 | - | 600,000 |
| IR Budget | | | | | | | | | 1,225,000 |
| AWP Budget | - | 225,000 | 250,000 | 364,024 | 332,760 | 382,709 | - | - | 1,554,493 |
| Actual Exp | 8,244 | 12,421 | 1,776 | 86,917 | 285,860 | 297,141 | - | - | 692,359 |
| Outcome 2 | | | | | | | | | |
| Prodoc Budget | | 127,000 | 612,500 | 496,500 | 415,500 | 339,500 | 9,000 | - | 2,000,000 |
| IR Budget | | | | | | | | | 2,368,000 |
| AWP Budget | | 184,000 | 325,000 | 130,000 | 1,440,209 | 436,775 | - | - | 2,515,984 |
| Actual Exp | | 3,565 | - | 343,820 | 1,169,063 | 420,887 | - | - | 1,937,335 |
| Outcome 3 | | | | | | | | | |
| Prodoc Budget | | 122,750 | 495,750 | 409,250 | 354,750 | 8,750 | 8,750 | - | 1,400,000 |
| IR Budget | | | | | | | | | 407,000 |
| AWP Budget | | 155,750 | 185,000 | 73,600 | 184,499 | 120,721 | 802,759 | 617,030 | 2,139,359 |
| Actual Exp | | 1,829 | 1,583 | - | 99,787 | 147,919 | 510,607 | 108,240 | 869,965 |
| Project Managemen | nt | | | | | | | | |
| Prodoc Budget | | 40,500 | 65,000 | 58,000 | 78,000 | 58,000 | 100,500 | - | 400,000 |
| IR Budget | | | | | | | | | 400,000 |
| AWP Budget | | 89,667 | 105,000 | 105,000 | 260,000 | 172,000 | 31,767 | 15,004 | 778,438 |
| Actual Exp | | 52,700 | 103,710 | 92,184 | 99,625 | 1,743 | 26,764 | 222,361 | 599,087 |
| TOTAL | | | | | | | | | |
| Prodoc Budget | | 372,250 | 1,463,250 | 1,134,750 | 867,250 | 425,250 | 137,250 | - | 4,400,000 |
| IR Budget | | | | | | | | | 4,547,984 |
| AWP Budget | | 654,417 | 865,000 | 672,624 | 2,217,468 | 1,112,205 | 834,527 | 632,034 | 6,988,275 |
| Actual Exp | 8,244 | 70,515 | 107,069 | 522,921 | 1,654,334 | 867,691 | 537,370 | 330,601 | 4,098,745 |
| % Expenditure of | 0.2% | 1.6% | 2.4% | 11.9% | 37.6% | 19.7% | 12.2% | 52.3% | 93.1% |
| Total Project | | | | | | | | | |
| Budget | | | | | | | | | |

Table 4.2: Budget by Prodoc and AWP and Actual Expenditures (USD)

Note: * The GEF expenditure for 2019 reflects data as of 9th December 2019

Table 4.3:	Project	Co-Financing
------------	---------	--------------

Year	Co-Financing					Total	Average	USD
	SFD	YS/RBJ	YS/CEMD	WWF-M	SWD	(RM)	Annual Rate	
2012	350,000	1,172,400	2,318,855			3,841,255	0.3237	
2013	1,407,492	1,179,854	2,662,894	326,124		5,576,364	0.3173	1,769,380
2014	2,040,991	1,339,453	4,527,520		3,600	7,911,563	0.3055	2,416,982
2015	2,363,968	3,652,251	4,342,346		1,620	10,360,185	0.256	2,652,207
2016	3,484,319	1,459,748	4,611,280		1,000	9,556,347	0.241	2,303,080
2017	1,629,958	299,846	4,572,701			6,502,505	0.2325	1,511,832
2018	2,244,109	9,362,722	4,711,560			16,318,391	0.2478	4,043,697
2019*	1,000,000	114,766	2,207,685			3,322,451	0.2385	792,405
Total						16,732,997		
Total (RM)	14,520,838	18,581,041	29,954,840	326,124	6,220	63,389,063		
TOTAL (USD)**	4,700,395	6,014,683	9,696,382	105,566	2,013	20,519,039		
Planned (USD)	15,000,00		4,400,000	100,000	-	19,500,000		

Note: ** Due to the sensitivity of exchange rates affecting the figures, annual average rates were used. The annual average rate for 2012 was used to reflect the total co-financing contribution in USD.

Source of average annual currency exchange rates: https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx, https://www.xe.com/currencyconverter/convert/?Amount=1&From=MYR&To=USD

*As of Third Quarter 2019

Financial records were well-organized and kept up to date. All Funding Authorization and Certificate of Expenditure (FACE) forms which were issued by the project were organized by year, while Combined Delivery Reports were generated by activities and year. Table 4.4 summarizes the relevant audits and checks that were conducted over the project period, including the National Implementation Modality (NIM) Audit by the National Audit Department of Malaysia, Implementation and Monitoring Stage Quality Assurance Report, UNDP Micro Assessment and the Harmonized Approach to Cash Transfers (HACT). Generally, the audit and check findings indicated low risk. As shown in Table 4.5, the budget for the MFL Project was heavily weighted towards research under GEF's 'targeted research modality.' While the total investment for research did not change much from the design budget to actual expenditure, a significant reallocation occurred, with the budget for Component 3 (sustainable financing) sharply reduced, and the budget for Component 2 (onsite MFL planning and management demonstration) significantly increased. The budget for Component 1 (enabling environment optimization) fluctuated somewhat between original project design and actual expenditure.

No.	Audit/Relevant reports	Scope
1	National Implementation Modality Audit	Audit period: 5 Sept 2012 – 31 Dec 2016
	by National Audit Department (March	Combined Delivery Report
	2016)	Statement of Assets
		Cash Position
2	Implementation and	Social & Environmental Standards
	Monitoring Stage Quality	Management & Monitoring
	Assurance Report (January	• Efficient
	2017)	• Effective
		Sustainability & National Ownership
3	UNDP Micro Assessment by Moore	Implementing partner
	Stephens (July 2016)	Programme management
		Organisational structure and staffing
		• Accounting policies and procedures
		Reporting and monitoring
		Information systems
		Procurement
4	Harmonized Approach to Cash Transfer	Application of a common operational
	(HACT) Spotcheck Report (2017, 2018	framework for transfer of cash to ensure
	and 2019)	closer alignment and improvements of
		national systems.

Table 4.4: List of Audits and Relevant Financial Monitoring Reports

Component*	Budget (USD)	Difference (%)		
	ProDoc	Inception	Actual	ProDoc Vs.	ProDoc Vs.
		Report	Expenditure	Inception	Actual
Component 1	384,000	1,009,000	686,732	62	44
Component 2	1,818,000	2,156,000	2,222,358	16	18
Component 3	1,240,000	247,000	95,795	-80	-92
TOTAL	3,442,000	3,412,000	3,004,885		
% of Total Budget	78%	78%	68%		

Table 4.5: Research and Consultancies: Budget Allocation Versus Actual Expenditure by Component

Note*

Component 1: An enabling environment for optimized multiple-use planning, financing, management and protection of forest landscapes.

Component 2: Multiple-use forest landscape planning and management system demonstrated at pilot site.

Component 3: Sustainable financing of protected areas and associated forest landscape areas demonstrated at the pilot site.

5.0 BEST PRACTICES AND SUCCESS STORIES

5.1 Well Managed Forest

Through the MFl project, Sabah now has close to 400,000 hectares of Forest Stewardship Council (FSC) certified forest areas - the largest in the country. This was achieved after the State received another Forest Stewardship Council (FSC) Well Managed Forest Certificates Gunung Rara Forest Reserve (now known as Mt. Magdalena Forest Reserve), which is within the MFL project area. Although maintaining certification is a challenging task as the work at Mt. Magdalena FR has shown the SFD is committed in moving forward the need to certify other forest reserves in Sabah. Following the implementation of Sustainable Forest Management (SFM) practices, the way Sabah manages its forests has improved remarkably, particularly in terms of phasing out short term logging licences which did not adhere to sustainability principles.

Through new practices, long term forest management plans were designed, reduced impact logging was introduced and the SFD started protecting High Conservation Value forests - home to diverse wildlife and plants and which also serve as watersheds. This is indeed a success story for Sabah. It is a fact that the SFD's experience with the MFL project now serves as an important catalyst in spreading SFM to the State's 3.6 million ha of forest reserves.

5.2 Mainstreaming Biodiversity

In addition to SFM success, the project was successful in bringing about a change in the land-use designation in much of the project area to "Class 1 Forest Reserve. This has ensured greater protection of biodiversity over a vast area which re-connects 3 existing Conservation Areas of global significance—the Danum Valley, Maliau Basin and Imbak Canyon. Collectively, this area which contains six out of seven of Sabah's globally threatened fauna species represents an epicenter of high biodiversity importance within the "Heart of Borneo" global biodiversity hotspot. From an original 18,517 ha of protected area at the start of the project, some 156,586.37 ha were established as Class 1 Forest Reserve and Virgin Jungle Reserve by the end of the project. The planned land-uses reflect the project's strategy to integrate and mainstream diversity. The integration of biodiversity concerns landscape planning and development was further enhanced with the enabling policies, which have been formulated and now in place.

5.3 Research

Research supported through the project made some ground-breaking discoveries. As part of GEF-supported initiatives for targeted research, a number of key scientific discoveries were made. Among the most interesting of these, the result of airborne Light Detection and Ranging (LiDAR) technology and geospatial mapping, was the determination that, per hectare, the above-ground carbon storage in Sabah's unlogged forests exceeds that found in the Amazon and Congo Basins. Equally exciting was the discovery that globally, the tallest trees in the tropics, which

may grow up to around 100 m in height, are found in Sabah. In fact, the two discoveries are closely linked—the high carbon storage in Sabah's forests is directly tied to the higher capacity which such tall trees provide. These discoveries only emphasize the critical importance of protecting Sabah's forests, not only for their biodiversity value, but also to mitigate the impacts of climate change.

5.4 A Platform Created

Through the multi-use landscape-level approach that was applied in the project, a platform was created to enable greater cooperation and collaboration among a diverse group of stakeholders. Through the project, representatives of state government agencies, NGOs, academia, and the private sector were brought together, thus enabling stakeholders to work in a collaborative manner to achieve common goals. Furthermore, the project stimulated greater awareness of the importance of preserving biodiversity, especially among private-sector partners. Through their exposure to the conservation activities of the project, several private-sector concessionaires in the project area actively participated in the research functions of the project and benefitted from training activities supported by the project. They also gained a greater appreciation for the importance of maintaining the unique biodiversity of Sabah's critically-important dipterocarp forests. This resulted in the incorporation of a stronger ethic for environmental sustainability, and led to the application of a range of measures which further contributed to the overall conservation efforts in the area.

5.5 PES Concept and Conservation Finance

Through the project, the concept of PES and Conservation Finance was approved by the Sabah State Cabinet, and significant progress was made toward enactment of an ecosystem conservation fee. the drafting of an enactment - *Ecosystem Conservation Authority Enactment 2020* - to make provisions for the establishment of the Ecosystem Conservation Authority for the purpose of and in relation to the sustainable financing or funding of conservation, management, protection and rehabilitation of the ecosystem and natural resources is another success of the project. The concept for the fee is based primarily on the fact that, in recent years, nature-based tourism has become one of the most important economic drivers for Sabah State. Through the proposed enactment, a State-level conservation fee would be assessed and collected at the airports (and other international transit points) for all departing passengers.

5.6 Piloting PES at Community Level

Through a trial conducted in the Babagon community, the project has pilot-tested the establishment of a scheme for payment for ecosystem services (PES). In this pilot project, community members are to be paid for maintaining watershed quality and functionality, so that water resources are preserved. Along parallel lines, the Forest Policy identifies as one of its strategies, the development of a State-wide scheme for PES. Thus the Babagon pilot

implemented under the project may provide valuable lessons that will help in formulating a State-wide PES scheme in the future.

5.7 Key Environmental Policy Goals

The project has supported the formulation and realization of key environmental policy goals at the State level. One of the recent policies which had been adopted by the Sabah State Government, and perhaps the policy which is most relevant to the focal area of this project, is the Sabah Forest Policy, adopted in 2018. The project has been influential in the formulation of the Forest Policy, and at the same time, has contributed to the achievement of a number of its stated objectives.

6.0 LESSONS LEARNED (ISSUES/CHALLENGES, ADAPTIVE MANAGEMENT AND MANAGEMENT RESPONSES)

6.1 Issues/Challenges

In any projects, there is no way that everything will go perfectly and according to plan. There will always be deviations from the original plan or target; and the MFL Project is no exception. There are many challenges. The challenges faced in implementing/executing the MFL Project among others are as follows:

Target Deadlines/insufficient Lead times: The activities which began upon finalization and acceptance of the Inception Report and inception phase had taken just over two years from project signature to full project implementation. Consequently, there was a great challenge for the Project Team to meet the target deadlines. A big thing that the Project Team struggled was what begun a desperate attempt where the team tried to fit the requirements in the already drawn boundaries.

Land-use Changes - Balancing Conflicts of Interests: In order to serve a number of different groups with diverging interests, the Sabah Forestry Department outlined plans in July 2013 for major land-use changes to the MFL Project that would effectively double the extent of plantation cover to almost 90,000 ha, including over 33,000 ha of oil palm plantations – a crop specifically excluded in the Project Document submission. With these conflicts – production of goods vs. services for the community, reforestation vs. protection of biodiversity, local vs. state and national interest - the main challenges are in the evaluation and balancing of the state and stakeholders needs and the adjustment of forest management. This adjustment did not take place automatically; it took the project a process of continually trying to reach agreements, which subsequently a MoU between the SFD and UNDP was signed.

Policy Acceptance: Forest policy in general is a sector policy, linked with other similar sectors, but forest policy is also subject to aspects policies, which are principally cross-sectoral. The potential of a single forest, to offer a series of benefits to society, predestines forestry to be influenced by sectoral and cross-sectoral policies. Both the sector and the aspects are linked with the nature of forestry. Therefore, coordination and for integration are rather complicated. In all these relations with other policies, particularly when the issue of "State-level Policy on Payment for Ecosystem Services and Ecosystem Conservation Programme" and the Sabah Conservation Fee was introduced, having them accepted was not an easy task because so many politicians and senior administrators understand so little about forestry and care even less.

Implementation: Implementation of the project is progressing on the basis of the initially- set outputs, accepted to ensure accomplishment of the project outcomes and objective. The reality that the Sabah MFL is a complex project intervention and that to achieve the overall project objective will demand cutting-edge, well developed responses on biodiversity, socio-economic

and connectivity conservation. There is still some not on target to be achieved at the closure of the project. More efforts have to be done to address this topic.

Participation: Stakeholders were consulted at each step of the way to provide inputs to the process while participation of the partners, stakeholders and NGOs in decision-making and implementation were of constant attention - timely information share, interim committee meeting, workshops with participation of stakeholders, observance of all the Government ,UNDP and GEF accepted procedures on tenders and procurement and etc., serve an obvious proof of the participation and its importance in project implementation process. However, there were occasions where some project activities were too much driven by the project partners with hidden agendas over the "right course" of the MFL Project.

Human Resources and Communication: The MFL Project is challenging, which demands a certain level of knowledge and expertise. The challenge is to have trained workforce to meet the challenges and performed assigned tasks. A good example is the processing of data from CAO where it requires a highly technical skill and competent staff to process.

In today's fast-paced economy, information needs to pass as rapidly as possible, yet dissemination of quality reports from the field is still a problematic. Often they do not have accurate or up-to-date information. Sometimes submission of reports from the field did not meet deadlines. This was due to the geographically dispersed teams and differences in concept of time. The communication issues to make sure that the field team is accountable throughout their daily workloads, and keeping the team on the same page, are other challenges of the MFL Project. And because things never work as foreseen, sub-activities were constantly adjusted. Monitoring of activities was needed to check if all goes well; and readjustments were made in time.

High level of Commitment is Essential: The Sabah MFL Project was a complex, multidimensional endeavor, involving a wide range of stakeholders, and requiring a good technical understanding of the issues concerning multiple-use forest landscape management. Although the MFL Project benefitted from the commitment and engagement from key agencies and organizations (including government agencies, private sector and NGOs), a high level of commitment and engagement from concerned agencies (and other stakeholders) is essential for project success.

Proper planning and preparation for the utilization of research data is essential. A considerable proportion of the project budget was invested into generating research data, which provided an opportunity to establish a rigorous, science-based foundation for decision- making. However, equally important as the production of accurate and reliable data, is consideration of how the information will be applied and communicated, by whom and for whom. Adequate preparation needs to be made, to ensure that the intended users are properly prepared to understand, manage, and apply the data. This requires careful consideration and planning, and

should be accompanied by appropriate training with counterparts at the outset of any such datagathering effort.

A clear vision and strategic direction are critical for effective project design and *implementation*. The MFL Project design was ambitious in its objectives. Thus, having a clear vision and strategic direction are essential for developing a project which can be effectively implemented, and which will have a greater probability to achieve its intended outcomes. This is especially important for projects with challenging objectives, such as addressing threats to biodiversity.

An initial period of socialization may help to reduce delays later on, and make project start-up processes smoother. It is important to note that the MFL Project experienced significant delays in its inception phase, including the recruitment of the complete Project Team. The TE Team acknowledged this and in their report emphasized that it is vital to avoid delays at an early stage of project implementation. An introductory preparatory period of socialization is, therefore, being considered as standard practice for future GEF projects to afford sufficient time to enable project personnel to familiarize themselves with project administrative, financial and monitoring requirements.

The private sector can play an important role in biodiversity conservation, especially in a *multiple-use landscape setting*. Because of the stress placed on the "multiple-use" nature of forest management in the MFL Project, the private sector specifically, Rakyat Berjaya (RBJ) as the concession holder under YS, and other RBJ's contractors were closely involved in implementation. This provided a mechanism for collaboration and engagement with the private sector, for assessing ways to mainstream biodiversity into management practices on the ground. Through their involvement in the project, managers in the private sector became more attuned and sensitized to the critical need for strengthening biodiversity conservation interventions in the context of a multiple-use forest landscape.

"Analysis paralysis" can prevent progress from being made, while adopting the Nike "Just Do It" approach may help to overcome barriers and lead to successful testing of innovative methods. According to the TE Team, situations sometimes arise in which it is necessary to take action in a timely manner so that a project or activity can move forward, even if the proposed methodology has not been fully proven. This lesson is drawn from the TE Team experience concerning the research project on NNL/NG. In such cases, the Team believed that delaying the action so that further fine-tuning can be done in greater detail may be counter-productive. As long as the proponent has a reasonable level of confidence that a particular method will not have adverse environmental consequences, "just doing it" may enable the methods to be tested, proven, and adapted or adjusted as needed. This can lead to new insights and innovative solutions. This approach according to the TE Team is very much in line with the GEF focus on testing and developing new and innovative methodologies which can be more widely applied through replication. To ensure success in carrying out complex multi-dimensional projects, experienced leadership is required. The MFL Project was a complex, multi-dimensional endeavor, involving a wide range of stakeholders, and requiring a good technical understanding of the issues concerning multiple-use forest landscape management. Good leadership skills that are needed to ensure successful performance in such a project would include (among others): good social and communications skills, tolerance, and patience, and a good understanding of the scientific method, and the ability to design, manage and implement appropriate scientific field research activities.

To develop appropriate management mechanisms, it is important that preparatory steps are carried out in a logical sequence. For example, to prepare for formulation of an environmental management policy, the first step would be data gathering. After necessary information is obtained, a feasibility analysis would be conducted. Only after these steps have been completed would it be appropriate to formulate the policy. Formulating the policy without having gone through the proper preparatory steps would result in having a policy with inherent weaknesses.

Gender Equality: Gender mainstreaming is an essential component of UNDP projects. In the case of the MFL Project, there was no major gender focus in the project, and thus, women as a target stakeholder group were not effectively included. This was perhaps unavoidable, due in large part to the fact that no communities are located within the MFL Project landscape. Efforts under the project to address gender concerns were limited to recording sex-disaggregated data for participation of males and females in project sponsored functions (e.g., workshops and training).

6.2 Adaptive Management

Land-use in the Project Landscape

In response to the land-use changes that occurred, it was necessary to re-evaluate and reaffirm the project's relevance within the target landscape. This led to the setting up of the Technical Working Group (TWG) on Biodiversity, which conducted a rapid assessment of the project landscape. The Rapid Assessment reviewed the Original Plan (2011), the Current Plan (2013) and proposed a TWG Plan (2014). The process that was put in place to translate the original ProDoc and produce the Inception Report was an adaptive management of the project, which allowed the MFL project to move ahead albeit after a $2\frac{1}{2}$ -year delay.

Management Structure Revised

The ProDoc sets forth a project management structure, which included the establishment of three "task forces," one for each of the project components. Shortly after the start-up of the project, the task forces as originally conceived in the ProDoc were abandoned. This came about in part because project management found it difficult to enlist experts having the requisite skills and knowledge to serve on these bodies. In place of the task forces, a TWG group was created. This

group basically served the same technical oversight function as intended for the three task forces, but with a narrower focus on biodiversity issues. Following the recommendations from the MTR, the TWG was dissolved and the Economic Modelling study was cancelled. As an adaptive measure in response to these events, expert groups were set up to address comments and provide technical guidance as required.

6.3 Management Responses

The Mid-Term Review Team concluded their report with a number of key recommendations as summarized in Chapter 3.4.1 of this report. The management responses to the MTR's recommendations can be referred to in **ANNEX 3**. Overall, most of the recommendations were completed and on-going while others are no longer relevant.

Meanwhile, the management responses on the TE's key recommendations can be referred to in **ANNEX 4.** Most of the key actions will be acted upon within a 5-year timeframe, that is, 2021-2025.

PROJECT ACHIEVEMENTS TOWARDS PROJECT OBJECTIVE, OUTCOMES AND OUTPUTS

Description

Objective

To institutionalize a multiple-use forest landscape planning and management model which brings the management of critical protected areas and connecting landscapes under a common management umbrella, implementation of which is sustainably funded by revenues generated within the area

Description of	End of Project Target Level	Achieved	Achievement Descriptions
Indicator			
Conservation of globally and nationally significant biodiversity within project landscape	By the end of the project, at least 145,000 ha of project landscape established and effectively managed as new Class I Protected Forest.	Yes	As of 30 June 2019, a total of 156,586.37 ha [excluding the Plant Improvement and Seed Production (PISP) plots] within the project landscape area, have been established as Class VI Virgin Jungle Reserve (VJR) and Class I Protection Forest Reserve. This has exceeded the updated end of project target of 145,000 ha by 7.99% or 138,069.37 ha more from an original 18,517 ha of protected area at the start of the project. These areas are: a. Virgin Jungle Reserves (VJR) gazetted in 2012: i. Batu Timbang = 261 ha; ii. Nurod-Urod = 1,705 ha; iii. Ulu Sungai Napagon = 523 ha; iv. Brantian-Tatulit = 38 ha; and v. Imbok = 127 ha vi. Sg. Imbak (Ext.) VJR = 4,655 ha gazetted in 2014

b. Class I Maliau Buffer Zone Forest Reserve (Part of) = 16,830 ha gazetted in year 2012.
c. Class I Mt. Magdalena Forest Reserve = 48,890 ha in year 2012.
d. Class I Mt. Magdalena Forest Reserve (extension) = 6,665 ha in year 2013.
e. Class I Tambalunan Forest Reserve = 3,265 ha in year 2013.
f. Class I Sungai Tiagau Forest Reserve = 19,870 ha in year 2013.
g. Class I Gunung Rara Wildife Corridor Forest Reserve = 10,364 ha in year 2014.
h. Class I Maliau Buffer Zone Forest Reserve (extension) = 5,181 ha in year 2014.
i. Class I Sungai Anjeranjermut Forest Reserve = 3,857 ha in year 2014.
j. Class I Sungai Sumagas Forest Reserve = 4,215 ha in year 2014.
k. Class I Sungai Tiagau Forest Reserve (extension) = 7,010 ha in year 2014.
1. Class I Northern Gunung Rara Forest Reserve = 8,443 ha in year 2015.
m. Class I Maliau Buffer Zone (extension II) = 13,810 ha in year 2015.
n. Class I Sungai Tiagau Forest Reserve (extension II) = 877.37 ha in year

Genetic, species and ecosystem diversity conserved in approximately 261,000 ha of the Kalabakan-Gunung Rara Forest Reserves, within a sustainably-managed forest landscape of 393,544 ha, including adjacent protected areas.	Yes
No decrease in primary forest areas.	Yes
The project seeks as an over-arching target to avoid and minimise impacts on	

2016.

Besides the above mentioned areas, there are other areas, which are also strictly protected. These areas are Plant Improvement and Seed Production (PISP) plots with a total area of 628 ha. Therefore, if the PISP plots are to be included, the total protected area within the project landscape is 157,214.37 ha. This has exceeded the updated end of project target (145,000 ha) by 8.42%.

This is a significant achievement, which provides realistic opportunities for landscape-scale connectivity between the three globally significant important conservation areas (Maliau Basin, Danum Valley and Imbak Canyon = 132,640 ha). It is expected that genetic, species and ecosystem diversity are conserved within the MFL project area, that is, all protected areas within the MFL project area have potential for significant ecosystem restoration. In short, connectivity between the three globally significant protected areas was established and maintained and that ecological best practices on connectivity corridors were applied.

Except in areas that have been gazetted as Class I Protection FRs, other primary forest area stands found in the MFL project area are located at higher elevation or on steep areas/slopes where forest harvesting using conventional logging was not possible in the past. The total area is approximately 6,737 ha. These areas are being set aside for natural forest management (NFM) but to be managed for conservation due to the nature of the terrains, which are steep.

Biodiversity and Ecosystem Conservation Programme and Monitoring

biodiversity, including through plantation		
development and plans to achieve NNL of	_	With regards to no net loss in levels of biodiversity and other ecosystem
biodiversity within the Project area. While	Yes	functions, the Sabah Government is committed in formulating a policy to
on-site mitigation is a strong preference, if		implement No Net Loss (NNL) of biodiversity within the project landscape
this proves unattainable, NNL of		or neighbouring areas. The NNL is in fact being incorporated in the Sabah
biodiversity should be achieved through		Environmental Policy.
offsite compensation, e.g. via the		
conservation of forests neighboring the		The State Government also has the policy whereby no part of the Permanent
Project site.		Forest Estate is degazetted except under extreme circumstances but then the
		excised area(s) shall be replaced. This commitment was shown through the
		continual assessment of the biodiversity losses and gains in the project
		landscape under the Forest Trends consultancy that resulted with a draft
		policy on "Managed Retention of Sabah's Forests: Moving Towards
		Biodiversity Net Gain". Managed retention is intended to ensure that, for
		any areas of forest reserve which are "excised", these will be replaced with
		forest areas of comparable size and quality.
		The Sabah Forestry Department is in the process to generate a new map on
		primary and/or intact forest areas in the project landscape. Maintenance of
		natural capital within the project landscape is on-going through forest
		restoration and/or enrichment planting and silvicultural operations by the
		SFD, Yayasan Sabah's joint venture (JV) partners and INIKEA in
		accordance with their plan (currently there are 8 Forest Management Plans
		and 1 Plan of Operation prepared in the Project Area) and Annual Work
		Plans (AWP) respectively.
		The sumulative total area of Marsh 2010 that has have ellevelter the
		The cumulative total area as of March 2019 that has been silviculturally
		uteated is 59,909.05 na, which comprises of YS & JV Partners = $1/,508.53$
		na; YS (Nadin Enterprise) = 5,000 na; SFD = 16,625 na; and INIKEA = 715.5 h M = 111 f = 100
		/15.5 ha. Meanwhile, the cumulative total area for enrichment planting

	since 2013 is 943.2 ha (SFD = 80 ha and INIKEA 863.2 ha).
A. Elephants 1.0-1.5 Ind/km2 B. Organg utan 2.0-3.5 Ind/km2	Wildlife Populations
C. Sun Bear >2.0 Ind/km2 D. Clouded Leopard >2.0 Ind/km2	Yes The indicator use for the four (4) wildlife species (elephant, orangutan sun bear and leopard) was found not suitable during the Inception Workshop. Thus, the populations as reported here are based on estimates on orangutan monitoring data from 2016 that showed an increase of orangutan density in the eastern part of MFL project landscape i.e., Mt. Magdalena Forest Reserve and along the Gunung Rara Wildlife Corridor Forest Reserve in the west (based on nest counts: 31 - 200); and some parts within the Tambulanan Forest Reserve and Sg. Tiagau Forest Reserve Extension $(1 - 10; 11 - 30)$ – mainly centered around lowland areas $(0 - 250 \text{ m a.s.l.})$.
	The population of orangutans within the project area is increasing, that is, the orangutans are moving into the Project Area as the forest recovers especially when more areas had been planted under the mosaic concept in Empayar Kejora areas.
	WWF-Malaysia has also been tracking elephants in the project area and suggests that elephant population data was reasonably good and that there are healthy populations. They estimated 300 elephants in the project area. The distribution of elephants is centered on lowland areas particularly at the eastern part where the area appears to be part of an elephant migration corridor (north – south, i.e. between Mt. Magdalena FR in the north and Sg. Sumagas FR in the south).
	HCV and HCS assessment predicted that the project area is in a medium suitability area that varies from medium to high for clouded leopard and sun bear. However, there is insufficient data to confirm the number of both

			 species within the project area. Nevertheless, indirect observations supported by evidence from the scientific literature and the field work carried out by the consortium of scientists highlighted the presence or likely presence of both species. Camera trappings, mammal survey and aerial monitoring of orangutan population size are work in progress; and will be carried out continuously in accordance with the "Manual of Protocols for Sampling Biodiversity in the UNDP-GEF Project Landscape" prepared by the Consortium of Scientists. Overall, there was a recognition and requirement of intensive management, including robust patrolling systems, and maintenance of the connectivity corridors areas.
Level of functionality of biodiversity- friendly, multiple use forest management systems in Sabah	• Project landscape is being managed in a manner that demonstrates the technical, economic and financial feasibility of the new management approach.	Partially	Mount Magdalena Forest Reserve (formerly known as Northern Gunung Rara Forest Reserve – 61,330 ha) was certified under Forest Stewardship Council (FSC) certification in May 2015, which indicates that the protected forest reserve is managed under a well-managed forest in accordance with sustainable forest management principle. All activities inside the project area are being managed in accordance with an approved 10-Year Forest Management Plan. The 10-Year Forest Management Plan contains a Chapter on "Financial Analysis and Sustainable Project Viability". The financial analysis is measured in terms of Net Present Value, Internal Rate of Return and Benefit-Cost Ratio. Sensitivity analysis is also conducted to examine changes in returns with possible changes in the main variables of whether the project is technically

and economically viable or otherwise. All the current 10- Year FMPs (8 of them) showed that the projects currently carried out in the MFL project area are technically, economically and financially feasible. • An enabling policy and regulatory **Progress on Enabling Environment/Policy** The State Government has introduced a policy to chart a transition to Net environment ready to facilitate Yes expansion / replication of the model Gain of forest biodiversity in the coming years. A brief report on "Forest (i) to other forest landscapes in Sabah Loss-gain Analysis for Sabah" was prepared and presented in 1.5 days that include (or will include) policy consultation workshop. protected forest reserves, and (ii) to Achieving Biodiversity Net Gain may not be feasible for Sabah in the first other PA sub-systems in Sabah. few years, so Sabah would build towards a policy of "managed retention" of biodiversity, which can achieve a specific conservation target that considerably exceeds the CBD's Aichi targets. This will build capacity in government and developers, and in a few years, Sabah will likely be in a better position to implement a Net Gain policy, which then ready to facilitate expansion / replication of the model to other forest landscapes in Sabah. Achieving Biodiversity Net Gain may not be feasible for Sabah in the first few years, so Sabah would build towards a policy of "managed retention" of biodiversity, which can achieve a specific conservation target that

> Meanwhile, The SFD has finalized its Forest Policy in June and approved by the State Cabinet on 1 August 2018. The Forest Policy contains 7

> considerably exceeds the CBD's Aichi targets. This will build capacity in government and developers, and in a few years, Sabah will likely be in a better position to implement a Net Gain policy, which then ready to facilitate expansion / replication of the model to other forest landscapes in

Sabah.

The Sabah Forestry Department and Yayasan Sabah have enhanced capacities and experience with the model needed to enable its maintenance and replication.
End of Project target (30% over baseline), SFD | YS:
Enabling environment 83 | 87 Leadership 87 | 100 Knowledge 75 | 90 Accountability 66 | 81 Overall Mean Score 78 | 90 Thrusts where objectives, strategies and action plans are clearly stipulated. Sustainability of forest resources and protection of biodiversity and environmental services are under Thrust 1 and Thrust 2 respectively.

Capacity Building on Leadership and Knowledge

The capacity assessment per UNDP Capacity Assessment and Development Scorecard, was not fully applied due to context related challenges.

An adapted capacity assessment questionnaire has been applied and was used after the training.

The Sabah Forestry Department had conducted several trainings during the year to enhance capacity and technical knowledge on key thematic issues (Forest Protection, Forest Enforcement, Accounting, REDD Plus, etc.) where some of which were supported by the MFL project.Efforts are being made to strengthen the institutional, systemic and individual capacities of the Sabah Forestry Department to implement adaptation- and mitigation-related actions. In this respect, various trainings have been organized by the Sabah Forestry Department and being supported by the project.

Training related public awareness

The cross-cutting issues like the environment and climate change are relevant to all aspects of development; and would require action and support at the local and regional levels. The Sabah Forestry Department placed on empowering its staff and the local communities and enhancing their capacities to better cope with extreme weather events and to participate in prevention efforts to reduce fire occurrence. Therefore, specialized training programmes related public awareness on fire protection and workshops tailored to the local environment and conditions, coupled with a stronger

Yes

engagement of affected key stakeholders have been organized throughout the year for the staff of the Sabah Forestry Department, SFMLA holders and the local communities.
Capacity Training on Support Systems Training events were delivered to enhance the capacity of research assistants from Yayasan Sabah to conduct Gibbon (<i>Hylobates muelleri</i>) point count surveys and from the Sabah Forestry Department to conduct drone surveys for Orangutan nests and install carbon plots. Training on collecting field data for Spatial Monitoring and Reporting Tool (SMART) application was carried out by WWF-Malaysia on 8th – 11th April 2019 in Luasong Forest Center; attended by 21 participants. Prior to that, several
trainings were provided at the project area by the consortium of scientists. These trainings are:
i. GPS and Basecamp software (Year 1 with refresher training in Year 2).
 Drone construction, mission planning and piloting (Year 1 with refresher training throughout the project). Researchers and Research Assistants undertook training course at Hornbill Surveys covering skills such as drone building, mission planning and drone piloting. This course provided training in the repair and maintenance of the drone following accidental crashes, and will allow staff to continue the fieldwork after the UNDP project is completed.
 iii. Point count and line transect training (Year 1). Researchers and Research Assistants participated in a Gibbon and Hornbill point count training course conducted by HUTAN on 27 to 31 January 2017. This course was delivered at Sukau under the guidance of Dr

Marc Ancrenaz and provided field training for Gibbon point count surveys, Hornbill surveying and Orangutan nest line transects.
iv. Point count and line transect training (Year 2). Research assistants were given a refresher course to carry out the survey.
v. SMART Patrols and SMART software (Year 2). Discussions were held between project staff with the Kalabakan Forestry Office.
vi. Drone survey techniques, carbon plot measurement and orangutan survey techniques (Year 2). Refresher training for Research Assistants.
vii. Training Workshop (Year 2). One day workshop for staff of Sabah Forestry Department and Yayasan Sabah including demonstrations of methods for dung beetle sampling and identification and deployment of drones.
 viii. PhD training (Years 1 and 2). The project provides a platform for four researchers to obtain data for their PhDs (three Malaysian, one UK), and therefore contributes to the supply of highly skilled postgraduates with experience of biodiversity monitoring and environmental management in Malaysia.
Capacity–building for raid, investigation and persecution
Compliance and enforcement of forest resource activities is one of the most
prerequisite requirements of the Sabah Forestry Department; and is
primarily carried out by the Sabah Forestry Department's officers who are
designated as Forest Officers under the Sabah Forest Enactment 1968.
Forest crimes and/or illegal activities ranging from breach of licences,

encroachment, illegal possession, and illegal timber harvesting in Sabah were quite significant. Most of these cases were investigated and brought to courts ((lower and high courts). In most cases, the SFD lost the case due weaknesses in persecution, inadequate evidence and poor investigation papers, thus, a great loss to the State in terms of revenue.
One of the long-term solutions to the above threats and their underlying causes besides focusing operational activities for forest law enforcement around a prevention, detection and suppression framework is enhancing and transforming the quality of the Forest Officers on raiding, investigation and persecution with the assistance from specialists /experts such as from the Royal Malaysia Police College (Maktab Polis DiRaja Malaysia). In this respect, the Sabah Forestry Department supported by the project, has organized a 2½ days training/course on Raid, Investigation and Persecution for its officers on 23-25/10/2018. Further training courses will be conducted
in July, August and September respectively.
Other Training Courses conducted and/or to be conductedSeveral capacity-building trainings/courses have been outlined, conductedand to be conducted in 2019.The first module on Tree Climbing was held on 29-30 April, 2019. Thesecond module in June and the third module will be in July.The first phase of the Tree Identification Training was successfullyconducted on 23-25 April, 2019. The second phase/session was conductedon 18-20 June, 2019. The Honorary Forest Ranger Course was held on 11-
13 June 2019 while the Biodiversity & Ecosystem Conservation Programme & Monitoring was conducted on 25-27 June 2019. Other courses that have been conducted are:

Statistical "R" Course
• Continuous Intensive Training for SFD PROTECT Team
Crime Scene Investigation
Capacity Assessment Scorecard
A Capacity Assessment Scorecard was undertaken in August 2011 and was
updated in 2016. Based on the results in 2016, it was evident that from the
viewpoints of the key agencies (Sabah Forestry Department ,
CEMD/Yayasan Sabah, RBJ/Yayasan Sabah, Environmental Protection
Department, Department of Irrigation and Drainage and Natural Resource
Office), there were significant and critical capacity gaps in relation to most
of the Project Output activities. The SFD is the exception as its gaps in
connection with the Project Output activities were relatively small. In order
had carried out the following:
had carried out the following.
i The Project Board Project Management Unit and the Project
Subcontractors had taken through concerted efforts to improve the
project's outreach to the key agencies and other stakeholders;
ii. Staff capacity development and coordination for cross-agency
training for key agencies of the project area;
iii. The project had taken the opportunity of its project activities to
further clarify and create synergy between the different advisory and
management roles of key agencies of the project area, to effectively
achieve the Project Outputs; and
iv. The SFD continued to play a leadership role in the Project to assist
other agencies in capacity building.
In September, 2019 the 2016 Scorecard Assessment was updated using by

			using a score ranking system that focused on closing the gaps identified in 2016. For continuity in both documentation and institutional memory, the key individuals from the targeted agencies who filled in the assessment scorecard in 2016 were required to fill in the 2019 assessment for the purpose of updating the scorecard. Explain the results
Sabah Forest Department investment in Class 1 forest reserve planning and management	By end of Y5, the Sabah Forest Department investment in Class 1 forest is at least 25% more than the baseline (RM25 million for 58 Class I Protected Forest Reserves totalling 466,757 ha).	Yes	On a state level in 2015, the SFD has budgeted RM 25 million towards the protection of all Class 1 - Protection FRs totaling 1,260,098 ha that equates to an average of RM 19.80/ha annually. With respect to the MFL project area alone, the cumulative amount spent by the SFD as of March 2018 was RM 11.3 million while YS/RBJ and INIKEA is approximately RM 9.1 million and RM 14.2 million respectively. The cost for protection of Ulu Kalumpang Forest Reserve consisting of nearly 60,000 ha is estimated to total RM 36.9 million over 10 years including restoration and silvicultural activities. The cost of protection of the forest area is estimated at RM 21.59 million over the 10 years. Yayasan Sabah (YS) has set aside/allocated a management expense budget of approximately RM 14 million per year or RM 2 million per area per year on 7 of their protected areas (245,888 ha). The cost to manage the protected areas under YS is averaged at RM 56.90/ha/year over the total 245,888 ha. Thus, for Sabah, RM 39 million was spent over an area of 1,537,498 ha, or RM 25.40/ha/year, which is 56% more than the baseline.

Outcome 1

An enabling environment for optimized multiple use planning, financing, management and protection of forest landscapes

Description of Indicator	Baseline Level	End of Project Target Level	Achieved	Achievement Descriptions
Description of Indicator State-level system for ensuring no net loss (NNL) of biodiversity from existing forest landscapes	Baseline Level NNL is a new concept for Sabah	 Pilot implementation of NNL (component 2) within project landscape provides initial practical lessons for drafting state-level policy. State level policy and regulation on NNL drafted in Y2. 	Achieved	Achievement DescriptionsVarious consultancies have contributed conceptual frameworks but there are no approved/working economic models. As a consequence, pilot implementation of NNL within the project landscape that provides initial practical lessons for drafting state-level policy could not be carried out although there is an aspiration within the SFD for policy work in this area. However, a significant amount of research work has been carried out. Data layers including land cover have been obtained and this formed a basic layer that trade-offs for the NNL / NG policy that focused on.A gap analysis was carried out by Forest Trends to see whether law and policy in Sabah positively requires a Net Gain of Biodiversity, is neutral on the subject, or is actually a barrier to it. The capacity and experience of government, business
				and civil society to deliver Biodiversity Net Gains was also being assessed. A range of policy options for the government – with their pros and cons and what would be needed to implement them in Sabah - from voluntary business as usual through to a regulated Net Gain requirement using market mechanisms to deliver offsets were set out and

		· · · · · · · · · · · · · · · · · · ·
		consulted. Likely losses and gains were reviewed
		and mapped. Data layers in spreadsheets and GIS
		and use this to establish a plausible reference
		scenario and against this - quantify and map
		projected losses of forest condition and area was
		built. This was done for the next twenty years
		looking at developments in oil palm, forestry,
		infrastructure and so on. Where there could be
		gains in forest condition and area through
		restoration and averted loss of biodiversity, to see
		whether a net gain could be achieved, were then
		estimated. Following this, a brief report on
		"Forest Loss-gain Analysis for Sabah", was
		finalized and presented to the stakeholders in 1.5
		days policy consultation workshop in Kota
		Kinabalu.
		Based on the Forest Trends's analysis and
		feedback of the workshop, achieving Biodiversity
		Net Gain may not be feasible for Sabah in the
		first few years, so Sabah would build towards a
		policy of "managed retention" of biodiversity,
		which can achieve a specific conservation target
		that considerably exceeds the CBD's Aichi
		targets
		The study by Forest Trends and feedback of the
		The study by Forest Trends and feedback of the stakeholder workshop revealed that the feasibility
		The study by Forest Trends and feedback of the stakeholder workshop revealed that the feasibility of a Net Gain outcome for Sabah's forests
		The study by Forest Trends and feedback of the stakeholder workshop revealed that the feasibility of a Net Gain outcome for Sabah's forests (within and outside the PFEs) over the next

		twenty years almost certainly impossible unless
		the projected losses were significantly curtailed.
		Since this is not in line with the government's
		development ambitions and plans, they
		investigated and recommended an alternative
		compensation approach (not relying on achieving
		a NNL or NG goal) that would nevertheless still
		be defensible and achieve good conservation
		outcomes for Sabah's forests. The recommended
		alternative compensation system is based on a
		"Managed Retention" approach, which is easier
		to establish and run than a Net Gain system and
		thus, requires lower capacity. "Managed
		Retention" approach is recommended as the way
		forward in Sabah over the short to medium term,
		with the aim of moving towards fulfilling
		Sabah's Net Gain commitment (included in the
		Environment Policy, 2017) over the longer term.
		"Managed Retention" is a compensation
		approach that is not framed to meet the goal of
		NNL or NG of biodiversity. Instead, it is based
		on establishing a desired outcome for
		biodiversity in a jurisdiction (or at least pass
		setting a minimum threshold for the area to be
		conserved, e.g., 30%) and then determining how
		compensation for scheduled development
		impacts can contribute to meeting this
		conservation outcome (and/or not dropping
		below a minimum threshold).

				A basic ratio determines how much
				compensation has to be provided for every
				hectare of forest impacted (within or outside the
				PFEs), with ratios being set so that the desired
				conservation outcome can be achieved. This uses
				simple metrics based on multipliers designed to
				ensure there is no breach of a minimum
				conservation threshold. This is set to retain and
				formally conserve a certain level of intact natural
				forest area. The goal is conserving at least 30%
				of forest biodiversity. This is a different goal
				from 'Biodiversity Net Gain'.
				5
				Subsequently a Final Draft Policy on "Managed
				Retention of Sabah's Forests: Moving Towards
				Biodiversity Net Gain" was finalized. Therefore,
				the government of Sabah would have an adaptive
				management by introducing a policy to chart a
				transition to Net Gain of forest biodiversity in the
				coming years.
		• State-level NNL regulation	No	
		in place by end of year 5		
		(Y5).		
State-level policies and	No policies or	By end of Y5, new state-level	Yes	The "Development of State-Level Policy
regulations for generating	regulations	policies and regulations in		Options and Mechanisms for Payment for
revenues from innovative		place for generating and		Ecosystem Services (PES)" are as follows:
financing mechanisms and re-		reinvesting revenues from		
investing into PA and		innovative financing		1. Phase 2: Drat Outline of Options for

sustainable multiple-use forest	mechanisms.	Conservation Finance/PES Policy and Strategy
landscape planning and		was completed in August 2016.
management		
management		2. Phase 2: Peer-Review Retreat Report
		(November 2016)
		(10000002010).
		3 Phase 2: Draft Report on Options for
		Conservation Einance/DES Policy and Strategy
		(December 2016)
		(December 2010).
		4 Dhave 2 Deeft Demost on Ferrorell
		4. Phase 3: Draft Report on Favourable
		Conditions for implementing Conservation
		Finance/PES Policy and Strategy in Sabah
		(March 2017); a Revised Draft Report on 14
		March 2017, while the Final Report was
		completed in June 2017.
		5. Draft Report on Legal Opinion: Possible
		frameworks for the establishment of
		conservation trust funds for Sabah (September
		2016).
		6. Draft Report on Legal Opinion: Imposition of
		an environmental protection/conservation fee for
		Sabah (September 2016).
		7. Draft Final Report: Study On Willingness of
		Visitors To Sabah To Pay Ecosystem
		Conservation Fee was finalized in April 2018.
		r
		8. Draft Final Report: Cash-flow Analysis -
		Collection of Proposed Ecosystem Conservation

				 Fee and Starting-up Ecosystem Conservation Programme Office was completed in April 2018. 9. Draft Final Report: Recommendations for State-level Policy on Payment for Ecosystem Services and Ecosystem Conservation Programme was formulated and completed in March 2018. 10. Draft Final Report: Guidelines for Operationalising Proposed Ecosystem Conservation Programme was completed in May 2018. 11. The State-level Policy on Payment for Ecosystem Services and Ecosystem Conservation Programme is yet to be approved by the State Government 12. The Final Draft "<i>Ecosystem Conservation Fee Enactment</i>" was finalized but yet to be passed/tabled at the State Legislative Assembly.
Capacities of staff within relevant state level	Limited capacities and experience of forest	A 30% increase in multiple- use landscape-level forestry	Yes	Various capacity-building training within the Sabah Forestry Department have been developed
Government departments	managers	forest conservation and		and implemented as reported earlier. These were
(NROS, SEPU, SFD. YS.		financial management		generally short courses of a few days duration.
SBC. SWD. DID. EPD) to		capacities of SFD, NROS.		For example, a 5-day hands-on Open Standards
design. implement and		SEPU.YS. DID. EPD		Training for Protected Area Managers was
manage / oversee biodiversity-				conducted in November 2017 with 30

landscape-level forest		senior officers from the managerial, planning
management and sustainable		level to the forest rangers/ guards who work on
financing schemes, and to		the ground. The participants came from SFD HQ
monitor ecosystem service		and protected areas in the forestry districts of
markets		Tongod, Telupid (PINTAR), Keningau/
		Trusmadi forest reserve (FMU10), Beluran, Ulu
		Segama Malua, Tenom, Kalabakan, and also
		Maliau Basin Conservation Area.
		Other hands-on training received or delivered
		were:
		\checkmark The Yayasan Sabah team conducting gibbon
		point counts (a refresher course) to carry out the
		survey.
		Discussion of CMADE Dates In
		 Discussions on carrying out SMART Patrols and entering data into SMART asftware with the
		and entering data into SMART software with the
		Kalabakan Polestry Office.
		✓ Sabah Forestry Department staffs were
		trained in drone survey techniques carbon plot
		measurement and orangutan survey techniques in
		January 2018.
		✓ High Conservation Value, Monitoring,
		Project Scope and Introduction (1-day seminar).
		✓ Forest Fire Awareness (conducted at various
		districts from February to October 2018).

	1	1		
				 ✓ Accounting (Revenue Collection System). ✓ REDD Plus –
Improved law enforcement effectiveness	Law enforcement in the landscape is done by SFD and YS staff by means of mobile inspection and checkpoint at point of entry to the landscape. There are 60 law enforcement staff and patrolling is conducted on a daily basis. Of these 60, half have been awarded honorary wildlife warden status with powers of arrest. In 2010, there were less than five cases of fines.	Increase in the ratio of number of fines collected relative to law enforcement efforts. Note: To be reviewed once information acquired.	Yes	 There were 232 crimes/ offences being detected and investigated throughout Sabah from 2012 to 2016 but none happened in the MFL project area. The total fines collected by the SFD from these cases were RM 6,918,268.04. During January – May 2017, there were 68 cases/crimes/offences being detected and investigated throughout Sabah. However, none of these cases happened in the MFL project area. The total fines collected by the SFD from these cases were RM 1,119,706.30. The amount of fine depends on the nature of the crime/offence. During June 2017 – February 2018, there were 83 cases/crimes/offences being detected and investigated throughout Sabah. Two cases happened in the MFL project area: 1. Arrested 3 suspects, 3 dogs, 1 D-Max vehicle and 1 carcass of porcupine in Gunung Rara F.R. in December 2017. 2. Arrested 4 suspected poachers at Mile 48, Kalabakan-Sapulut Road. The total fine collected by the SFD from these
1	1			2

				cases (June 2017 – February 2018) was RM 350,546.70. The amount of fine depends on the nature of the crime/offence.
				During March 2018 – May 2019, there were 180 cases/crimes/offences being detected and investigated throughout Sabah. There were no cases in the MFL project area.
				The total fine collected by the SFD from these cases (March 2018 – May 2019) was RM 698,410.58. The amount of fine depends on the nature of the crime/offence.
				No report received from the SFD on crimes or fines for June 2019.
				The total cumulated cases from 2012 to May 2019 was 563, while the total cumulated fine collected by the SFD during the same period was RM 9,086,931.50.
Systems for compliance, monitoring and enforcement of multiple use forest regulations.	Generic M&E guidelines, no training materials.	By end of project, a revised and updated set of regulations and guidelines for compliance monitoring and enforcement within a multiple use context that includes innovative revenue generating instruments.	Yes	A lot of initiatives related to compliance, monitoring and enforcement were undertaken by the Sabah Forestry Department (SFD). Monitoring was done within the SFD and outside the SFD. The Forest Enactment 1968, Forest Rules 1969, C.F Circular and the Forest (Timber) Enactment 2015 were amended; Guidelines for Reduced Impact Logging (RIL) were introduced and effectively implemented; Guidelines for Mosaic Planting and Compartment Planting Plan were prepared in

		May, 2017; the recruitment of Honorary Ranger by the SFD of which guidelines and training materials for monitoring and enforcement have been prepared: recruitment of Wildlife Worden
		by the Wildlife Department of which the SOP was developed; the set-up of Spatial Monitoring
		and Reporting Tool (SMART) by WWF Malaysia for planning, implementing,
		efforts; 25 SFD personnel (3 personnel working in the Project Area) were trained using the
		Spatial Monitoring and Reporting Tool (SMART) to help prepare them in their
		of SMART in the MFL project area.
		A task force has been set up for the Tawau Region (Tawau Anti-Poaching Task Force) and
		the DaMaI Monitoring Team led by YS and the SFD not only to facilitate anti-poaching efforts, such as patrolling and roadblocks at key hotspots
		in the region but also on the key ecological attributes (climate and hydrological data; forest
		structure; landscape mosaic and ecological integrity) - this somewhat had helped the SFD in their monitoring and enforcement of forest
		management.
		Meanwhile, the SFD continuously carried out its monitoring tasks to all Sustainable Forest Management Licence Agreement (SFMLA)
		Holders' operations through quarterly reporting

		by the respective District Forestry Officers		
		(DFO) and the mandatory submission of		
		Compliance Reports (CR) to the SFD by the		
		SFMLA Holders annually. The CR will be		
		analysed and verified through ground truthing		
		before a Compliance Certificate can be issued.		
		The Reduced Impact Logging (RIL) Assessment		
		and Monitoring (based on RIL Audit Checklist)		
		was carried out regularly both internally (within		
		the SFD) and externally, that is, by appointed		
		Third Party Assessor, i.e., Global Forestry		
		Services (M) Sdn Bhd (GFS).		
		GFS was also appointed to carry out audit and		
		monitoring on Timber Legality Assurance		
		System (TLAS). The audit and monitoring is		
		carried out based on Sabah TLAS Checklist for		
		Principle $1 - 4$. Auditing was appointed to		
		ensure the SFMLA Holders' continuous		
		compliance with the terms and conditions of the		
		SFMLA or Long Term Licence Agreement, as		
		well as, legal compliance with Malaysian laws		
		and in confirmation with the EU-FLEGT of		
		TLAS requirement. TLAS Auditing is carried		
		out regularly.		
		-		
		The auditing mechanism is being done by		
		following the approved SOP, which has been		
		certified under ISO 9001:2008.		
		Monitoring of biodiversity impacts is yet to be		
		emphasized, while monitoring the impacts of		
				wildlife have been given top priority by the SFD staff.
---	--	--	-----	--
				Training on Biodiversity & Ecosystem Conservation Programme & Monitoring was conducted on 25-27 June 2019, which was attended by attended by 44 participants from the SFD, Sabah Parks, SEPU, EPD, Sabah Wildlife Department, UMS, YS/RBJ, Ministry of Tourism, Resources & Environment, MoF, NGOs (Forever Sabah & LEAP Spiral) and SFMLA Holders. A guideline is already in place with regards to the innovative revenue generating instruments (e.g., Payment for Conservation Programme). The guideline can be referred to in the " Framework for Disbursement of Payments for Ecosystem Conservation".
State and national guidelines and operational policies for multiple-use forest landscape planning, management and conservation.	Sustainable Forest Management License Agreement (SFMLA).	By end of Y3, policy and guidelines specific to multiple- use forest landscape established.	Yes	The development of State policy and guidelines specific to multiple-use forest landscape is contingent upon several consultancy interventions. The following are the policies and guidelines that have been formulated/established and in place: Policies
				1. Sabah Forest Policy 2018 (Replaces the 1954

		Forest Policy).
		2. Draft Final Report: Recommendations for
		State-level Policy on Payment for Ecosystem
		Services and Ecosystem Conservation
		Programme – completed in March 2018.
		2 A Einel Darfe Daliana an WAanaa 1 Datantian
		5. A Final Drait Policy on Managed Retention
		Biodiversity Net Gain"
		blourversity feet Gam .
		Guidelines
		1. Draft Final Report: Guidelines for
		Operationalising Proposed Ecosystem
		Conservation Programme - completed in May
		2018.
		2. An Outline of Guidelines to Accompany the
		in June 2018
		in June 2016.
		3. Enforcement guidelines have been prepared by
		the SFD and completed.
		<u>^</u>
		4. Draft Guidelines for Mosaic Planting and
		Compartment Planting Plan was prepared by the
		SFD in May, 2017.
		5. The field guides or a "Manual of Protocols for

The progress of the objective c	an be described as:			 Sampling Biodiversity in the UNDP-GEF Project" was completed in 2018. 6. The Final Draft of the 10-Year Integrated Landscape Management Plan (2020-2029) for the MFL project area was completed in June 2019 and approved on 14th November 2019.
Outcome 2				
Multiple-use forest landscape planning and management system demonstrated at pilot site				
Description of Indicator	Baseline Level	End of Project Target Level	Achieved	Achievement Descriptions
Development of multiple-use forest landscape planning, management and conservation systems within project demonstration area.	 No multiple-use planning, management or conservation systems in use at site. Fragmented and out-dated collection of forest data in EIA reports. 	• By end of Y1, all existing management plans (to become sub-plans within new landscape framework) covering portions of the landscape have been collected and analyzed and priority gaps identified.	Partially	The project target level (Y1) as set under Outcome 2 was partially achieved due to the fact that there was a 2-year delay in the take-off of the MFL project. All the 8 existing 10-Year Forest Management Plans and and one (1) Plan of Operation (by INIKEA) that cover portions of the project landscape have been collected at Y2 instead of Y1 due to the delay in the MFL project implementation. Some of them have been analysed with priority gaps identified. Landscape level biodiversity and forest quality assessment and mapping using LiDAR and hyperspectral imagery was completed at Y3 where Forest Carbon Map Report for Sabah was completed and submitted to the SFD in May 2017, while the final data analysis and synthesis results report was completed and submitted to

 By end of Y2, biodiversity overlay completed. By end of year 2, economic model selected and tested— annual refinement required. 	Partially Negligible Value	the SFD in November 2017. Because of the delay in the project take-off, the ground-based biodiversity assessment (using a range of key taxa), mapping and monitoring programs was only completed with a final report submitted in September 2018. The bio-physical data assessment and Economic Landscape Modeler were completed in 2016. However, the combined consultancy on IC-2 (Economic Landscape Modeler) and SC-5 (Economic model to assess combinations of conservation investments and regulatory approached to maximize net revenues from demonstration landscape while ensuring No Net Loss) was awarded on 11 May 2017 but later cancelled based on the advice from the Mid- Term Review Team due to the fact that over 90% of the land within the MFL project area has already been allocated to various concession holders or declared as Class I
• By end of Y3, landscape-level management plan completed.		concession holders or declared as Class I Protection Forest Reserve (protected areas). The preparation of the 10-Year Integrated Landscape Management Plan (ILMP) was supposed to commence in Y1 (2012) and to be completed in Y3 (2014). However, this was not achieved due to the fact that the actual commencement of the MFL project was in 2014, that is, a 2-year delay because of the land-use changes issue as explained earlier. The task of

				 preparing the Plan was initially given to the Technical Working Group (TWG). However, the TWG was dissolved in October 2017 based on the recommendation of the Mid-Term Review Team. Consequently, the preparation of the plan was only given to a new consultant (NEPCon) in June 2018. The First Draft was completed in early March 2019 and later presented and discussed with the stakeholders in the Stakeholder Consultation Workshop held on 28 March 2019. The Second Draft of the Plan was completed and submitted to the SFD on 9 May 2019 and subsequently reviewed by the Expert Group together with the Senior Officers of the SFD and YS on 22 May 2019 and 22 August 2019 respectively. The Final Draft of the plan was finally endorsed by the Project Board and approved by the Chief Conservator of Forests on xx. Due to the delay of the completion of the 10-Year ILMP, its application and demonstration would only commence in 2020.
Implementation of landscape- level management plan.	No plan / implementation.	• New PAs established (ecological corridors, watershed, salt lick) by end of year 3.	Yes	Although the landscape level management plan has not been prepared, a total of 156,586.37 ha excluding the Plant Improvement and Seed Production (PISP) plots within the project landscape area have been established as Class VI Virgin Jungle Pasaria (VIP) and Class J

			Protected Forest Reserve has been established as of June 2019. These protected areas (PA) serve the functions as ecological corridors, watershed and salt lick and also form an important to secure landscape connectivity or a "safe corridor" for biodiversity conservation purposes and to provide an ecological connection between the three renowned conservation/protected areas in Sabah, that is, Maliau Basin (to the west), Danum Valley (to the east) and Imbak Canyon (to the north) of the MFL project area.
			Implementation of activities within Maliau Basin, Danum Valley, Imbak Canyon and Mt. Magdalena Forest Reserve (Northern Gunung Rara FR) were based on their respective existing Forest Management Plan. The 10-Year Integrated Landscape Management Plan (2020- 2029), which was approved on 14 th November 2019, could only be implemented commencing in 2020. The prescriptions on sustainable-use management system based on sustainable off- take, no net loss, monitoring and enforcement amongst others are highlighted in the Plan.
	• Sustainable-use management system based on sustainable off-take, no net loss,	Yes	Regular field monitoring and surveillance on all activities and against poaching were effectively carried out by the field staff of Yayasan Sabah, the Sabah Forestry Department and Wildlife Department. Besides the field staff, the SFD and the Wildlife Department respectively had recruited Honorary Rangers and Wildlife

		monitoring and enforcement (especially of hunting).		Wardens whereas, the WWF Malaysia had set- up a Spatial Monitoring and Reporting Tool (SMART) to help prepare the SFD and Wildlife Department in their protection efforts. The Honorary Forest Rangers had their regular training of which the latest one was held on 11-
				13 June 2019 to enhance their skills.Coordination with Relevant Programmes
				The project has coordinated closely with the SFD under the HoB landscape initiative. In addition, the project has collaborated with other on-going forest management related initiatives within and adjacent to the project landscape such as, the Innoprise-IKEA Forest rehabilitation Project (INIKEA). The project also worked closely with the biodiversity conservation-related initiatives such as, DaMAI (Danum Valley, Maliau Basin and Imbak Canyon) Conservation Areas.
Habitat conserved and degradation reduced under landscape - level management plan	Forest plantation occupies 15% of total project landscape; baseline scenario to be determined as part of model development	At a minimum, a large majority of the biodiversity losses (-8,447 ha) expected under current scenario #2 will be avoided, mitigated and/or offset within the landscapes.	Yes	The total protected area under scenario #2 (TWG's recommendations – Table 3) was 154,553 ha with a net biodiversity gain of 30,911 ha. However, as of June 2019, the total protected area has increased to 156,586.37 ha, which means there was a net biodiversity gain of 31,317 ha. Similarly, the areas allocated for agroforestry and mosaic have been reduced, thus a further gain net of biodiversity area. Areas that

The progress of the objective ca Outcome 3	an be described as: On	n track		have been initially set for oilpalm plantation (approx. 25,155 ha in scenario #2 with a loss biodiversity area of -15,069 ha is no longer to be pursued by the state government as of June 2019. Consequently, the area has been set aside under natural forest management, which means a further biodiversity net gain area of 2,512 ha instead of loss of -15,069 ha. In this respect, at a minimum, a large majority of the biodiversity losses (-8,447 ha) under scenario #2 have been avoided and mitigated within the MFL project landscape.
Sustainable financing of protec	ted areas and associated fo	orest landscape areas demonstr	ated at the p	ilot site
Sustainable financing of protec Description of Indicator	ted areas and associated fo Baseline Level	rest landscape areas demonstr End of Project Target Level	rated at the p	ilot site Achievement Descriptions

		consultancies were awarded to determine the
		optimal land-use matrix, based on environmental
		economic considerations. These are:
		1. Under the Environmental Economist
		consultancy, four reports were produced. An
		inception report in December 2015, two interim
		progress reports in June and October 2016 and a
		final report "Environmental economic and
		financial analyses of actual and potential land use
		scenarios incorporating estimates of landscapes
		level total economic value, including ecosystem
		services, conservation and other value" in
		November 2016. In these reports, the consultant
		correctly stated that out of the 261,264 ha that
		comprises the MFL project area only 105,596 ha
		had the actual potential to produce revenue. This
		would come mainly from Natural Forest
		Management, Mosaic Forestry
		Plantations/Restoration and Oil Palm plantations
		with minor contributions from other sources such
		as eco-tourism.
		2. Under the Financial Data Management
		Specialist consultancy, three reports were
		produced. An inception report in December of
		2015, an interim progress report in June 2016 and
		a final report in November 2016. These reports
		identified the data gaps for both bio-physical and
		economic data and it is clear that there are a

	series of areas where there were deficiencies in
	data availability that could limit, both the
	execution of the project, the capacity of the SFD
	and Yayasan Sabah/RBJ to effectively manage
	the conservation areas and monitor income from
	the concessions granted within the project area.
	I J.
	3 Economic Landscape Modeler and Economic
	model to assess combinations of conservation
	investments and regulatory approaches to
	maximize net revenues from demonstration
	landscape while ensuring NNL (SC 5). The
	substance of this (combined) consultance is to
	substance of this (combined) consultancy is to
	provide the SFD and YS with a model of land-
	use within the MFL project area, in order to
	maximize net revenues from the possible mix of
	concessions, that is, those areas managed by YS
	and their JV partners. This with a view to
	generating an income flow capable of financing
	the conservation activities of the MFL project
	area, including the three adjoining protected
	areas.
	This contract was scheduled to have been carried
	out much earlier in the MFL project's cycle but
	the contract for these activities was only signed
	in June 2017 and work was programmed to start
	in September 2017. However, this contract was
	terminated under the advice of the Mid-Term
	Review Team since this report would be of

	• By end of project, three revenue generating mechanisms, including REDD+ / carbon, biodiversity offsets and PES, have been designed and piloted, with total annual revenues projected to reach at least 50% of optimal management costs within five years following project completion.	Partially	 negligible value as over 90% of the land within the MFL project area has already been allocated to various concession holders or declared as Class I Protection Forest Reserve (protected areas). Revenue generating mechanisms, including REDD+ / carbon, biodiversity offsets and PES After a detailed scoping and market studies based on the two REDD+ pilot projects in Sabah, it was found out that the sale of carbon credits has been slow to date. In other words, the projects do not have a huge potential for generating carbon credits. Similarly, the Malua Wildlife Conservation Bank project in 2008 (selling biodiversity conservation credits) was also found unsuccessful. Thus, the MFL project did not pursue on these two revenue generating mechanisms and instead focused on PES only. The following have been accomplished with regards to PES: Phase 2: Drat Outline of Options for Conservation Finance/PES Policy and Strategy was completed in August 2016.
			 Conservation Finance/PES Policy and Strategy was completed in August 2016. 2. Phase 2: Peer-Review Retreat Report (November 2016)
			(november 2010).

		3. Phase 2: Draft Report on Options for Conservation Finance/PES Policy and Strategy (December 2016).
		4. Phase 3: Draft Report on Favourable Conditions for Implementing Conservation Finance/PES Policy and Strategy in Sabah (March 2017); a Revised Draft Report on 14 March 2017, while the Final Report was completed in June 2017.
		5. Draft Report on Legal Opinion: Possible frameworks for the establishment of conservation trust funds for Sabah (September 2016).
		6. Draft Report on Legal Opinion: Imposition of an environmental protection/conservation fee for Sabah (September 2016).
		7. Draft Final Report: Study On Willingness Of Visitors To Sabah To Pay Ecosystem Conservation Fee was finalized in April 2018.
		8. Draft Final Report: Cash-flow Analysis - Collection of Proposed Ecosystem Conservation Fee and Starting-up Ecosystem Conservation Programme Office was completed in April 2018.
		9. Draft Final Report: Recommendations for

	State-level Policy on Payment for Ecosystem
	Services and Ecosystem Conservation
	Programme was formulated and completed in
	March 2018. The beneficiaries of this PES
	system are mentioned in this report.
	10. Draft Final Report: Guidelines for
	Operationalising Proposed Ecosystem
	Conservation Programme was completed in May
	2018.
	11. The Cabinet Paper on PES/CF including the
	need for a new enactment was drafted and
	submitted to NRO and subsequently approved by
	the state cabinet on 20 March 2019.
	12. The part stap would be to get the paw
	"State level Deliev on Devenant for
	State-level Policy of Payment for
	Ecosystem Services and Ecosystem
	Conservation Programme" approved by the
	State Government and to have the
	"Ecosystem Conservation Fee Enactment"
	(ECFE) approved by the State Attorney-
	General's Chambers and the Ministry of
	Finance before it can be included for
	approval by the State Legislative Assembly
	during the November 2019 session. Once this
	ECFE is passed by the State Legislative
	Assembly, there will be a coherent

				 sustainable financing system available to apply and demonstrate. Unfortunately, this can only be realized after the closure of the MFL project. 13. Meanwhile, a pilot case study on Developing PES Options for the Babagon Sub-Catchment is on-going. The MoU between the State Government represented by the SFD and DID and the local communities in Kg. Tampasak, Kg. Kolonsunan and Kg. Babagon Toki was signed on 18 June 2019.
Management budgets, as % of optimal management costs.	RM11.4 million (2010) budget represents approximately 57% of optimal management costs (later to be updated based on revised estimate of optimal management costs).	• Annual revenues available for sustainable, multiple use management and conservation equivalent to 80% of estimated optimal landscape level management costs and on upward trend.	Yes	There are six (6) companies, which had a Joint Venture (JV) with Yayasan Sabah/Rakyat Berjaya managing their respective concession within the MFL project area. The revenue earned by the SFD is from royalty payments (from the sale of logs) and from oil palm {sale of Fresh Fruit Bunches (FFB) in metric ton – MT}, while YS/RBJ earned their revenue in accordance with their JV Agreements. The cumulative total amount of revenue/royalty from timber collected from the project area by the SFD as of March 2019 was RM 129,626,094.42, while revenue collected from oilpalm was RM RM315,036.81. This amount (royalty from oilpalm) was based on 5% of the total FFB price. The current financial/accounting

		system for collecting revenue is based on the financial/accounting system that currently in place and adopted by the SFD and also from a Quarterly Report submitted by the RBJ and Kalabakan District Forestry Officer, who will track the revenue generated from the MFL project area.
		The royalty collected from timber was quite small due to the fact that the commercial forests (Class II) in the MFL project area have been repeatedly logged in the past and thus, generally the timber stand (mainly in the mosaic areas) was considered too low. The collection of royalty from oil palm plantation started at the fourth quarter of 2016 (4-year old plantation).
		As of December 2017, the total cumulative revenue for YS/RBJ was RM 203,462,345.29 while the total cumulative cost of management was RM 86,859,134.88, which is approximately 42.69% from the revenue. Meanwhile, the total cumulative in-kind contribution from YS for the MFL project as of December 2017 was RM 9,168,571.29 or 4.51% of their revenue.
		The total cumulative cost of management from YS/RBJ as of September 2018 was approximately RM 96,125,203.17 while the total cumulative in-kind contribution from RBJ and

		INIKEA as of 1 st Quarter 2019 was
		approximately RM 9.362 million and RM
		14.198 million respectively with a cumulative
		grand total of RM 32.664 million.
		The SFD on the other hand, has a total
		cumulative cost (as of March 2019) for
		management and conservation in the project area
		of approximately RM 13,724,708.33 or
		equivalent to 10.59% of the total cumulative
		revenue collected.
		Meanwhile, the final report on "Financial Data
		Management Specialist) was completed and
		submitted in November, 2016 of which a list of
		recommended adaptation measures suggested by
		GFS had been acted upon, which amongst others
		include:
		1. YS JV partners had been instructed to up-date
		the Compartment Record Books (CRB) at all
		times. All information recorded in the CRB will
		be audited during limber Legality Assurance
		System (ILAS) auditing.
		2 The Quarterly Report format or from work
		2. The Quality Report format of financial data
		This is to ansure reliable data is collected and
		reported that is log production (volumes) from
		a defined course or compartment for NEM and
		a defined coupe of comparament for NFM and

	Mosaic areas are accurately recorded that can be matched with scaling records; Removal Passes; Timber Disposal Permits & Royalty Receipts. The log production data from each JV partner needs to directly reflect royalty charges and collection, as well as, estimated stock and volumes from inventory or Comprehensive Harvesting Plan (CHP) data.
	3. A standardized report was developed to record Fresh Fruit Bunch (FFB) & Latex production volumes from defined areas within the plantations, which match with weigh bridge tickets, transport permits and associated royalty charges based on 5% of sales value to the mill or rubber factory.
	4. A standardized report will be collected by the SFD. The report would be submitted to HQ for compilation and further analysis. Results would be summarized for each JV area to monitor performance and ensure royalties are accurately accounted for against production.
	5. Compilation on costs of management of defined protected areas had been appropriately carried out by the SFD & YS/RBJ. However, data on costs of protection are yet to be separated from costs of restoration and silviculture operations in order to better define

				actual costs of management.6. Costs of management borne by sponsors are recorded as revenue that will be expensed as costs to the Project Area by the SFD or YS/RBJ. Revenue earned from research or other activities within protected areas are also to be appropriately recorded.
An effective financial accounting system for func management and disbursement.	Financial/accounting system at SFD and YS.	• Transparent mechanism that allows stakeholders to track revenue generated from proposed multiple-use activities in project site and the amount of each that is channeled back for conservation.	Partially	 The accounting system is controlled at the SFD's Accounts Division, who keeps all monthly/annual accounts records according to accounts code (Head) and the Division reports to the Ministry of Finance/State Treasury monthly on behalf of the Chief Conservator of Forests. The Chief Conservator of Forests conducts a quarterly meeting on accounts to monitor revenue and expenditure. The SFD's account (Accounts Division) is audited by the State and Federal Audit regularly in a year. The SFD's assets and new procurements are audited each year and monitored by a special committee headed by the General Services Division.

		 Collected at the field (District level) where amount to be collected (dues) are assessed by the respective District Forestry Officers. Accounting works are handled by the respective Regional Accounts Office who will report to the Accounts Division Head at the SFD HQ each month. Subject to regular audit. All revenue collected will be put under consolidated fund. Disbursement of fund will be based on the SFD's Annual Budget.
		Example for timber
		Example for timber.
		 At the field level, all timber extracted from the Licenced area will be issued a Scaling Order to assess royalty and payment of other relevant fees. Royalty collected will be issued receipts by the District Forestry Office through the Regional Accounts Officer who will keep all collection records according to revenue account heads. This is reported to the SFD HQ Accounts Office each month. The SFD's Accounts head will issue the Final Bill of all timber extracted according to Scaling Order to the respective company, detailing species extracted, royalty rates and

 Revenue concertion form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales. The SFD is very transparent. The stakeholders are allowed to track revenue/royalty collected from a specific company/licenced area based on the receipts or Bill issued by the SFD. The financial accounting system for YS is not known. 	The progress of the objective can be described as:	On tract
 Revenue collection form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales. The SFD is very transparent. The stakeholders are allowed to track revenue/royalty collected from a specific company/licenced area based on the receipts or Bill issued by the SFD. The financial accounting system for YS is not 		known.
 Revenue contection form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales. The SFD is very transparent. The stakeholders are allowed to track revenue/royalty collected from a specific company/licenced area based on the receipts or Bill issued by the SFD. 		The financial accounting system for YS is not
 Revenue contection form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales. The SFD is very transparent. The stakeholders are allowed to track revenue/royalty collected from a specific company/licenced area based on 		the receipts or Bill issued by the SFD.
 Revenue collection form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales. 		The SFD is very transparent. The stakeholders are allowed to track revenue/royalty collected from a specific company/licenced area based on
 Revenue collection form each company can only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment. 		In the case of revenue generated from oil palm companies, the SFD is mending a gate and a weigh bridge; closely monitor the monthly FFB price, as well as, the monthly total sales.
• Revenue collection form each company can		 only be finalized after the issuance of the printed Final Bill from the SFD HQ (Accounts Division). The Final Bill will indicate if there is any excess of payment or shortfall of payment. Normally is in excess as the SFD normally collects extra collection (a certain percentage) on top of all actual payment due to avoid shortfall of payment.

MTR RATINGS & ACHIEVEMENT SUMMARY

Measure	MTR Rating ¹	Achievement Description
Objective: To institutionalize	Moderately Unsatisfactory	The Sabah MFL is, without question, a complex intervention that demands a
a multiple-use forest	(MU)	cutting-edge, well developed biodiversity, socio-economic, connectivity
landscape planning and		conservation, response. This should be an inherent part of the multiple-use forest
management model which		landscape planning and management model. The MTR was not aware of significant
brings the management of		progress in the development and advancement of this critical part of the project.
critical protected areas and		
connecting landscapes under		The underlying assumptions made when the project document was formulated
a common management		were sound at the time but these were overtaken by several fundamental land-use
umbrella, implementation of		allocations decisions. The effect of these impacted on the original assumptions and
which is sustainably funded		entirely changed the context for achieving the Sabah MFL results, as outlined in the
by revenues generated within		original project document.
the area		
		The MTR concluded that realisation of the Sabah MFL objective was, for a number
		of reasons, problematic. Two primary reasons for this conclusion include:
		restricted time left for project implementation,
		capacity limitation within the PMU and TWG relating to the contemporary theory
		and practice for developing a multiple use forest landscape planning approaches.

¹ DESCRIPTION OF PROGRESS TOWARDS RESULTS RATING SCALE

Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings.
	The progress towards the objective/outcome can be presented as "good practice".
Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Moderately Satisfactory	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
(MS)	
Moderately	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
Unsatisfactory (MU)	
Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
Highly Unsatisfactory	The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-
(HU)	project targets.

Component 1: An enabling environment for optimized multiple-use planning, financing, management and protection of forest landscapes.	Moderately Satisfactory (MS)	The MTE concluded that several fundamental building blocks were being progressively established to advance Component 1. Most of these are in an early stage with reports from the sub-contracts and consultancies needing to be consolidated and synthesised before they can be integrated into the comprehensive Integrated Conservation Management Strategy (ICMS).
Component 2: Multiple-use forest landscape planning and management system demonstrated at pilot site.	Moderately Satisfactory (MS)	There is no coherent multiple use forest landscape planning system available to apply and demonstrate. Relevant comments in the main objective and components 1 and 2 are relevant in this context.
Component 3: Sustainable financing of protected areas and associated forest landscape areas demonstrated at the pilot site.	Moderately Satisfactory (MS)	There is no coherent sustainable financing system available to apply and demonstrate. Relevant comments in the main objective and components one and two are also relevant in this context.
Project Implementation and Adaptive Management	Moderately Satisfactory (MS)	The UNDP comparative advantage (as defined by GEF) lies in its global network of country offices, its experience in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation. UNDP has provided substantial support to Sabah MFL implementation and is recorded in PMU meeting minutes as an active participant and is a member of the Project Board. This level of support is slightly beyond the original role defined for UNDP in the project document under National Implementation Modality but this involvement can only be regarded as positive.
		The MTR concluded that UNDP has effectively exploited its comparative advantage in several important areas including Sabah MFL supervision, monitoring and procurement. A singular inconsistency was the agreement by UNDP that the Project Manager

could be hired by SFD rather than what would normally be the case, as a UNDP contract.
Project staff based in the project team in Sandakan under UNDP service contract provided exceptional support and coordination.
Executing Entity The Sabah MFL project is being implemented by the Sabah Forestry Department (SFD) as the representative of the Ministry of Natural Resources and Environment, Malaysia (NRE), which is acting as the Executing Entity. The SFD is collaborating with two governmental agencies and is providing national/state level facilitation for the project namely: NRE and the State of Sabah Economic Planning Unit (SEPU).
The SFD is accountable to UNDP for the disbursement of funds and the achievement of the Sabah MFL objective, outcomes and outputs according to the approved work plan. In particular the SFD is responsible for: (i) coordinating activities to ensure the delivery of agreed outcomes; (ii) certifying expenditures in line with approved budgets and work plans; (iii) facilitate communication and networking among key stakeholders; (iv) coordinating interventions financed by GEF/UNDP with other parallel interventions; (v) preparing Terms of Reference (TOR) for consultants and
approval of tender documents for sub-contracted inputs; (vi) reporting to UNDP on project delivery and impact; and (vii) organising meetings and workshops.
The MTR team was impressed with the interest and support that the SFD Chief Conservator of Forests is giving to the Sabah MFL and the high level of commitment to the PMU which is chaired by the National Project Director / Deputy Conservator of Forests.
As far as the MTR team could ascertain current management arrangement, with the significant exception of the Technical Working Group, is consistent with arrangement laid out in the Project Document.
The MTR team has no doubt that the TWG have been an effective forum but note

		that to a significant degree this group have usurped the role of the PMU.
		The MTR suggest that consideration could be given to amalgamating functions of the PMU with those of the TWG as there is significant cost implications and potential duplication having both these units. The TWG Chair has direct access to the Chief Conservator of Forests, and this indicates that some decision-making bypasses the Project Board and, to a certain extent, UNDP.
Sustainability	Modoratoly Likoly (ML)	After considering the impediments the Sabah MEL faced during its start up phase
Sustainability		including significant delays, the TE submits that the Moderately Likely ranking is appropriate.
		The Sabah MFL made progress following the formulation of the Project Inception Document and the appointment and mobilisation of the Project Manager and Technical Working Group.
		Based on present trends and achievements, the MTR suggest that the Sabah MFL has a reasonable probability that it will positively contribute to GEF biodiversity conservation objectives.
		Areas that the MTR suggest would contribute to sustainability include: Additional co-financing and the need to explore if SFD in-kind support could be translated to a cash contribution;
		Formal agreements with concession holders in relation to the scope and wider
		objectives of the Sabah MFL to sustain on-the-ground initiatives;
		Increased focus on capacity building; and 12-month Sabah MFL extension.

EVALUATION NAME: SABAH MFL MTR MTR COMPLETION DATE: JULY 2017 UNDP/GEF MTR MANAGEMENT RESPONSE & KEY ACTIONS TAKEN

MTR	Management Response (As	Key Action	Responsible	_		_
Recommendations	Submitted)	Identified	Agent	Status	Due Date	Comments
Key recommendation						
1: The SFD, PMU,						
TWG and Project						
Board ensure the						
following five priority						
elements are an	(Project will address the five					
integrated into the	points under the					
ICMS:	recommendation :)					
	1. The connectivity between the					
	three YS conservation areas					
	(Danum Valley, Maliau Basin					
	and Imbak Canyon) was					
	established in November 2012,					
	by the reclassification of Mt					
i. Connectivity	Magdalena Forest Reserve (FR)					
between the three	as a Class I (Protection) FR. This					
globally significant	will be further bolstered as					Accomplished and
protected areas is	additional Class II (Production)	Reclassification of				maintained. Approximately
established and	areas in Gunung Rara and	Class II				61,330 ha (Mt. Magdalena
maintained and that	Kuamut FRs (which are adjacent	(Protection) areas				FR) of the 156,586 ha
connectivity corridors	to the target landscape) are	in Gunung Rara &				gazetted have been certified
apply ecological best	reclassified as Class I FR once	Kuamut Forest				as a well-managed forest
practices	current logging operations have	Reserves into	Sabah	Completed/		under the FSC certification
	been completed.	Class I	Forestry Dept	Done		scheme since 2015.
	2. The Connectivity corridors					
	are already under Class 1					
	Protection Forest Reserves					
	where no logging except					
	restoration and silvicultural	n/a				

	operations are allowed.					
	 The Project Area will be upgraded and to be managed by District Forestry Office following Deramakot example. 	Upgrading Project Area and to be under District Forestry Office management	Sabah Forestry Dept	Currently, the project area is managed by the Kalabakan District Forest Officer	July - Dec 2019	Overall management will be governed by a two-tiered hierarchy consisting of a central Management Committee supported by a three Technical Panels. The key implementing agencies will be the SFD and Rakyat Berjaya, who shall be jointly responsible for executing the Interventions and Actions described in the ILMP.
ii. Recognition of the	2. MoU signed between Sabah Environmental Trust, SFD and					
management,	YS on patrolling (enforcement					
including robust	Danum Valley-Maliau Basin-					
patrolling systems,	Imbak Canyon (DaMal) on 24th					
that connectivity	October, 2017.	n/a				
corridors areas						SMART patrolling enables
require.						rangers to capture more
						systematic data in their
						patrols, empowers
						information on the threats
						faced, guides managers to
						better protect the areas,
						allocation of patrolling
						resources for protecting the
						areas. It is a free, user-
						triendly technical solution
	3. On-going SMART patrolling.	SMART patrolling	& SWD	On-going	On-going	patrols from different

				A Protect Team and	July - Dec 2019 This	sources, strengthening of enforcement action, and is compatible with a wide variety of GPS units and data collection devices A schematic of Management Committee organisational hierarchy was also proposed
		Establishing a		SMART Team	dedicated	in the 10-Year Integrated
	4. Establish a dedicated special	dedicated special	Sabah	were	special	Landscape Management
	task force.	task force	Forestry Dept	established	task	Plan (ILMP).
	5. A special Protection Unit responsible for surveillance, patrolling and protection against illegal activities will be	Formation of a special Protection	Sabah	Currently, a special Protection Team was formed. The Team was further boosted with the funding from Sime		A special Protection Unit responsible for surveillance, patrolling and protection against illegal activities is yet to be formed within the SFD organizational
	formed.	Unit	Forestry Dept	Darby.	2020	structure.
				The study is carried out by the		
iii. The impact of		A study on the		Environmental		
logging on water	1. A special study will be carried	impacts of logging		Protection		
quality and the	on water quality and the	the management		based on the		This study will be carried out
zones and wildlife	management riparian zones	rinarian zones &	Sahah	FIA Report		further by the researchers in
corridors and	and wildlife corridors.	wildlife corridors	Forestry Dept	requirement.	2020	FRC.
specifies the design			/			Besides the EPD, all
of these areas in		Protocol	Environmental			operations are also closely
conjunction with	2. Monitor through	incorporating ECR	Protection			monitored and audited by a
ecological specialists.	Environment Compliance	findings in project	Department			third party auditor once a
	Report (ECR).	management	(EPD)	On-going	On-going	year.
	3. Water monitoring is part of					
	certification process.	n/a				

	4. New GEF funded project on watershed, which is to be implemented by Department of Irrigation and Drainage (DID).	n/a				
	1. Discussions with YS JV partners with regards to their roles on the importance of conservation will be held at least twice a year.	At least 2 discussions with JV partner planned since MTR		Done	on-going	Discussions were carried out; and to be continued at least twice a year.
iv. Integration of concessionaire activities into the wider conservation mandate.	2. All their operations will be closely monitored and to be audited by a third party auditor once a year.	Third party audit at least once since MTR	SFD	The FLEGT Team (a Third Party Auditor) had carried out their auditing.	On-going	All operations are closely monitored and audited by a third party auditor once a year.
	3. Development of a state-wide Forest Management Estate Plan (Dr. Robert Ong) – supported by MUFL consultant.	State-wide Forest Management Estate Plan developed	SFD	In-progress	2020	Development of the plan is on-going.
v. Expresses in prescriptive terms best practice management for all components of the Integrated	1. The ICMS planning process will be considered during the preparation of the Landscape Management Plan.	ICMS planning process considered during preparation of the Landscape Management Plan (evidence in Plan documentation)	SFD	Completed/ Done		The consultant responsible to prepare the 10-Year ILMP has considered the ICMS planning process.
Conservation Management Strategy (ICMS) planning process.	2. Consolidate into Forest Management Plans (FMPs)	ICMS consolidated into Forest Management Plans (evidence in Plan documentation)	SED	Completed/	30-Apr-19	This was taken during the preparation of the 10-Year

Key recommendation 2: That the UNDP and the SFD postpone contracts for the implementation of SC-7, SC-8 and LC-5 until the management planning advisor(s) ToR have been formulated and work on the ICMS has been advanced.	 Establishment of new protected areas and biodiversity corridors - (SC-7). Operationalisation of on the ground landscape management system based on landscape level management plan and adaptive management to improve habitat conditions, reduce natural capital loss and to increase financing for biodiversity conservation - (SC-8). Protected area planning and management advise – (LC-5) Proposed Follow-up Actions 1. To develop Forest Landscape Management Plan by end of 2018. 	 To develop Forest Landscape Management Plan by end of 2018. 	Sabah Forestry Dept	Completed/ Done	30-Apr-19	Final Draft of the 10-year Integrated Landscape Management Plan (ILMP) was completed in October 2019.
Recommendation 3:						
That steps be taken						
by the SFD to use, as		Monitor the				
species for		impact in the area				
production purposes		of using non				
to reduce the risk of	Proposed Follow-up Actions	native species				
introducing Invasive	1. Follow existing SOP	(evidence in	Sabah	Monitoring is		
Alien Species (IAS).	2. Monitor the impact	reporting)	Forestry Dept	on-going	on-going	

Recommendation 6: That UNDP and the SFD review the contract of the consultancy	Proposed Follow-up Actions 1. To carry out further study if the Economic modeling is really necessary in view of the fact that the land-uses in the Project Area were already being determined/decided/fixed by the state government.	Study on the necessity of the economic modelling		No longer applicable	The consultancy to carry out this study was terminated.
Modeler" (IC-2) with ETH Zurich in order to reduce its scope to	2. To carry out feasibility study on the potential of eco-tourism in the project area.	Eco-tourism feasibility study		No longer applicable	The Project Board agreed that the Eco-tourism in the project area is not feasible.
formulation of a Master Plan for Eco- Tourism in the 3 protected areas. This should include a market study and an investment plan. Therefore, the contract should be re-negotiated, and the financial provisions reduced to reflect the more limited scope of the work to be carried out.	3. To terminate contract with Dr. Chris Kettle and reimburse any cost incurred with immediate effect	Contract termination of Dr Chris Kettle and reimbursement of costs incurred (if any)	Sabah Forestry Dept	Completed/ Done	The SFD terminated contract with Dr Chris Kettle on 17th November 2017. The SFD also notified Dr Chris on 25th September 2018 that the offer to seek reimbursement on the cost incurred during the contract period was no longer valid as there was no submission of invoice despite several reminders. The PMU agreed to postpone on the idea of
	Plan for Eco-tourism of protected areas in the project site.	ToR for Master Plan for Eco- tourism developed		No longer applicable	since eco-tourism is seen as not feasible at the project landscape.

		Recommendation 7: That the SFD, with support from UNDP, should ensure under the consultancy entitled "State-level policy options and mechanisms for PES (SC-2) that the consultant Green Spider: • concentrate exclusively on the creation of the Conservation Fund and ensure that this fund be based on two income sources: (i) Green Fee paid by tourists and that it discriminates between foreign tourists and that it discriminates between foreign tourists and Malaysian visitors. (ii) a Water Levy paid by users • approach Green Spider and request that they design and undertake a "pilot" exercise for the Conservation Fund. This is an integral part of the work they are contracted to complete and it should be no-cost	Proposed Follow-up Actions 1. Green Spider had rephrased the statements as follows: Concentrate exclusively on the creation of Conservation Fund and ensure that this fund be based on at least one of the two proposed income sources: (i) Ecosystem Conservation Fee paid by visitors and that it discriminates between foreign and Malaysian visitors. (ii) a Water Catchment Conservation Fee paid by users. This because it was not finalised whether both fees will be channelled to one fund. 2. MTR or PB to elaborate what constitute "pilot" exercise for the Conservation Fee since Green Spider was not clear supporting implementation – Phase 5? 3. To seek further clarification from Green Spider with regards to Phase 5 of their consultancy. 4. The proposed framework for Ecosystem Conservation Fund is pending Cabinet's approval. Once approved, it will be operationalized and project site is one of the beneficiaries.	Green Spider exclusively focused on developing a Conservation Fund per TOR including conducting a pilot testing the Fund's modality		Completed/		Green Spider had completed all deliverables and submitted the fina deliverable under fina Phase 5, i.e. Guidelines for Operationalisation of the Proposed Ecosystem Conservation Programme and Grant Application Guidelines on 14th May 2018. The pilot testing the fund's modality was not possible during the consultancy period as the collecting and disbursement of fund are subject to the State Cabinet's approval The Sabah State Cabinet has only recently on 20th March 2019 approved the concept of PES and conservation fund developed by the project, and recommended the establishment of a Technical Committee to further study on the formulation of mechanism for implemention of PES and CF in Sabah.
--	--	--	---	---	--	------------	--	---

	financial compensation packet already agreed to.						
	That the UNDP and the SFD postpone contracts for the implementation of SC-7, SC-8 and LC-5 until the management planning advisor(s) ToR have been						Development of the 10-year
	formulated and work on the ICMS has been	Proposed Follow-up Actions 1. To develop Forest Landscape Management Plan portuger	Development of a Forest Landscape	Sabah	Completed/	20 Apr 10	Integrated Landscape Management Plan (ILMP) by
	That SFD consider reviewing its	Proposed Follow-up Actions 1. SFD to review its structure and establish a dedicated Conservation Unit to provide expertise approaches to the management.	management run			56 Apr 15	
	structure in order to provide expertise and contemporary approaches to protected area planning, management and	2. SFD to put priority on human capacity through more exposure and trainings, which are to are to be organized at least once a year					The dedicated Conservation Unit has yet to be established. However, SFD has reviewed its structure during the SFD workshop on
	biodiversity conservation.	i. Identify who to be trained, what training programmes, costs, etc. ii SED and YS to look into the					31st October 2018. With regards to the human capacity, the project is supporting eight (8)
		costs for continuing training based on existing HRD	Establishing a dedicated Conservation Unit	Sabah Forestry Dept	On-going	2020	trainings by SFD and WWF in 2019 of which some were already being conducted
L		P. 00			00		an easy being conducted.

That the UNDP and the SFD approach the Sabah Wildlife Department with a view to them actively contributing to the project.	 Proposed Follow-up Actions 1. SFD will take proactive action by assigning special tasks/roles to ensure SWD will actively contribute to the project. 2. Wildlife Monitoring Task force for Tawau Region already established. Task force comprised of SFD, SWD, YS, PDRM and WWF. 3. In addition, Human-elephant Conflict (HEC) Committee is established for Kalabakan-Tawau area. 4. MoU signed between WWF-SFD-SWD for implementation of the Transboundary Elephant/Orangutan Project (Kalabakan FMU 25). 	Assigning roles/tasks to SWD specifically that will result in their active contribution to the project	Sabah Forestry Dept	Done	Sept 2019	The SWD's tasks will be spelled out in the 10-Year ILMP.
Key recommendation: I						
Project Strategy						
• approve a 18 month no-cost						
extension for the						
project						
• this to provide for the completion of						
ongoing activities and						
other priority	Proposed Follow-up Actions					
detailed in the MTR	Depend of the project					
• for this purpose,	request for extension to UNDP					The project extension
UNDP should secure	by 15 November 2017.					request has been approved,
the necessary	UNDP to consider and approve					whereby the revised project
authorization from	no-cost extension by 31	Approval of no-		Completed/	24 0 17	closing date is 31st
GEF on the	December 2017.	cost extension	UNDP & SFD	Done	31-Dec-17	December 2019.

understanding that			
this would be a cost-			
neutral extension to			
be financed by			
savings. These			
savings could come			
from the reduction in			
funding to			
consultancies (IC-2),			
(SC-5) and if			
appropriate, (IC-4).			
Other sources of			
savings might be			
identified, based on			
the recently			
completed UNDP			
HACT audit/review.			

ANNEX 4

UNDP/GEF TERMINAL EVALUATION MANAGEMENT RESPONSE AND TRACKING TEMPLATE

Project Title: Biodiversity Conservation in Multiple-use Forest Landscapes in Sabah, Malaysia

Project PIMS #: UNDP PIMS ID: No. 80468 PIMS 4186

Evaluation Completion Date: 15th November 2019

	Key Issues and Recommendations	Management Response*			Tracking**		
		Response	Key Actions	Timeframe	Responsible Unit(s)	Status***	Comments
1)	Undertake measures to replicate better ecological connectivity, as demonstrated in the project area (collaborating with various partners, identify replication sites for re- establishing stronger ecological connectivity).	Replication of ecological connectivity in potential areas to be identified with relevant partners and stakeholders, agreed and implemented by Sabah State Government.	 Discussions and collaboration with relevant partners (including Sabah Parks, Sabah Wildlife Department, Lands and Surveys Department, Sabah Foundation, Department of Irrigation and Drainage and Department of Agriculture) to identify promising areas to replicate ecological connectivity in Sabah. 	2021 -2025	Sabah Forestry Department (SFD)		
			 State-wide forest management plan (FMP) is currently under preparation; and sites for ecological connectivity will be explicitly prescribed in the FMP and to be implemented under the 12th Malaysia Plan (RMK-12). Rainforest Trust to identify remaining areas for 	ву 2025 2021 – 2025	SFD		
Key Issues and Recommendations	Management Response*					Tracking**	
---	--	--	---------------------	------------------------	-----------	------------	--
	Response	Key Actions	Timeframe	Responsible Unit(s)	Status***	Comments	
		protection to meet the Sabah's target of 30% Totally Protected Area.					
		• Review and improve connectivity in the Heart of Borneo landscape through the Strategic Plan of Action for Sabah – Heard of Borneo and upcoming GEF-funded Integrated Landscape Management in the Heart of Borneo Landscapes in Sabah and Sarawak project.	By 2025 (RMK-12)	SFD			
 Take steps to ensure that research data is given relevance through continuing application and dissemination (promote closer engagement between international experts/researchers and local counterparts, with appropriate 	Application and dissemination of research data generated with the project support to be enhanced through on-going initiatives including capacity building, platforms and formulation of research &	 Set-up a research committee between relevant agencies (including Universiti Malaysia Sabah) to look into existing initiatives by SFD at wider scope. 	2020	SFD			
training provided).	analytical guidelines/protocols.	 Enhance capacity of remote sensing/GIS unit in Sabah Forestry Department through trainings in collaboration with Carnegie Airborne Observatory, Malaysia Remote Sensing Agency. 	On-going	SFD			
		 Explore utilization of research data generated from Sabah MFL project in 	2016 – 2025	SFD			

Key Issues and Recommendations	Management Response*				Tracking**		
	Response	Key Actions	Timeframe	Responsible Unit(s)	Status***	Comments	
		the National Forest Inventory (NFI) 2016 – 2025.					
		• Forest Research Centre of the Sabah Forestry Department to incorporate lessons learned from the research under MFL Project, including to simplify the research methodology to be practical and can be replicated in other areas such as in the Forest Management Unit (FMU) 25. Key actions are as follows:	2020	SFD			
		 To ensure local counterpart researchers and managers to work closely with experts through: Discussion and meeting Letter of acceptance Memorandum Of Understanding (MOU) (if applicable) 					
		 2. To conduct capacity building and ensure technological and knowledge transfer for all involved in the research, the following actions are to taken: Field training Courses Workshop 					

Key Issues and Recommendations		Tracking**				
	Response	Key Actions	Timeframe	Responsible Unit(s)	Status***	Comments
		 3. To ensure dissemination of research findings to relevant stakeholders through: Seminar Publication Conferences Multimedia 4. To ensure relevant research output is applied in forest policy and management planning. 				
 Uphold the ban on oil palm plantations in permanent forest reserves; confine plantations to previous agricultural or degraded lands (provide advocacy). 	Action to ban on oil palm plantations in permanent forest reserves was done in accordance with State Government policy and Sabah Forest Policy 2018.	 No new permit for oil palm within forest reserves are issued. Jurisdictional Certified Sustainable Palm Oil (JCSPO) initiative – to achieve no loss of high conservation value and high carbon stock forests, to enable zero- conflict and to strengthen smallholder sustainability. 	On-going By 2025	SFD JCSC		
		 Implement GEF-funded Integrated Landscape Management in the Heart of Borneo Landscapes in Sabah and Sarawak project to promote responsible value chains for palm oil and smallholder support. 	2021-2026	KATS		

	Key Issues and Recommendations	Management Response*						Tracking**	
		Response	K	ey Actions	Timeframe	Responsible Unit(s)	Status***	Comments	
4) Strengthen the role of the private sector in biodiversity conservation, within multiple-use forest landscapes (Foster networking among the plantation community; Conduct relevant training and capacity building; promote Information sharing).	Steps are be taken to promote greater engagement with the private sector in biodiversity conservation efforts.	•	More training will be given/conducted to private sector on awareness, capacity building, good practices and roles on biodiversity conservation.	On-going	SFD				
	sharing).		Encourage the private sectors to get their respective Sustainable Forest Management Licence Agreement (SFMLA) Area certified.	2025	SFD				
			•	Continue Sustainable Forest Management (SFM) Auditing and Timber Legality Assurance System (TLAS) by external auditors.	On-going	SFD			
			Continue Compliance Reporting and issuance of Annual Compliance Certificate for contractors who performed.	On-going	SFD				
			•	Promote and explore networking and information sharing to promote mutual benefits through JCSPO and upcoming GEF-funded Integrated Landscape Management in the Heart of	On-going	SFD			

	Key Issues and Recommendations	Management Response*					Tracking**	
		Response	Ke	ey Actions	Timeframe	Responsible Unit(s)	Status***	Comments
				Borneo Landscapes in Sabah and Sarawak project.				
5)	Take action to promote the institutionalization of sustainable financing mechanisms for biodiversity conservation in Sabah State (formalize Conservation Finance	Actions will be aggressively taken to ensure the continuity of progress made on sustainable financing mechanisms for biodiversity	•	FinaliseEcosystemConservationFee/Boardenactment and table to StateCabinet for approval.	2021	SFD		
	Committee; integrate collection of ecosystem conservation fee; clarify management of the Ecosystem Conservation Fee Trust Fund: clarify	conservation in Sabah.	•	Formalize and strengthen the Interim Committee on Conservation Finance.	2021	SFD		
	definition of sustainable finance mechanisms, and explore a range of sustainable finance mechanisms; build capacity for sustainable financing).		•	Explore ways to integrate the collection of the ecosystem conservation fee within the existing system for collection of departure	2021	SFD		
			•	To clarify further on the issue of Ecosystem Conservation Fee Trust Fund management.	2021	SFD		
6)	Adopt measures to improve the efficiency of project design, implementation, and management functions (employ lessons learned from TERs; provide socialization period at project start-up; use project performance canvas; allocate sufficient time for consultant procurement; give adequate	Best practices are adopted in order to improve performance in project design, project management, implementation, monitoring and evaluation.	•	Conduct workshop to come up with specific requirement for review of relevant Terminal Evaluations that can be included in the Terms of References for specialists tasked to prepare GEF project documents.	2021	UNDP		
	attention to communications		•	Prepare a "Standard	2021	SFD		

Key Issues and Recommendations	Management Response*				Tracking**	
	Response	Key Actions	Timeframe	Responsible Unit(s)	Status***	Comments
strategies, knowledge management and capacity building).		 Operating Procedure" (SOP) guidance document for "socialization period" for upcoming GEF-funded Integrated Landscape Management in the Heart of Borneo Landscapes in Sabah and Sarawak project Project. Prepare "Guideline" for procurement of consultants for new projects (e.g. FOLUR Project) so that average time involved in the engagement of a consultant will be four months. To conduct at least three programs/year for communications and 	2020 On-going	SFD		
7) Link lessons learned from the Sabah MFL project with other related initiatives (e.g., implementation of the Sabah Biodiversity Strategy 2012- 2022, proposed GEF-7 FOLUR project; proposed listing of the DaMaI area as UNESCO World Heritage Site).	Lessons learned from the MFL Project are to be linked with on-going or new initiatives e.g. FOLUR Project.	 knowledge management. Lessons learned from the MFL Project will be shared to Sabah Biodiversity Council; upcoming GEF-funded Integrated Landscape Management in the Heart of Borneo Landscapes in Sabah and Sarawak project; and the proposed listing of the DaMal. 	2021	SFD		

* Unit(s) assigned to be responsible for the preparation of a management response will fill the columns under the management response section.

** Unit(s) assigned to be responsible for the preparation of a management response will be updating the implementation status. Unit assigned with an oversight function monitors and verifies the implementation status.

*** Status of Implementation: Completed, Partially Completed, Pending.

RISK ASSESSMENT AS OF SEPTEMBER 2019

	RISK RATING		REVISED RISK	PROPOSED ADDITIONAL	REVISED RISK RATING
Risk	IN THE PRODOC	RISK MITIGATION MEASURES	RATING ² IN 2013	MITIGATION MEASURES	IN 2019
				IN 2013	
Conflicts between	Medium	The Project will collaborate closely with all	High	No further changes	Low
conservation and		stakeholders including the private sector from		except for good.	
development in State		the start of Project inception and			
planning. Support for		implementation. Stakeholders will be fully			
multiple-use forest		involved in the process for developing policies			
landscape management		and regulations in support of NNL/NG as well			
will be weak primarily		as for the novel financing mechanisms. The			
from the private sector,		general approach will be participatory with			
thereby increasing the		defined roles and responsibilities of the			
possibility that more		partners. Key stakeholders will include the			
areas will be converted to		state economic planning unit, different sector			
non-forest-based uses		departments at the state level, the private			
that will compromise		sector that depends on land resources such as			
biodiversity conservation.		agriculture, plantation, forestry, tourism, and			
		workers and management units in the target			
		landscape and adjacent conservation areas,			
		locally operating NGOs, subcontractors in the			
		landscape, beneficiaries of ecosystem services			
		which would include distant communities,			
		among others.			

² Risks rated as 'High' will need to be categorised as 'Critical Risks' in Atlas and reported accordingly.

Risk	RISK RATING	RISK MITIGATION MEASURES	Revised risk Rating ² IN 2013	PROPOSED ADDITIONAL MITIGATION MEASURES IN 2013	REVISED RISK RATING IN 2019
Political pressure and interferences will prevent stakeholders from rational utilisation of natural resources compatible with biodiversity conservation goals.	Medium	In the context of the project, "political pressures and interferences" in Sabah are manifested in the subtle form of assigning management rights of land-uses to political patronage. The project's strategy to mitigate this risk is to create a transparent process of forest planning and management through third party involvement. The international presence created by the UNDP/GEF supported project will be absolutely critical in this regard in raising the profile of the issue and serving this reform process. The project will act as a lever to further increase the commitment at different bureaucratic levels to improving the situation.	High		Medium
Site level improvement in the target landscape is causing a "leakage problem", causing additional deforestation/degradatio n in other areas under YS or SFD management.	Medium	This risk is considered especially significant in the case of YS, which has approximately one million ha. under management. It has been mitigated partly already by the selection of the target landscape, which is believed to be of greater biodiversity significance than other YS areas. Thus, leakage or shifting of conversion pressures would still result in net biodiversity gains. Nevertheless, it will be important for SFD to move quickly to ensure rapid uptake and replication of the model / approach, once it has been shown to be a successful one.	Medium		High

Risk	RISK RATING	RISK MITIGATION MEASURES	REVISED RISK RATING ² IN 2013	PROPOSED ADDITIONAL MITIGATION MEASURES IN 2013	REVISED RISK RATING IN 2019
International REDD Plus process does not progress fast enough and loses the confidence among the project stakeholders.	Medium	The project will play close attention to the process through which a REDD+ compliance market may be expected to emerge. It will include consideration of voluntary markets as an alternative, while bearing in mind that carbon prices remain low there. It will investigate options for 'stacking' credits for multiple (carbon, biodiversity) services. Finally, the project's emphasis on adaptive management means that strategies are not written in stone.	Medium		High
Poor cooperation among government agencies will prevent the formulation of supporting policy reforms and institutional strengthening towards multiple-use forest landscape management.	Low	Consultations have been undertaken among the key government stakeholders in the State and their endorsement has been secured. The dialogue will continue during full project implementation. The project will maintain close ties with the HoB process, which has helped substantially, together with efforts by SFD, to raise the prominence of green growth issues. As a result, it is becoming increasingly difficult for other government agencies to pursue business as usual patterns of development.	Low		Low
Lack of suitable qualified personnel to act as local counterparts in planning, management and execution of project programmes.	Low	This risk will be minimized by engaging key stakeholders in the selection of suitable personnel to be involved in the project planning and management. Training and on the job training / and capacity building will be a significant project activity to instill new skills	Low		High

Risk	RISK RATING	RISK MITIGATION MEASURES	REVISED RISK RATING ² IN 2013	PROPOSED ADDITIONAL MITIGATION MEASURES IN 2013	REVISED RISK RATING IN 2019
		and competencies among PA system staff.			
Climate change undermines the conservation objectives of the Project.	Low	The Project will work to address the anticipated negative impacts of climate change by increasing resilience of the forest landscape. The adaptive management approach will ensure project resilience to all changes (not limited to climate-related changes) that will occur in the future.	High	To incorporate the TWG recommendations and the BioD assessment into the project planning and implementation.	Low
Market-based biodiversity, carbon and PES do not develop despite the development of regulations and guidelines.	Low	Malaysia is a signatory to several international conventions including the Convention on biodiversity and Framework of Convention on Climate Change. There are currently strong interests to develop market-based forestry instruments in Malaysia by governmental (NRE) and non-governmental organization (e.g. WWF). It is expected that the multi- stakeholder coordination process of the project will contribute to the understanding and development of a market-based instruments. As noted above, in case market-based mechanisms are slow to emerge, the project will look to voluntary schemes.	Medium-High		High