conducted by Malaysia Office: April, 2022

Country Name	Project on Sustainable Development for Biodiversity and Ecosystems
Malaysia	Conservation in Sabah

I. Project Outline

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Background	Sabah State is one of the few places on earth still blessed with mega-biodiversity, which is not only vital to the sustainable socio-economic development of the State but also a treasure for all humankind. Conservation of its biodiversity and ecosystems is of utmost importance. JICA supported the Malaysian Federal and Sabah State Governments through the Programme for Bornean Biodiversity and Ecosystems Conservation (BBEC) Phase 1 and 2 as technical cooperation projects. The Programme Purpose of BBEC/Phase 1 (February 2002–January 2007) was "Comprehensive and sustainable approach for conservation is established," while BBEC/Phase 2 (October 2007–September 2012) aimed "A system for biodiversity and ecosystem conservation in Sabah is strengthened and Sabah State becomes capable of extending knowledge and skills on biodiversity conservation to other states of Malaysia and foreign countries." The authorities concerned of the Government of Malaysia had set the implementation of the Sabah Biodiversity Strategy (SBS), prepared under BBEC/Phase 2, as a next step to be taken and requested the Government of Japan for this project, which is known as SDBEC.							
Objectives of the Project	Through 1) strengthening management system of biodiversity and ecosystem conservation in Sabah, 2) sharing Sabah's experiences in biodiversity and ecosystem conservation nationally and internationally, the project aimed at promoting biodiversity and ecosystem conservation for sustainable development in Sabah, thereby contributing to making Sabah become known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally. 1. Overall Goal: Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally. 2. Project Purpose: Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.							
Activities of the Project	1. Project Site: State of Sabah, especially (i) Core and Buffer Zones of Lower Kinabatangan and Segama Wetlands (LKSW) – Ramsar Site – and its River Basin and (ii) Core, Buffer and Transition Zones of Croker Range Biosphere Reserve (CRBR) under the UNESCO Man and Biosphere (MAB) Programme. 2. Main Activities: (1) Supporting necessary revision of the SBS, developing a monitoring system for the SBS, preparing the CRBR management plan, collaborating with other programmes and donor agencies; piloting livelihood improvement in Tudan Village and Sintuong-Tuong/Kiporing Village in the Buffer Zone of CRBR, organizing training in Communication, Education and Public Awareness (CEPA), etc. (2) Compiling Sabah's experience into documents, undertaking studies on sustainable financing mechanisms for biodiversity, participating in/hosting national and international conferences, sharing experience to policy formulation processes at the national level, supporting organizations for publicity and media strategy, etc. 3. Inputs (to carry out above activities) Japanese Side Malaysian Side 1) Staff Allocated: Staff from 15 different agencies 2) Trainees Received: 66 persons 2) Land and facilities: Project office, telephone line, 3) Equipment: PCs, Portable GPS, Spectrophotometer, Laboratory equipment for soil analysis 3) Local Cost: International workshop-related Cost 4) Local Cost: Construction of the Tudan community hall etc.							
Project Period	(ex-ante) February 2013 – January 2017 Project Cost (ex-ante) 236 million yen, (actual) 208 million yen (actual) 2017 (ex-ante) 236 million yen (actual) 208 million							
Implementing Agency	Sabah State Government Agencies: Natural Resources Office (NRO), Sabah Biodiversity Center (SaBC), Sabah Forestry Department (SFD), Sabah Parks (SP), Sabah Wildlife Department (SWD), Environment Protection Department (EPD), Department of Irrigation and Drainage (DID), etc. Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah (ITBC-UMS)							
Cooperation Agency in Japan	Ministry of Environment							

II. Result of the Evaluation

<Constraints on Evaluation>

• Due to the COVID-19 pandemic, it was difficult to collect information from some of the implementing agencies. The field survey was not possible for the same reason. Therefore, this evaluation is based on the limited information provided by some of the implementing agencies, which managed to cooperate with the study under difficult circumstances.

<Special Perspectives Considered in the Ex-Post Evaluation>

• Series of third country training programmes (TCTPs), namely, "Integrated Biodiversity" (FY2013–2015) and "Integrated Biodiversity and Ecosystem Conservation" (FY2016–2019) were implemented, and a JICA Partnership Project (JPP), "Establish Local ESD Activity Bases for Sustainable Biodiversity Conservation and Ecosystem Services" (2019–2022) is undergoing in the Sabah State. The counterpart agencies/personnel of this project (SDBEC) have been continuously engaged in the above-mentioned programmes and project. Also, the terminal evaluation team's

¹ The BBES Phase 1 and 2 supported the registration of these areas under international initiatives. LKSW was registered as a Ramsar Convention site in 2008, and CRBR was to be declared as a Biosphere Reserve under the UNESCO MAB Programme at the time of ex-ante evaluation of this project.

recommendations for SDBEC have been followed up in the TCTPs and the JPP. Therefore, they may have contributed to the outcomes and impacts of this project.

1 Relevance

<Consistency with the Development Policy of Malaysia at the Time of Ex-Ante Evaluation>

This project was consistent with development policy at both the Federal and State levels at the time of ex-ante evaluation. At the Federal level, the 10th Malaysia Plan (2011–2015) set out "valorization of our environmental endowments" as one of the "10 big ideas." The plan also identified the "five drivers" to transform the nation into a high-income economy, and one of them was "creating an environment that improves the quality of life." Under this driving force, the "seven focuses" were identified. One of them was "to ensure that modern Malaysians fulfill their responsibilities to future generations through the wise management and conservation of existing resources." At the State level, the Direction of Sabah State Development and Advancement (development plan of the state) (2003) stipulates that certain areas should be reserved for the conservation of natural resources to support healthy ecosystems with introducing the concept of zoning.

<Consistency with the Development Needs of Malaysia at the Time of Ex-Ante Evaluation>

This project was consistent with the needs for conserving Sabah's biodiversity and ecosystems, such as through the implementation of the SBS as mentioned in "Background" above. Also, after the BBEC Phase 1 and 2, more emphasis was given to sustainable development to accomplish conservation.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

This project was consistent with Japan's ODA policy. One of the priority areas for ODA policy to Malaysia at the time of ex-ante evaluation was to "Support balanced development toward becoming a developed country" that included environmental conservation.² <Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the Time of Project Completion>

The project achieved its Project Purpose by the time of project completion. The SBS, prepared under the BBEC Phase 2 and approved by the Sabah State Cabinet in December 2014, was revised with the support of this project and launched in October 2016. The project's activities contributed to the SBS implementation through the pilot projects³ (Indicator 1). Although the State Government's official endorsement of the CRBR management plan prepared by this project was delayed due to institutional issues, the pilot projects were virtually deemed to be part of the implementation of the CRBR management plan, which was an element of the SBS. The progress of the SBS implementation was monitored and reported to the Sabah Biodiversity Council (Indicator 2). As the project proactively disseminated Sabah's experience and knowledge on biodiversity and ecosystem conservation through domestic and international conferences etc., some are referred to as good practices in National Policy on Biological Diversity in Malaysia (2016–2025) (Indicator 3). Two additional sites were registered under international initiatives of biodiversity conservation – (i) CRBR as a Biosphere Reserve (BR) for the UNESCO MAB Programme (June 2014) and (ii) Kota Kinabalu Wetland as a Ramsar Convention site (October 2016) (Indicator 4).

<Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

The project effects have continued to the time of ex-post evaluation. SaBC has monitored the SBS progress annually, and the reports were presented to the Sabah Biodiversity Council. SaBC acts as the secretariat and monitoring body, and the Council acts as the steering committee. The CRBR management plan has yet to be endorsed by the State Government: the plan requires approval by the State Cabinet, but it is difficult to reach approval because of the jurisdiction of multiple agencies. Nevertheless, the annual plan of the CRBR management plan, which only requires approval by the steering committee, has been approved, implemented, and monitored regularly. UMS has been involved in CEPA. In the former pilot project sites, livelihood activities have continued with support from the Department of Agriculture and ITBC-UMS. The NRO, ITBC-UMS, and other government agencies, together with NGOs, continued to organize the TCTP up to 2019. The TCTP was financially supported by the Malaysian Technical Cooperation Programme (MTCP) under the Ministry of Foreign Affairs, Malaysia, and JICA. In addition, there has been significant progress on financing mechanisms that the project studied: the concept of Payment for Ecosystem Services (PES) and Conservation Finance was approved by the Sabah State Cabinet in 2018, and a way to the introduction and regulation of the ecosystem conservation fee has been opened through the drafting of an enactment known as the Ecosystem Conservation Authority Enactment 2020 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.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

The Overall Goal has been achieved at the time of ex-post evaluation. At least 635 researchers visited Sabah for studies on biodiversity conservation and sustainable development from 2017 to 2020 (Indicator 1). More than six visitors visited Sabah for media coverage on biodiversity conservation and sustainable development from 2019 to 2021 (Indicator 2). More than six articles were published in international scientific journals regarding Sabah's experiences/initiatives on sustainable development and biodiversity conservation from 2018 to 2021 (Indicator 3). Sabah's contribution to the achievement of the Aichi Target (included in the Strategic Plan for Biodiversity 2011–2020 adopted at the Tenth Meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity (CBD)) was evidenced in the Sixth National Report of Malaysia to the CBD in 2019 (Indicator 4).

<Other Impacts at the Time of Ex-Post Evaluation>

Negative impacts were not observed. As a positive impact, SaBC mentioned women empowerment: through the pilot project in Tudan Village, women from the village were involved in the capacity development activities. Currently, several of the women are leading several activities and the village management committee. Also, one of the main counterpart Prof. Charles S. Vairappan, Professor of Natural Products Chemistry at the Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah, received the Foreign Minister's Commendation in recognition of his contribution in promoting education and research between Japan and Malaysia including activities through this project.

² Ministry of Foreign Affairs, "ODA Country Data Collection" (2012).

³ The pilot projects aimed to balance conservation and sustainable development through incentive creation and livelihood improvement in communities adjacent to the protected areas and included activities such as compost and biochar making, bee-keeping and mulberry cultivation and processing.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

Achievement of Project Purpose and Overall Goal

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Aim	Indicators	Results		Source				
(Project Purpose)	Indicator 1	Status of the Achievement (Status of the Continuation): achieved (continued)						
Biodiversity and	The project activities	(Project Completio	*					
ecosystem conservation		The SBS was revised with the support of this project and launched in October						
for sustainable	Implementation.	1 1						source: Terminal
development in Sabah		2 2 7						Evaluation Report,
is promoted with		` '						Questionnaire with
national and		1						SaBC
international	Indicator 2	Status of the Achievement (Status of the Continuation): achieved (continued)						
recognition.	Indicator 2: The progress	(Project Completion)						
	of SBS is monitored in	The revised SBS includes a monitoring system. The progress of the SBS						
	the formalized way and	implementation was monitored and reported to the Sabah Biodiversity						
	reported to the	Council.				source: Terminal		
	Biodiversity	(Ex-Post Evaluation)				Evaluation Report,		
	Council/Chief Minister.					Questionnaire with		
		presented to the Sabah Biodiversity Council.				SaBC		
	Indicator 3	Status of the Achievement (Status of the Continuation): achieved (continued)				continued)		
	Sabah's experience and	(Project Completion)						
	knowledge on	The National Policy on Biological Diversity in Malaysia (2016–2025) refers				025) refers		
	biodiversity and	to the SBS as a good practice of gazetting protected areas and the Tagal						
	ecosystem conservation	(traditional fisherie	-				_	source: Terminal
	are referred as good	using fishery resou		-				Evaluation Report,
	practices nationally and	(Ex-Post Evaluatio		•	2	,		Questionnaire with
	internationally.	See the Overall Go	1	1 and 2.				SaBC
	Indicator 4	Status of the Achie	vement (Statu	is of the Cor	ntinuation):	achieved	(continued)	
	At least 1 additional site	(Project Completio			,		,	
	is registered under	Two additional site	*	vas declared	as a BR fo	or the UNE	SCO MAB	
	_							
			programme in June 2014. (ii) Kota Kinabalu Wetland was registered as a Ramsar Convention site in October 2016.					source: Terminal
	and/or existing site(s) is	(Ex-Post Evaluatio						Evaluation Report,
	expanded.	· · · · · · · · · · · · · · · · · · ·				Questionnaire with		
							SaBC	
(Overall Goal)	Indicator 1	(Ex-Post Evaluation) achieved						
Sabah is known as the	At least 20 researchers			2017	2018	2019	2020	
Asian Centre of	visit Sabah for studies on	No. of international i		172	173	200	90	
Excellence for	biodiversity conservation	newly visited Sabah Theme of studies	for study				41)	source:
biodiversity	and sustainable	Theme of studies				life, marine, Janagement		Questionnaire with
conservation and	development in 5 years.			SaBC, Government				
sustainable				•	<u> </u>		'	of Malaysia
development nationally	Indicator 2	(Ex-Post Evaluation) achieved					or many sia	
and internationally.	At least 5 visitors visit	Name of the media	Date	Volume/page	s/	Topic, outli	ne	
	Sabah for media coverage	Daily Express (local		1	Sabah's	Conservat	tion rated	
	on biodiversity	newspaper) The Star Online	2019 June 19, 2018	1	'satisfacto	ory' rotect biodiv	arcity	
	conservation and	Judi Dench's Wild		TV (2-pa			ld Borneo	
sustainable developme		Borneo Adventure	, ,	series)	Adventur	e Airing T	onight Judi	
	in 5 years.	Airing Tonight			Dench's Wild Borneo Adventu			
	in 5 years.	New Strait Times	August 20,	1	Airing To		vid-19 issues	
		Strait Times	2021	1			thening US-	
			. 40.2		Sabah tie			
		New Strait Times	April 8, 2021	1			ves in Sabah rough tree-	
					planting	restored In	nough tree-	
		TV1 RTM	May 26, 2021		8) Herba Hı		kit Mahawis'	source:
				in Rona Saba		Rona Sab	ah (Sabah	Questionnaire with
					Indigenou Timbou,	us Herbs Tambunai	Garden III	SaBC and ITBC-
		Sabah).			UMS			
	Indicator 3	(Ex-Post Evaluation) achieved						
At least 5 articles are published at international scientific journals		Many articles including the following were published.						
		Name of the article Year Name of the						
		journal						
Sustainable development and environmental stewardship: the regarding Sabah's Heart of Borneo paradox and its implications on green				2018 Tay Frai		source:		
	experiences/initiatives on economic transformation in Asia (a chapter in Routledge					Questionnaire with		
	sustainable development	Handbook of Sustain	able Developm	ent in Asia)				SaBC
	•	1						

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	and biodiversity	Exploring Tourists' Knowledge, Perceptions and Willingness to	2021		
	conservation in 5 years.	Pay on Biodiversity Conservation: Insights from Kinabalu		Conference	
	j	Park, Borneo		Series	
		The Practice of Biodiversity -related Indigenous Knowledge in	2019		
		Kota Belud, Sabah: A Preliminary Study		Journal of	
				Social Science	
		T	2010	and Humanities	
		Integrating Sunda clouded leopard (Neofelis diardi)	2019	Science Direct	
		conservation into development and restoration planning in			
		Sabah (Borneo)	2021	IOD C. C	
		The Impact of Environmental Education (EE) on the Society's		IOP Conference	
		Awareness, Responsibility, and Attitude towards the Development of a Lifelong Attitude of Pro-Conservation		Series	
		Behaviour in Kota Kinabalu, Sabah			
	T 1' 4 4				
	Indicator 4	(Ex-Post Evaluation) achieved			
	Visible evidence is	The Sixth National Report of Malaysia to the CBD (December 2019)			
	observed in the report to	mentions the contribution of Sabah on multiple pages.			
	be prepared by the				
	Malaysian Government				
	regarding Sabah's				source:
	contribution to the				Questionnaire with
	achievement of Aichi				SaBC and the
	Target.				mentioned report

3 Efficiency

The project cost and the project period were within the plan (the ratio against the plan: 88% and 100%, respectively). The outputs of the project were produced as planned. Therefore, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

Conservation of biodiversity and ecosystem in Sabah have been supported by the National and State Governments as evidenced in the 12th Malaysia Plan (2021–2025) (under "Socio-Economic Development in Sabah and Sarawak") and Sabah's Strategic Long Term Action Plan (2016–2035) (under "Sabah as a Smart Green State: Towards Green Industry and Services"). Also, the concept of PES and Conservation Finance was approved by the State Cabinet in 2018. Furthermore, the Department of Agriculture (DOA)'s certification of good agriculture practices such as myGAP (for good agricultural practices) (2001–) and myOrganic (for organic farming) (2007–) promotes conservation of resources and biodiversity.

<Institutional/Organizational Aspect>

There have not been any big changes in the organizational structure/setting to promote conservation of biodiversity and ecosystems, i.e., SaBC (under NRO) as the secretariat for the SBS and the Sabah Biodiversity Council as the Steering Committee. The DOA and ITBC-UMS are also continuously involved in capacity development in sustainable development and awareness (CEPA), respectively. Regarding staffing, SaBC stated that the number of staff is not enough to continue necessary activities. SaBC is in the process of increasing the number of staff, although it is challenging as the appointment of new staff need to go through the approval of the Ministry of Finance and the Sabah Public Service Commission.

<Technical Aspect>

According to SaBC, the technical level has been sustained with necessary skills through continuous training.

<Financial Aspect>

According to SaBC, the Federal Government and the State Government have allocated the necessary budget according to the Malaysia Plan and the State Government's Action Plan, respectively. Also, through the MTCP, the Federal Government allocated a budget to implement the TCTP 2019 through a cost-sharing basis with JICA. ITBC-UMS has secured its funding from the Ministry of Higher Education and financial assistance from private funding bodies.

<Evaluation Result>

In light of the above, a slight problem has been observed in terms of the institutional aspects of the implementing agency. Therefore, the sustainability of the project effects is fair.

5 Summary of the Evaluation

The project achieved the Project Purpose by the end of the implementation period as the biodiversity and ecosystem conservation in view of sustainable development was promoted in Sabah through the implementation support of the SBS, the pilot livelihood projects, and sharing of their experiences and knowledge. After project completion, the project effects have continued through the implementation of the SBS with various activities, including livelihood improvement and CEPA in the target areas. The Overall Goal has been achieved as Sabah has been known for biodiversity conservation and sustainable development in both academic and press. As for sustainability, a slight understaffing problem was found in the institutional/organizational aspect, but all the other aspects were in adequate condition. Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

Counterpart agencies are recommended to continue cooperating to keep Sabah known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally.

Lessons Learned for JICA:

• It was found that one of the main counterpart Prof. Charles S. Vairappan, Professor of Natural Products Chemistry at the Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah, received the Foreign Minister's Commendation in recognition of his

- contribution in promoting education and research between Japan and Malaysia. Such a good practice was made possible by continuously keeping good relationship utilizing JICA schemes.
- While making an environment project successful is generally challenging due to its nature of involving various stakeholders, this project has achieved the expected outcomes, which might have largely attributed to the long-term cooperation between JICA and Malaysia in Sabah.



Skeleton of Borneo Elephant was reconstructed in the project. It is used for an environmental education after the project.



Plantation activities for reversing oil palm farm to natural forestry by "Establish Local ESD Activity Bases for Sustainable Biodiversity Conservation and Ecosystem Services"