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**Developing & Implementing  
A National Access & Benefit-Sharing Framework in Malaysia**

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**FINAL REPORT**

**November/2019**

## CONTENTS

Contents .....	2
Abbreviations and Acronyms .....	4
<b>Executive Summary</b> .....	6
<b>1.0 Project Information</b> .....	12
1.1 Problems The Project Sought To Address .....	14
1.2 Project Key barriers.....	15
1.3 Project Design .....	15
<b>2.0 Project Performance and Key Results</b> .....	15
3.1 Objectives and/or Outcome Level .....	16
3.2 Outputs .....	25
<b>3.0 Implementation Review</b> .....	33
3.1 Management Arrangement/ Project Governance .....	33
3.2 Partnerships.....	33
3.3 National Ownership & and sustainability of project results .....	38
<b>4.0 Monitoring, Evaluation and Reporting</b> .....	40
4.1 M&E Systems – Design & Implementation.....	40
4.2 Adaptive Management (Work planning, Reporting & Communications) .....	41
<b>5.0 Impact &amp; Catalytic Effect</b> .....	41
5.1 Impact.....	41
5.2 Catalytic Effect.....	42
<b>6.0 Project Financial Analysis</b> .....	43
6.1 Financial Management .....	43
6.2 Co-financing.....	43
<b>7.0 Lessons Learned (Issues/Challenges and Management Responses)</b> .....	43
7.1 The LITSARA Story - from Traditional Knowledge to Innovation.....	45
7.2 Recommendations.....	46
<b>Appendix</b> .....	47
<b>Annex 1: Stakeholder List</b> .....	47

<b>Annex 2: Rating Scales .....</b>	<b>48</b>
<b>Annex 3: Delivery of Project Objective &amp; Outcomes against Performance Indicators.....</b>	<b>53</b>
<b>Annex 4: Risk Log.....</b>	<b>60</b>
<b>Annex 5: Co-financing Table .....</b>	<b>61</b>
<b>Annex 6: Planned Budget and Expenditures at End-term .....</b>	<b>62</b>
<b>Annex 7: Sectoral plans, Technical reports &amp; Miscellaneous .....</b>	<b>64</b>

## LIST OF FIGURES

Figure 1: Working group and stakeholders of ABS project.....	14
Figure 2: Distillation unit to extract Litsara essential oil.....	34
Figure 3: The Litsea tree.....	38
Figure 4: Sample of the Litsara Products from the ABS project.....	44

## ABBREVIATIONS AND ACRONYMS

ABS	Access to and benefit-sharing (of biological resources)
AGC	Attorney General's Chamber
ATLAS	UNDP tracking system
AWP	Annual Work Plan
CAs	Competent Authorities (administer the licences for access to biological resources under ABS)
CBD	UN Convention on Biological Diversity
CP	Community Protocol (a PIC document demonstrated in Sabah)
DBFM	Division of Biodiversity & Forest Management (MWLNR)
DIPD	Department of Indigenous Peoples Development (~JAKOA)
DIM	UNDP Direct Implementation Modality (of project)
DWNP	Department of Wildlife & National Parks Peninsular Malaysia
EA	Executing Agency (UNDP)
EPU	Economic Planning Units
GEF	Global Environment Facility (GEF guidelines for Terminal Evaluations are utilized)
FRIM	Forest Research Institute Malaysia (one of the three IPs)
ILCs	Indigenous & Local Communities
IPNM	Indigenous Peoples Network of Malaysia (~JOAS)
IPs	Implementing Partners (service providers for UNDP, a.k.a. 'project partners' – FRIM, SaBC, SBC)
IPRs	Intellectual Property Rights
MAPs	Medicinal & Aromatic Plants
M&E	Monitoring and Evaluation
MWLNR	Ministry of Water, Land & Natural Resources (~KATS) (its forerunner was Ministry of Natural Resources & Environment (MoNRE) (Executing Agency)
MAT	Mutually Agreed Terms (as part of ABS)
MESTECC	Ministry of Energy, Science, Technology, Environment & Climate Change
MyIPO	Intellectual Property Corporation of Malaysia
NCA	National Competent Authority (administration, guidelines and policy of ABS)
NCRs	Native Customary Rights (ILC land tenure rights)
NP	Nagoya Protocol (of CBD)
NSC	National Steering Committee
PIC	Prior informed consent (to discuss TK and ABS)
PIMS	UNDP Project Information Management System
PRF	Project Results Framework (~logframe / Strategic Results Framework)
RP	Responsible Parties (~ local hire service providers or implementing on behalf of the IPs)
R&D	Research & Development
SaBC	Sabah Biodiversity Centre (One of the three IPs)
SaBCo	Sabah Biodiversity Council
SaFD	Sabah Forestry Department
SBC	Sarawak Biodiversity Centre (One of the three IPs)
SBCo	Sarawak Biodiversity Council
SFD	Sarawak Forest Department
SMART	Specific, Measurable, Achievable, Relevant and Time-bound - Indicators
MUDeNR	Sarawak Ministry of Urban Development and Natural Resource

SMESTR	Sarawak Ministry of Education, Science & Technological Research
SSPU	Sarawak State Planning Unit
TE	Terminal Evaluation (of the project)
TF	Trust Fund
TK	Traditional Knowledge
UNDP CO	United Nations Development Programme Country Office
VDSC	Village Development and Security Committee (~JKKK, with the Head officially designated by government)

**UNITS** US\$ - US dollar; MYR - Malaysian Ringgit; m - million or meters; ha - hectare (100 m x 100 metres)

## EXECUTIVE SUMMARY

GEF provides financial and technical resources to implement the United Nations (UN) Convention on Biological Diversity (CBD, Earth Summit Rio, 1992), which is the world's policy to conserve biodiversity. The three objectives of CBD were expressed in its Article 1: conservation of biological diversity; sustainable use of its components; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (including by appropriate access to genetic resources, and the transfer of relevant technologies and funding). The CBD convention includes the Nagoya Protocol (NP, 2010) as a legal framework that targets the third objective of CBD - i.e. the access to and benefit-sharing of biological resources (ABS).

The specific problem that the project sought to address is the lack of a functioning national legal, institutional and financial framework that would enable the equitable sharing of benefits from the exploration and exploitation of biological resources and traditional knowledge (TK), between national / state governments, commercial interests, and the owners / custodians of these resources and their TK. The unclear jurisdiction of indigenous and local communities' (ILCs) land resources has hindered the traditional management of their biological resources. Added to this, ILCs are also increasingly having to face outside commercial interests with seemingly higher economic values for land use, than from biodiversity conservation and sustainable use. The perceived lack of biological value has also meant that the younger generation has little or no interest in the TK associated with biodiversity utilization.

Hence the objective of this project was to 'Strengthen the conservation and sustainable use of biological and genetic resources in Malaysia through developing the national framework for the implementation of Access & Benefit Sharing (ABS) under the UN Convention on Biological Diversity (CBD)'. The project was designed with three outcomes:

1. An operational national regulatory and institutional framework on ABS;
2. Strengthened national institutional & stakeholder capacity for implementation of a national ABS framework;
3. Best practice ABS processes demonstrated recognizing the principles of Prior Informed Consent (PIC) & Mutually Agreed Terms (MAT) including the access to and fair & equitable sharing of benefits (ABS).

The project was implemented in Peninsular Malaysia, and in Sabah and Sarawak, in total, there are three levels of the project results framework that were assessed - objective, outcome and output. This was guided by the indicators and targets set at each level. Success is also built upon achievement of the Outputs, according to 'framework logic.' The approach and methodology of the evaluation followed the guidelines outlined in the UNDP Guidance for Conducting Terminal Evaluations (TE) of UNDP-supported GEF-financed Projects (2012). The Objective and Outcome levels include a rating according to UNDP GEF guidance (described in Annex 2). Evaluation of the project was determined through TE - an evidence-based assessment and feedbacks from stakeholders who were involved in the design, implementation, and supervision of the project.

The overall rating is provided in the table below:

TE Rating	Achievement Description
	Outcomes/ Results
Overall Project Objective Achievement <b>Satisfactory</b>	<p><b>Objective: Strengthen the conservation and sustainable use of biological and genetic resources through developing a national framework for the implementation of Access &amp; Benefit Sharing (ABS) under CBD</b></p> <p><u>National ABS law, regulations &amp; institutional framework will enable Malaysia to accede to the Nagoya Protocol</u> – the rating against the objective indicator is Satisfactory.</p> <p>Malaysia is now a party to the CBD's Nagoya Protocol with the accession in November 2018 and</p>

	<p>entered into force in February 2019. Summary List of Legislation</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> <li>- ABS Act 795 (2017) - output from ABS I (UNDP project 2010-13) through to ABS II (2014-19)</li> <li>- National Regulations (draft status)</li> <li>- Sabah Biodiversity Enactment (2000), Amended 2017, passed into Law 2018</li> <li>- Sabah Access to Biological Resources &amp; Benefit-Sharing Regulations (Draft, 2018)</li> <li>- Sarawak Biodiversity Centre Ordinance (1997, Amendments, 2003, 2014)</li> <li>- Sarawak Biodiversity Regulations (2016)</li> </ul> </div> <p>An Access to Biological Resources &amp; Benefit Sharing Act 2017 (Act 795) was adopted by the government in August 2017 and published in the Gazette in October 2017. The Act consists of 10 parts and two schedules that cover provisions on permits to access biological resources, benefit-sharing agreement, prior informed consent (PIC), mutually agreed terms (MAT), monitoring, and payment into fund.</p> <p>A draft of the Access &amp; Benefit Sharing Regulations was reviewed by the Attorney General’s Chamber (AGC) in November 2018 with comments to now be incorporated. The enforcement of the Act and its regulation will only take effect once the regulation is approved by the AGC and the Minister.</p> <p>The draft regulation has been with the AGC for the last nine months (as of August 2019) without action. This lack of an approved regulation has held up the development of ABS, in particular in terms of the competent authorities (CAs) and checkpoints to fully discharge their duties. An institutional framework (as described within Act 795) and its draft regulations have been established. Notably, the CAs are beginning to function. E.g. in the issuance of licences to access biological resources.</p> <p><u>Finance mechanisms for managing ABS monetary benefits</u> - The rating is Moderately Satisfactory</p> <p>The National Conservation Trust Fund is currently not replenished and is not managed to handle ABS investments and disbursements. The Sabah ABS fund appears to be for recurrent administrative costs. Thus, only Sarawak appears to have a fund directly set up for ABS investments to be used for biodiversity conservation, although at present it also uses incoming funds for ABS administration. The ABS Act 795 includes funding which indicates that the national or state governments may establish a fund for biodiversity conservation (para 22), with the draft regulations reiterating the Act. Thus, the Act rather left this issue open.</p> <p>The FRIM ABS agreements are also of note, under which, future royalties are divided four ways (community, government CA, FRIM (developer), and a trust fund for R&amp;D). For these TFs, FRIM has a ‘research, development, commercialization management committee’ including FRIM, state government and ILC members. Having a TF proportion is considered necessary due to the high R&amp;D costs of product development. However, with this focus on R&amp;D, it appears that this 25% TF portion of the royalty is not really ‘ear-marked’ for village cultivation or biodiversity conservation.</p>
<p>Outcome 1 Overall Achievement <b>Satisfactory</b></p>	<p><b>Outcome 1: National regulatory &amp; institutional framework for ABS</b></p> <p><u>National law and implementing regulations on ABS come into force</u> - The rating is Satisfactory</p> <p>As discussed in the above Objective 1</p> <p><u>National &amp; State Competent Authorities identified and implementing the ABS law / regulations</u> - The rating is Moderately Unsatisfactory</p> <p>A National Competent Authority (NCA) has been established. Fourteen CAs representing the 13 states and federal territories have been identified. They are the EPU’s of all the peninsular states of: Johor, Melaka, Pahang, Selangor, Perak, Kedah, Perlis, Kelantan, Penang and Terengganu, plus the Forestry Department of Negeri Sembilan State. In east Malaysia, Sabah’s CAs is the Sabah Biodiversity Council (SaBCo), and the Sarawak CA is the Sarawak Ministry of Urban Development &amp; Natural Resources (MUDNR). The CA for the Federal Territories (Kuala Lumpur, Labuan, Putrajaya) is the Ministry of Federal Territories.</p> <p>The capacity of the NCA to maintain its skills and staffing is of concern, especially in their need to ‘lead’ and liaise with the 13 state-level CAs. The evidence includes a lack of functioning webpage, lack of up</p>

	<p>to date information for the CBD / Nagoya Protocol’s ABSCH; lack of informing state CAs when national access permits have been issued for research in particular states. Most of the EPU’s of the peninsular states believe that they require further training and that their responsibilities are not yet clear, which in part is due to the ABS regulations remaining in draft form.</p> <p><u>Local institutional system for the protection of TK and customary uses of biological resources in Sabah</u> - The rating is Satisfactory</p> <p>Two community protocols (CPs) were developed. Melangkap Community Protocol has been published by SaBC. The CP consists of seven chapters which cover: village TK, PIC, MAT procedures to access the community resources and TK. The community ‘ownership’ of the CP is very high. The first complete draft of the Long Pasia / Mio Community Protocol (Malay) was completed in July 2018.</p> <p>The CPs together with the experiences in the peninsular states (FRIM pilots in Perak and Kedah states), SBC in Sarawak and studies by project consultants have been used to inform and as a reference for procedures when working with communities. Although CPs <i>per se</i> are not mentioned in the draft ABS regulation.</p> <p>The Melangkap Community Protocol stands as a good demonstration of community management of natural resources, however to date, the ‘community protocol’ approach has not been replicated by the other states which have more directly followed the national guidelines on PIC, MAT and ABS. This is partly because the Sabah CPs only cover PIC and expected access procedures, whereas the models on the peninsular (FRIM) and Sarawak (SBC) have developed further into actual ABS agreements for particular bio-resources.</p> <p><u>The funding mechanism for proceeds from ABS agreements for biological conservation and sustainable use</u> - The rating is Moderately Satisfactory</p> <p>This is a repeat indicator - See above Objective Indicator 2</p>
<p>Outcome 2 Overall Achievement <b>Moderately Satisfactory</b></p>	<p><b>Outcome 2: Strengthened institutional capacity for implementation of an ABS framework</b></p> <p><u>Improved capacity of Competent Authorities (NCA, CAs) in ABS</u> - the outcome indicator rating is Satisfactory</p> <p>The UNDP Capacity Development Scorecard indicated that at a national level and on the peninsular, capacities are somewhat lacking, especially in comparison to Sabah and Sarawak. This was largely confirmed by the peninsular CAs (~EPU’s). For the national level capacity (MWLNR as the focal agency for ABS), some of the comments on the scorecard were revealing:</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> <li>- The national ABS law was adopted on 17 October 2017 and is not in force pending finalization of its subsidiary legislations</li> <li>- There are an overall policy and commitment under the national ABS law, however, getting buy-ins from all states to implement the federal law is taking time. There is official and political commitment at the top level within MWLNR</li> <li>- The CAs and Checkpoints have been identified under the national ABS law. However, other institutions for ABS such as the NCA’s Advisory Committee are yet to be established.</li> <li>- A dedicated ABS institution to oversee/coordinate implementation of ABS at the national (federal) level is not yet in place. The officers involved in ABS are from the civil service and so are transferable and do not necessarily have biodiversity background or training.</li> <li>- DBFM (MWLNR) oversee ABS implementation. The unit will be strengthened as a National Biodiversity Centre (NBC) which will act as the NCA at the national level</li> <li>- The understanding of ABS is adequate but financial resources, personnel and expertise are limited to address the issues</li> <li>- The motivation level of the ABS focal point is high as the personnel have the interest. There is a need to develop technical skills in ABS. Training at the national and regional level have been undertaken</li> <li>- No monitoring has been done as the national ABS law is still not operational</li> </ul> </div>



	<p><u>NCA, CAs and related agencies trained to implement the national ABS framework</u> - The rating is Moderately Unsatisfactory</p> <p>Whilst three national-level training events were conducted for 140 participants, these were somewhat disjointed. Sabah and Sarawak undertook a more complete training programme.</p> <p><u>Researchers, ILCs &amp; industry aware of the ABS Act, and ABS / TK documentation procedures</u> - The rating is Moderately Satisfactory</p> <p>The findings of the 2<sup>nd</sup> KAP study with 1,149 respondents (550 institutional, 599 ILCs), in 2017:</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> <li>- <u>Institutional stakeholders</u> - the knowledge of the existence of ABS regulations was good, however, less than one third understood the policies, law or procedures/practices under ABS (e.g. licences, PIC, and equitable sharing of benefits)</li> <li>- <u>ILCs</u> - knowledge on ABS regulations was low, although the principles of ABS were understood, however, a number of ILCs were concerned that the ABS law would restrict resource collection for local use, which it does not.</li> </ul> </div> <p>A concern of the evaluation team concern was the level of protection of community Traditional Knowledge (TK) as their Intellectual Property Right (IPR). For example, where do the laws or regulations control researchers who make PICs / ABSs, but by then will have taken the TK, taken the plants, grown them commercially and extracted active compounds, and thereafter applied for patents, without the need to either go back to the village or share the patent. The ownership of community TK and any link to IPRs isn't present in Act 795, however, ABS draft regulations (Part 3) provide the expected IPR protection stating 'recognition or co-ownership of IPRs'.</p> <p>The draft ABS User's Guideline – has suggested two clauses:</p> <p>1/ Technology transfer - The Access Party must provide the following to the Provider and its members 'Transfer technologies relating to the research and development of the biological resources accessed to the provider, including technology protected by IPRs and/or relevant to conservation and sustainable utilization of biological diversity; and</p> <p>2/ Intellectual Property Rights (IPRs) – 'The Access Party agrees to joint ownership of IPRs with the Provider arising out of the utilisation of the Biological Resource and associated Traditional Knowledge accessed' and 'The Access Party must notify the Provider before applying for IPRs'.</p> <p>The meaning of co-ownership or joint ownership of IPRs, in the Malaysia context, has not been examined, however it would appear that until the ABS regulations are approved in their present form, IPRs of local communities with TK are not safeguarded.</p>
<p>Outcome 3 Overall Achievement <b>Satisfactory</b></p>	<p><b>Outcome 3: Best practice in ABS piloted with biodiversity conservation, Prior Informed Consent (PIC), Mutually Agreed Terms (MAT), and Equitable sharing of benefits</b></p> <p><b>Justification:</b> The project is expected or has achieved most of its global environmental objectives.</p> <p><u>ABS agreements negotiated with fair and equitable benefit sharing provisions</u> – the outcome indicator is rated as Highly Satisfactory</p> <p>Sarawak Biodiversity Centre (SBC) successfully signed one ABS benefit-sharing agreements with five communities involved in the <i>Litsea cubeba</i> oil production in March 2019. The pilot project demonstrated a complete value chain from biological resource (raw material) collection, through primary oil extraction to secondary product processing (soap, air freshener) to marketing and sales.</p> <p>Forest Research Institute Malaysia (FRIM) produced two prototypes traditional medicines named 'Pengloy Semai' and 'KaHerbs', based on the ILC TK of these medicinal plants in Kedah and Perak State. FRIM has negotiated two ABS agreements with the Semai and Kensiu communities for initial commercialization of these prototypes. The ABS agreements are with the respective CAs, namely Kedah and Perak EPU, awaiting approval to move to the signature.</p>

PIC processes with ILCs implemented – the outcome indicator is rated as Satisfactory

A national standard PIC template has been developed based on the experiences drawn from the pilot projects conducted by FRIM, SBC and SaBC. It is included in the ABS regulation (draft) and ABS User's Guide. FRIM and SBC both gained PIC during the engagement with their respective communities, in the lead up to creating ABS agreements. In the case of SaBC, the PIC stage was encapsulated within the two Community Protocols (CPs) that were developed. Under the project, the PIC processes were piloted in nine communities.

Best practice ABS agreements and PIC processes disseminated at regional level – The outcome indicator rating is Moderately Satisfactory

The requirements for ABS and PIC have legal status in-country, with supporting procedures developed for the licensing of research (commercial or otherwise) of biological resources. The required supporting ABS regulation to the ABS Act has not to date been finalised, with the government view that until done so, the ABS Act 795 can't be promulgated. This also means that the rights of the ILCs are not yet fully protected, such as concerning the sharing of IPRs.

The ABS agreements of the 'FRIM communities' have not been approved by the respective CAs so far, and the ABS agreements of the 'SBC communities' include non-disclosure clauses and so are not open for dissemination. The TE team only had limited access to either. The TE team briefly assessed both types and found that the FRIM ABS agreements appeared more balanced towards ILCs and biodiversity conservation and would serve better for 'best practice' dissemination. The SaBC Community Protocols provide a different approach where a community wish to document TK, establish and update their natural resource management methods (new or customary) and set up engagement procedures for outside interests (bio-prospectors, product developers, researchers etc).

Additionally, SBC and SaBC have established ABS Trust Funds, although how these will benefit, whereby Under Reg 14(2)(i) it is indicated that payment will be towards the conservation of biological resources and the sustainable use of its component. Therefore, SBC is required to ensure the conservation and sustainability of the resources.

ABS agreements that specify biological resources conservation – the outcome indicator rating is Moderately Unsatisfactory

Act 795 states 'the Access may not result in adverse environmental impact which may be difficult to control and mitigate'. The draft regulations state that 'the permit holder shall undertake to take all reasonable measures, (a) for conservation and its ecosystem; (b) to control, mitigate or remedy any adverse environmental impacts.'

In biodiversity conservation terms, these legal statements are somewhat weak. They assume that resource extraction under ABS is fairly benign. In areas with high biodiversity value, any permit applications need to state the likely impacts, and how they are going to be avoided, minimised, or the ecosystem integrity restored thereafter. If the impacts are going to be residual then a discussion of whether a permit should be issued in the first place, or if such residual impacts can be offset in a 'like for like' capacity.

ILCs are aware of the value of biological resources under their stewardship – the outcome indicator rating is Moderately Satisfactory

Through the pilot projects, a number of ILCs have improved knowledge of the value of 'their' biological resources and associated TK. Development potential has been outlined for two prototype products in Kedah and Perak, one aromatic oil in Sarawak, and within two CPs in Sabah (listing biodiversity and TK of value).

	<p>It is, however, the 'Access Parties' e.g. the researchers who are also the developers (i.e. FRIM and SBC) who had collected the plant specimens and associated TK, the biological materials are still accessible by the communities. SBC is not the sole holder of the biological material and local knowledge of its traditional value. The communities still own the knowledge and its traditional value. The ILC TK in many cases is expected to die out with this generation. The access parties also have the advantage of the plant and TK accumulated and confirmed across many ILCs, making the access parties combined TK much stronger. The ILCs are in a position of trust, relying on the access party informing them of the value of particular biological resources to develop in partnership or with a third party. Under the Sarawak Litsea Geographical Indication (GI2011-00001), the communities and their traditional knowledge are clearly stated. Under BSA, shared IPRs is one of the terms and conditions (Reg 14(2)). The ILCs awareness of the value of a potential product at this stage is likely to be far less than the access party (and their developer if not themselves), so equity in negotiating any ABS agreement is going to be based largely on trust, and Under the Sarawak Litsea Geographical Indication (GI2011-00001), the communities and their traditional knowledge are clearly stated. Under BSA, shared IPRs is one of the terms and conditions (Reg 14(2)).</p>
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ABS is now largely embedded within a legal and institutional framework. A number of pieces of legislation have been passed, primarily ABS Act 795 with the national regulations expected to be approved by the end of 2019. The project also produced user guidelines with further information on PIC, MAT, and ABS. For Sabah and Sarawak, Access Parties (commercial or non-commercial researchers), now apply on-line for permits, with the various permissions including now ABS required integrated into single systems.

TK work started in Sabah and Sarawak in 2001 and by FRIM on the peninsular in 2010, and has been developing since. It was given a boost after Malaysia joined the NP and also due in part to the UNDP projects ABS I and II. However, the younger generation is not involved in TK or ABS and need to be engaged. TK is still being lost at a village level.

There were clear differences in approaches by the three implementing partners (FRIM, SaBC, SBC). FRIM's approach to ABS was on the cautious or steady side in seeking PIC on a number of occasions. SaBC established themselves primarily as an administrative body. In the field they put most effort into making community protocols, which had a focus on community rights and management of biological resources and the methods for working with researchers (PIC and TK documentation). SBC focused much more on moving towards an end product with an ABS agreed to underpin it. SBC has already developed products for market. They have been able to achieve this having a small dynamic international standard research facility (with a modern bio-assaying laboratory, plant material storage unit and database).

For FRIM on the peninsular, prior to the project, they were only screening plants, whereas now they concurrently screen for associated TK. They have been able to further TK documentation, develop two prototypes for two communities, and develop two ABS agreements. In Sabah, their Biodiversity Enactment passing into law (2018) was their key project outcome. Two community protocols were developed by SaBC in Sabah. In Sarawak, SBC was able to put distillation equipment on-site at the village level, and to move to product development, thus securing a higher forest income for five communities. SBC has ABS agreements with five villages and has demonstrated a product value-chain with benefit to these ILCs.

The project has achieved many if not most of its objectives, and in some cases had gone beyond them. The volume of work that went into the project in comparison to the level of (GEF) project funding was high. The three national IPs – FRIM, SaBC and SBC have all achieved an extremely high level of national ownership of the project, there is an increased awareness with regard to ABS.

## 1.0 PROJECT INFORMATION

The Nagoya Protocol on Access to Genetic Resources and the Fair & Equitable Sharing of Benefits Arising from their Utilization was adopted by the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) at its 10<sup>th</sup> meeting (29 October 2010) in Nagoya, Japan. The protocol entered into force in 2014. This project is to support fulfilment of Malaysia's obligations under the CBD and its Nagoya protocol (2010)<sup>1</sup>. Malaysia has yet to sign the Nagoya Protocol (<https://absch.cbd.int/countries/MY>), however, an ABS National Focal Point has been appointed.

The project is designed to generate economic & social benefits for indigenous & local communities (ILC) from biodiversity / biological resources. Conservation and sustainable use of the biological resources (important genetic material) is to be achieved with the application of traditional knowledge and not least via the access and benefit-sharing (ABS) principles and associated legislation linked to the Nagoya Protocol. The basic design:

Outcome 1 concerns putting the policy and legislation in place for joining the Nagoya protocol and implementing it;

Outcome 2 concerns capacity building in ABS;

Outcome 3 concerns three pilot plant-based projects:

- (a) Identification of phytochemicals (alkaloids, saponins, flavonoids etc.), essential oils from aromatics – for use in medicine, herbal remedies and cosmetics – with of course ABS for local communities for selected products<sup>2</sup>
- (b) ABS licensing agreement for the production of extracts from the legume plant family (peas and beans)
- (c) ABS agreement in operation through a product's value chain. The product chosen is *Litsea cubeba* seeds which produce citral oil for soaps

Whist the identified products may be produced commercially (e.g. *Litsea* in China), it is the conservation of the genetic resources (wild races) *in-situ* that is important, together with ILC sustainable management and economic utilization.

The project has been implemented in several states and districts:

State	District	Village	Indigenous People	Activity
Kedah	Baling	Ulu Legong	Kensiu	TK provider + prototype 'KaHerb' developed by FRIM
Perak	Gopeng	Ulu Geroh	Semai	TK provider + prototype 'Pengloy Semai' developed by FRIM
Sabah	Sipitang	Long Pasia & Long Mio	Lundayeh	Lundayeh Community Protocol

<sup>1</sup> GEF provides financial & technical resources for developing countries to implement the CBD. The CBD (1992) is the global policy framework to conserve biodiversity. The convention includes protocols that target access & benefit sharing (ABS) of genetic resources (Nagoya), and biosafety (Cartagena). The Nagoya Protocol provides a legal framework for the implementation of the 3<sup>rd</sup> objective of CBD. The primary objective of the Nagoya Protocol Implementation Fund is to facilitate early entry into force and create enabling conditions at national and regional levels

<sup>2</sup> Including Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT)

	Kota Belud	Melangkap	Melangkap	Melangkap Community Protocol
Sarawak	Sarikei	Bukit Sadok	Iban	Distillation equipment
	Padawan	Kampung Kiding	Bidayuh	Litsara oil
	Bario	Pa'Ukat & Pa'Lungan	Kelabit	Litsara oil
	Lawas	Long Kerebangan & Long Telingan	Lun Bawang	Litsara oil

TK - Traditional Knowledge

GEF provides financial and technical resources to implement the United Nations (UN) Convention on Biological Diversity (CBD, Earth Summit Rio, 1992), which is the world's policy to conserve biodiversity. The three objectives of CBD were expressed in its Article 1: conservation of biological diversity; sustainable use of its components; and the fair & equitable sharing of the benefits arising out of the utilization of genetic resources (including by appropriate access to genetic resources, and the transfer of relevant technologies and funding).

The project is also aligned with GEF Biodiversity Focal Area Outcomes:

- GEF 5 BD 4 Focal Area objective – Build capacity on access to genetic resources & benefit sharing, contributing directly towards Outcome 4.1
- GEF 6 BD 3-8 - Implementing the Nagoya Protocol on Access to & Benefit Sharing of Biological Resources (ABS)
- GEF 7 BD 3-9 - Development of biodiversity policy & institutional frameworks through the Implementation of the Nagoya Protocol on ABS.

The overall project information can be found in the table below:

<b>Project Information Table</b>			
<b>Project Title:</b>	Developing and Implementing a National Access and Benefit Sharing Framework in Malaysia		
<b>UNDP Project ID (PIMS #):</b>	5191	<b>PIF Approval</b>	
<b>GEF Project ID (PMIS #):</b>	5593	<b>CEO Endorsement/Approval</b>	Oct 22,2013
<b>Country</b>	Malaysia	<b>Project Document (ProDoc) Signature</b>	Jan 7, 2014
<b>Region</b>	Asia Pacific	<b>Project manager hired</b>	August 2106
<b>Focal Area</b>	Biodiversity	<b>Inception Workshop</b>	Nov, 2014
<b>Strategic Programs</b>	Ecosystems and Biodiversity	<b>Terminal Evaluation</b>	June - Aug 2019
<b>Trust Fund</b>	GEF	<b>Closing Date</b>	Jan 6, 2019
<b>Modality</b>	NIM		
<b>Executing Agency / Implementing Partner</b>	Ministry of Water, Land & Natural Resources (formerly Ministry of Natural Resources & Environment)		
<b>Other Partners / Responsible Parties</b>	Forest Research Institute Malaysia (FRIM), Sabah Biodiversity Centre (SaBC), Sarawak Biodiversity Centre (SBC)		
<b>Project Financing:</b>	<b>at CEO endorsement (USD)</b>	<b>at Terminal Evaluation (USD)*</b>	
<b>[1] GEF financing:</b>	1970000	1725405	
<b>[2] UNDP contribution:</b>	33000	33000	
<b>[3] Government:</b>	5800000	6534557	
<b>[4] Other partners:</b>			

<b>[5] Total co-financing [2 + 3+ 4]:</b>	5833000	6567557
<b>PROJECT TOTAL COSTS [1 + 5]</b>	<b>7803000</b>	<b>8325962</b>

\*Actual expenditures and co-financing contributions through GEF/UNDP-GoM as of 31 Dec 2018.

Note 1 – the duration was a 4-year project + 1-year no-cost extension (7 Jan 2014 to 31 Dec 2017 + no cost extension till 6 Jan 2019)

Note 2. the Centre of Excellence for Biodiversity Law (CEBLAW) was originally going to be a Responsible Party but was replaced in favour of an individual legal consultant.



Figure 1: Working group and stakeholders of ABS Project (Photo captured during ABS field visit Jun 2019)

## 1.1 PROBLEMS THE PROJECT SOUGHT TO ADDRESS

The specific problem that the project sought to address was the lack of a functioning national legal, institutional and financial framework that would enable the equitable sharing of benefits from the exploration and exploitation of biological resources and traditional knowledge (TK), between national / state governments, commercial interests, and the owners / custodians of these resources and their TK. The unclear jurisdiction of indigenous and local communities' (ILCs) land resources has hindered the traditional management of their biological resources. Added to this, ILCs are also increasingly having to face outside commercial interests with seemingly higher economic values for land use, than from biodiversity conservation and sustainable use. The perceived lack of biological value has also meant that the younger generation has little or no interest in the TK associated with biodiversity utilization.

The solution is to make the biological resources generate economic benefits for the country and key stakeholders including ILCs, in the form of business through the discovery and development of new biochemical products such as pharmaceuticals, nutraceuticals, and agro-chemicals. The project will focus on supporting a national regulatory and institutional framework for ABS, which is needed to support the development of the bio-prospecting industry.

## 1.2 PROJECT KEY BARRIERS

Differences in national and state jurisdictions regarding the management/exploitation of biological resources complicate their governance is identified as one of the key barriers for that need to be addressed. The government carries responsibility for CBD and therefore the conservation of biological resources and their sharing. However, the states have jurisdiction to exploit land resources. Furthermore, the East Malaysian states of Sabah and Sarawak have separate legislation on biodiversity and ABS to the ABS Act.

Within the scientific research field, the biotech industry will be most directly affected by ABS. To ensure full participation and compliance of the law, awareness-raising activities are needed, targeting research institutions and biotech companies. The organizations and companies need to understand their obligation to obtain permits from CAs whenever there is research/bio-prospecting and to obtain PIC from resource providers. Bio-prospectors must be informed of their obligation to share benefits equitably with the resource providers, including possible technology transfer (non-monetary benefits).

## 1.3 PROJECT DESIGN

This project was conducted to support the fulfilment of Malaysia's obligations under the CBD and its Nagoya protocol (2010)<sup>3</sup>. The project was designed to generate economic and social benefits for indigenous and local communities (ILCs) from biodiversity/biological resources. Conservation and sustainable use of the biological resources (or genetic material) is to be achieved with the application of traditional knowledge (TK) and via the access and benefit-sharing principles associated with the Nagoya Protocol. The basic design of the project is listed below:

- Outcome 1 concerned putting the policy and legislation in place for joining the Nagoya Protocol and implementing it
- Outcome 2 concerned capacity building in ABS
- Outcome 3 concerned three main ABS demonstration projects:
  - Identification, with associated TK of phytochemicals (alkaloids, saponins, flavonoids) and essential oils from aromatics – for use in medicine, herbal remedies and cosmetics
  - An ABS agreement for ILCs for selected products<sup>4</sup>
  - An ABS agreement in operation through a product's value chain. The product chosen was *Litsea cubeba* from which aromatic oil for soaps and perfumes can be produced

Whist the identified products may be produced commercially (e.g. *Litsea* in China), it is the conservation of the genetic resources *in-situ* that is important, together with ILC sustainable management and economic utilization. A further risk log was maintained by UNDP under their Atlas Risk & Management Response system (**Annex 4**).

## 2.0 PROJECT PERFORMANCE AND KEY RESULTS

In total there are three levels of the project results framework that were assessed - Objective, Outcome and Output. This was guided by the indicators and targets set at each level. Success is also built upon achievement of the Outputs, according to 'framework logic.' The approach and methodology of the evaluation followed the guidelines outlined in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported GEF-

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<sup>3</sup> <https://absch.cbd.int/countries/MY>

<sup>4</sup> Including Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT)

financed Projects (2012). The Objective and Outcome levels include a rating according to UNDP GEF guidance as described in **Annex 2**.

The TE was an evidence-based assessment and relied on feedback from persons who were involved in the design, implementation, and supervision of the project. The TE team reviewed available documents, conducted interviews with a full range of stakeholders at national, state, district and village level including holding focus group discussions in a number of villages. The international consultant was the team leader and responsible for quality assurance, consolidation of the findings, and the TE report. Close support was provided by the National Consultant throughout the process. The field mission took place from 16<sup>th</sup> June – 5<sup>th</sup> July and a UNDP briefing and debriefing on 17<sup>th</sup> June and 4<sup>th</sup> July respectively. A stakeholder workshop was called on 3<sup>rd</sup> July.

According to the TE guidance, these tables were rated and commented on. The main ratings are also provided in the Executive Summary (Exhibits 2 and 3).

- Achievements towards Objective and Outcomes (Indicator-based) (refer section 3.1)
- Achievements towards Outputs (refer section 3.2)

A detailed result-level analysis follows of the Objective, Outcomes and their indicators, which continues through to the Outputs.

## 2.1 OBJECTIVES AND/OR OUTCOME LEVEL

**Overall Achievement: Strengthen the conservation and sustainable use of biological & genetic resources through developing a national framework for the implementation of Access & Benefit Sharing (ABS) under CBD**

**Rating: Satisfactory**

The overall rating was derived by Indicator 1 and 2.

**Indicator 1: National ABS law, regulations & institutional framework will enable Malaysia to accede to the Nagoya Protocol**

**Rating: Satisfactory**

*(Baseline - No national law, regulations or institutional framework; state legislation on ABS only exists for Sabah & Sarawak; Target - National law & implementing regulations on ABS come into force and applied by national and state CAs)*

**Results:**

Malaysia is now a party to the CBD's Nagoya Protocol with the accession in November 2018 and entered into force in February 2019.

**Summary List of Legislation:**

- ABS Act 795 (2017) - output from ABS I (UNDP project 2010-13) through to ABS II (2014-19)
- National Regulations (draft status)
- Sabah Biodiversity Enactment (2000), Amended 2017, passed into Law 2018 – (reference copy April 2018)
- Sabah Access to Biological Resources & Benefit-Sharing Regulations (Draft, 2018)
- Sarawak Biodiversity Centre Ordinance (1997, Amendments, 2003, 2014)
- Sarawak Biodiversity Regulations (2016)



An Access to Biological Resources & Benefit Sharing Act 2017 (Act 795) was adopted by the government in August 2017 and published in the Gazette in October 2017. The Act consists of 10 parts (63 sections) and two schedules that cover provisions on permits to access biological resources, benefit-sharing agreement, prior informed consent (PIC), mutually agreed terms (MAT), monitoring, and payment into the fund.

A draft of the Access & Benefit Sharing Regulations was reviewed by the Attorney General's Chamber (AGC) in November 2018 with comments to be incorporated. The enforcement of the Act and its regulation will only take effect once the regulation is approved by the AGC and the Minister.

**Analysis:**

The draft regulation has been with the AGC for the last nine months (as of August 2019) without action. This lack of an approved regulation has held up the development of ABS to a certain extent, in particular in terms of the competent authorities (CAs) and checkpoints to fully discharge their duties. An institutional framework (as described within Act 795) and its draft regulations have been established. Notably, the CAs are beginning to function. E.g. in the issuance of licenses to access biological resources.

**Indicator 2: Financial and funding mechanism(s) for the management of ABS monetary benefits**

*(Baseline – No mechanism exists; Target - Funding mechanism(s) established and operational for the reinvestment of proceeds from ABS agreements into conservation)*

**Rating: Moderately Satisfactory**

*Results against the indicator:*

A consultant study on ABS funding mechanisms and ABS / TK proceeds (~50pp) was completed in October 2017 and approved by the NSC in March 2018<sup>5</sup>. The study indicated that only two dedicated ABS biodiversity conservation trust funds (TF) exist at the state level: Sarawak – administered by SBCo for the proceeds of ABS to be used for biodiversity; and Sabah administered by SaBCo for the administration costs of ABS.

The study assessed the compatibility of using the National Conservation Trust Fund (NCTF, established in 2014) for ABS funding, indicating that it was. However, in a feedback workshop, the 'federal versus state' management issue arose from the respective jurisdictions.

The consultancy notably indicated that for any 'local' ABS fund, its operating method would be that of a 'revolving fund' with a percentage of ABS proceeds being able to be used by others for bio-resource development (for other products to be identified by the ILC or for use by the developer in testing/marketing a new product). It also pointed out that under the ABS Act, fees and penalties are directed to the government.

**Analysis**

The NCTF is currently not replenished and is not managed to handle ABS investments and disbursements. The Sabah fund appears to be for recurrent administrative costs. Thus, only Sarawak appears to have funds to directly set up for ABS investments to be used for biodiversity conservation, however, at present it also uses incoming funds for ABS administration. The ABS Act 795 includes funding which indicates that the national or

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<sup>5</sup> The report did assess ABS funding mechanisms from a number of countries (presented in prose) but failed to tabulate or compare with pros / cons in order to identify the best features needed for such a fund and to furthermore draft a concept for the design and management of one.

state governments may establish a fund for biodiversity conservation (para 22), with the draft regulations reiterating the Act. Thus, the Act left this issue open.

The FRIM ABS agreements are also of note, under which future royalties are divided four ways (community, government CA, FRIM (developer), and a trust fund for R&D). For these TFs, FRIM has a 'research, development, commercialization management committee' which includes FRIM, state government and ILC members. Having a TF proportion is considered necessary due to the high R&D costs of product development. If medicinal products are to become fully licensed and not merely listed as traditional medicine, then the cost of pre-clinical trials alone are estimated to amount to MYR700,000/product. However, if the focus is on R&D, it appears that this 25% TF portion of the royalty is not really 'ear-marked' towards village cultivation or biodiversity conservation.

**Assessment and rating key at outcome level:**

Indicator	Baseline	End of Project target	2018 End term Level & Assessment	Assessment Key	Rating
<b>Outcome 1: An operational national regulatory &amp; institutional framework on ABS</b>					
1. National law and implementing regulations on ABS come into force	No national law; state legislation on ABS only exists for Sabah and Sarawak	National law and implementing regulations on ABS come into force by year 2	<p>The Malaysian Access to Biological Resources and Benefit Sharing Act 2017 (Act 795) was adopted by the Parliament on 15 August 2017 and then published in the Gazette on 17 October 2017.</p> <p>The draft ABS regulation is currently being reviewed by the Attorney General's Chamber (AGC).</p>	On target to be completed / achieved	S
2. National and State Competent Authorities identified and operational for full implementation of national law and regulations on ABS	No national competent authority; state competent authorities only exist for Sabah and Sarawak (Sabah Biodiversity Centre; and Sarawak Biodiversity Centre and Sarawak Forestry Corporation)	National and State Competent Authorities identified for all (13) States and operational for full implementation of national law and regulations on ABS by end of project	<p>13 Competent Authorities (CA) representing all States in Malaysia have been identified:</p> <ol style="list-style-type: none"> <li>1. Johor – Johor Economic Planning Unit (EPU)</li> <li>2. Melaka – Melaka Economic Planning Unit (EPU)</li> <li>3. Pahang – Pahang Economic Planning Division (EPD)</li> <li>4. Selangor – Selangor Economic Planning Unit (EPU)</li> <li>5. Perak – Perak Economic Planning Unit (EPU)</li> <li>6. Kedah – Kedah Economic Planning Unit (EPU)</li> <li>7. Perlis – Perlis Economic Planning Unit (EPU)</li> <li>8. Kelantan – Kelantan Economic Planning Unit (EPU)</li> <li>9. Terengganu – Terengganu Economic Planning Unit (EPU)</li> <li>10. Negeri Sembilan - Negeri Sembilan State Forestry Department</li> <li>11. Sabah - Sabah Biodiversity Council</li> </ol>	On target to be completed / achieved	MU

			<p>12. Sarawak – Sarawak Ministry of Urban Development and Natural Resources</p> <p>13. Federal Territories (Kuala Lumpur, Labuan, Putrajaya) - Ministry of Federal Territories.</p> <p>The agencies appointed as official checkpoints are:</p> <ol style="list-style-type: none"> <li>1. Intellectual Property Corporation of Malaysia (MyIPO)</li> <li>2. Ministry of Science, Technology and Innovation (MOSTI)</li> <li>3. Clinical Research Centre (CRC) Ministry of Health</li> <li>4. Ministry of Higher Education (MoHE)</li> <li>5. National Pharmaceutical Regulatory Agency (NPRA),</li> <li>6. Universiti Putra Malaysia (UPM)</li> <li>7. Universiti Teknologi Malaysia (UTM)</li> <li>8. Universiti Sains Malaysia (USM)</li> <li>9. Universiti Malaya (UM)</li> <li>10. Universiti Kebangsaan Malaysia (UKM).</li> </ol>		
3. Institutional framework for <i>sui generis</i> systems for protection of traditional knowledge and customary uses of biological resources developed under the auspices of SaBC and used to inform national framework	No institutional framework for <i>sui generis</i> systems for protection of traditional knowledge and customary uses of biological resources exist for Malaysia	Supportive institutional framework for <i>sui generis</i> systems for protecting traditional knowledge, innovations and practices and customary uses of biological resources developed for Sabah State and used to inform	<p>Two community protocols have been produced during the project implementation. Melangkap Community Protocol (English and Malay) has been completed and published by Sabah Biodiversity Centre. The protocol is written by the community themselves with the guidance from the Bio-Community Initiative (BCI) as project facilitator. The community protocol consists of 7 chapters which covers the documentation of history and traditional knowledge of the villages, the Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) procedures to access the resources and traditional knowledge of the community.</p> <p>First completed draft of the Long Pasia/Mio Community Protocol (Malay version) has been completed in July 2018.</p>	Completed / Achieved	S

development		national framework development.	These protocols alongside with the previous studies and lesson learned by The Centre of Excellence for Biodiversity Law (CEBLAW), Ministry of Natural Resources and Environment, FRIM, SBC has been used as the reference in developing the standard community protocol template in the ABS regulation.		
4. Financial and funding mechanism(s) established at federal and state levels to receive and reinvest proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	No formal governmental financial mechanism exists for reinvesting proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	Financial and funding mechanism(s) established at federal and state levels by end of Year 3 to receive and reinvest proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	<p>The final report on financial and funding mechanism(s) for ABS proceeds has been completed in October 2017 and approved by the National Steering committee on 12th March 2018.</p> <p>The summary of the recommendations are as follows:</p> <ul style="list-style-type: none"> <li>The decision-making process for disbursement of the funds should include representative from Indigenous and Local Communities or Non-Governmental Organisations for inclusive decision making.</li> <li>The capacity to manage the fund at the federal and state level needs to be assessed and a fulltime management need to be created to manage and administer the ABS fund.</li> <li>Competent Authorities/State Economic Units to discuss on the interim setup before the enforcement of National ABS Act.</li> </ul>	On target to be completed / achieved	MS
<b>Outcome 2: Strengthened national institutional and stakeholder capacity for implementation of the national ABS framework</b>					
1. Improved capacities of national and state competent authorities for ABS implementation as shown by an increase of at	<p>ABS Capacity Scorecard baselines</p> <p>NRE: 33%</p> <p>Sabah: 35%</p> <p>Sarawak: 31%</p> <p>Other states: 0%</p> <p>Other agencies:0%</p>	<p>Targets</p> <p>NRE: 75%</p> <p>Sabah: 75%</p> <p>Sarawak: 75%</p> <p>Other states: 30%</p> <p>Other agencies: 30%</p>	<p>KATS (NRE): 51.28%</p> <p>Sabah/SaBC: 77.27%</p> <p>Sarawak/SBC: 68.33%</p> <p>FRIM: 42.86%</p>	On target to be completed / achieved	S

least 30% in the draft ABS Capacity Development Scorecard					
2. Number of NCA, state and related agencies trained on ABS and bio-prospecting related subjects to facilitate implementation of the national ABS framework. <sup>6</sup>	No staff have been trained	100 staff from the NCA, 13 state CAs and related agencies (see footnote) are trained	The capacity workshop conducted: <ol style="list-style-type: none"> <li>1. 21 Mar 2016 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 43 Participants (23 Male; 20 Female).</li> <li>2. 9-10 Aug 2018 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 46 Participants (24 Male; 22 Female)</li> <li>3. 12 October 2018: ABS Capacity Building Workshop For Researches, NGOs, and other Stakeholder: 51 Participants (21 Male; 30 Female)</li> </ol>	On target to be completed / achieved	MU
3. Percentage of the population of researchers, local communities, and relevant industry targeted by the campaign is aware of the national law and CBD and NP provisions related to ABS and traditional knowledge (TK)	0%	80%	The second phase of the Knowledge, attitude, and practices (KAP) second phase study has been completed and the final report was submitted in November 2017. A total of 1149 respondents participated in the Phase 2 of the study from March to October 2017 (550 institutional stakeholders, and 599 Indigenous and Local Communities). The findings of the study: <ul style="list-style-type: none"> <li>• Overall, the knowledge on regulations related to ABS among institutional stakeholders were good. Knowledge on access to genetic resources and benefit sharing arising from their utilization among institutional stakeholders was high.</li> <li>• Knowledge on regulations related to ABS remain low among the ILCs. Compared to phase 1, there was a small increase in the percentage of ILCs who had heard either one of the Convention of</li> </ul>	On target to be completed / achieved	MS

<sup>6</sup>Potentially staff in MOSTI in charge of public research grants, university staff in charge of research grant administration, product approval under MOH and MyIPO

among stakeholders including researchers, public, ILCs and industries			<p>Biological Diversity, Nagoya Protocol and Malaysian ABS Bill. A majority of the Indigenous and Local Communities (ILCs) appeared to understand the principles of the ABS. Most ILCs were positive in terms of their attitude towards Access &amp; Benefit Sharing. Access and Benefit Sharing practices among ILCs were low, and if any form of procedure or process existed, they were mostly informal. Among the ILCs, there was no clear procedure about access to traditional knowledge or the fair and equitable sharing of benefits by non-members of the communities.</p> <ul style="list-style-type: none"> <li>• There was no formal procedure in place although a few communities had some form of informal procedures or protocol.</li> <li>• ILCs were concerned whether the implementation of the Access to Biological Resources and Benefit Sharing law in Malaysia could restrict their use of resources in performing their traditional and customary practices.</li> </ul>		
<b>Outcome 3: Best practice ABS processes piloted recognizing the principles of biodiversity conservation, Prior Informed Consent (PIC) &amp; Mutually Agreed Terms (MAT) including fair and equitable sharing of benefits</b>					
1. Number of ABS pilot agreements negotiated for initial commercialization of prototypes with fair and equitable benefit sharing provisions	No ABS agreements in Malaysia that fully comply with CBD requirements	At least 2 ABS pilot agreements negotiated for initial commercialization of prototypes with fair and equitable benefit sharing provisions	<p>Sarawak Biodiversity Council (SBC) successfully signed a benefit sharing agreement with 5 communities involved in the Litsara pilot project on Mar 2019. The project demonstrated the complete value chain which involved 7 villages across the Sarawak State. Community involved benefited from capacity building in sustainable essential oil production skills, extra income from selling the raw essential oil as well as the loyalty generated from the marketing of Litcea oil products by SBC.</p> <p>Forest Research Institute Malaysia (FRIM) produces 2 prototypes named "Pengloy Semai" and "KaHerbs" from the medicinal plant from the Traditional Knowledge of the indigenous community in Kedah and Perak State. FRIM is in the final process of negotiating 2 ABS agreements with both the Semai and Kensiu communities for initial commercialization of the 2 prototypes.</p>	Completed / Achieved	HS

2. Number of PIC processes <sup>7</sup> with ILCs implemented in accordance with the planned PIC/community protocol	Some developmental work in Sabah and Sarawak on PIC processes	At least 3 PIC processes with ILCs implemented in accordance with the planned PIC/community protocol	Both SBC and FRIM conducted full PIC practices during the engagement with the communities.  The standard Prior Informed Consent (PIC) template has been developed based on the experiences drawn from the pilot demonstration project conducted by the Forest Research Institute Malaysia (FRIM), Sarawak Biodiversity Centre (SBC) and Sabah Biodiversity Centre (SaBC). It is included in the ABS regulation and user guide.	Completed / Achieved	S
3. Number of best practice pilot ABS agreements and PIC processes disseminated at regional level	Malaysia participates in UNEP-GEF ASEAN ABS project, but has limited experience to contribute to date	Best practice pilot ABS agreements and PIC processes presented at international workshop for ASEAN countries, published in workshop proceedings and made available through NRE website	A website <a href="http://www.abs.mybis.gov.my">www.abs.mybis.gov.my</a> . dedicated for Malaysia ABS has been set up under the existing platform of Malaysia Biological Information System (MyBIS). The webpage is serving as ABS clearing house mechanism (ABS CHM) to enable better public engagement. The online permit application system is being developed to assist the permit application process after the law enforcement.	On target to be completed / achieved	MS
4. Number of ABS agreements arising from the pilot projects that specify conservation measures to ensure the security of the	No ABS agreements in Malaysia that fully comply with CBD requirements or include specified conservation measures for related biological resources	At least 2 ABS pilot agreements negotiated that, when necessary, include <i>in situ</i> and/or <i>ex situ</i> conservation measures to ensure the security of the concerned	Sarawak Biodiversity Council successfully signed a benefit sharing agreement with 5 communities involved in the Litsara pilot project on Mar 2019.  Total 7 communities around Sarawak have been participated in the Litsara project. They were benefited from the capacity building activity in how to sustainably harvest the forest product and produce the essential oil by using modern equipment. they also manage to generate extra income form the selling of essential oil. Now with the benefit sharing agreement signed, the community involved managed	On target to be completed / achieved	MU

<sup>7</sup> These would be the processes leading up to the signing of ABS pilot agreements above.



concerned biological resources		biological resources	<p>to receive loyalty from the commercialisation of the Litsara Product by SBC.</p> <p>Forest Research Institute Malaysia (FRIM) produces 2 prototypes named “Pengloy Semai’ and “KaHerbs” from the medicinal plant from the Traditional Knowledge of the indigenous community in Kedah and Perak State. FRIM is in the final process of negotiating 2 ABS agreements with both the Semai and Kensiu communities for initial commercialization of the 2 prototypes.</p>		
5. At least 80% of the population of ILCs participating in the pilot projects are aware of the existence, use and option values of the biological resources under their stewardship.	0%	80%	<p>The general awareness on ABS among the stakeholders has increased during the implementation of ABS Project in Malaysia since 2014. The government sectors are now more aware of ABS concept through participation in a series of workshops and promotional activity organized by the Ministry.</p> <p>In community level, through the pilot projects carried out by Forest Research Institute Malaysia (FRIM), Sarawak Biodiversity Centre (SBC), and Sabah Biodiversity Centre (SaBC), the communities have achieved the following:</p> <ol style="list-style-type: none"> <li>1. All communities involved are aware of the importance of fair &amp; equitable sharing of benefits.</li> <li>2. Communities are empowered with the knowledge in sustainable harvesting and the skills in essential oil distillation technique.</li> <li>3. Traditional Knowledge of the community involved has been documented.</li> <li>4. Groups of community researches have been trained in the ABS concept which enable them to produce the community protocol by their own.</li> <li>5. The strong knowledge capacity of the community enables them to safe guard their Traditional Knowledge and associated biological</li> </ol>	On target to be completed / achieved	MS

			resources from being illegally exploited. Feedback and comments obtained from communities on ABS framework and mechanism via field documentation have been used in developing ABS guidelines, regulation and model ABS agreement.		
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## 2.2 OUTPUTS

At the objective level, there were two indicators (Refer 3.1). At the outcome level 1 there were four indicators; at the outcome level 2 there were three indicators, including the UNDP Development Capacity scorecard; and at outcome 3 level, there were five indicators. There were 17 outputs. The indicators were mostly logical, practical and feasible and were mostly SMART (Specific, Measurable, Attributable, Realistic/Relative, Timebound) (Refer Annex 3).

The outputs, achievements and rating (TE comment) are presented below:

Outputs	Achievements Reported by IP	TE Comment
<b>Project Objective: Strengthen the conservation &amp; sustainable use of biological &amp; genetic resources in Malaysia through developing the national framework for the implementation of Access &amp; Benefit Sharing (ABS) under CBD</b>		
<b>Outcome 1: An operational national regulatory &amp; institutional framework on ABS</b>		
1.1: National law and implementing regulations on ABS developed with stakeholder participation.	<ul style="list-style-type: none"> <li>▪ The Access to Biological Resources and Benefit Sharing Act 2017 [ACT 795] was adopted by the Parliament on 15 August 2017 and then published in the Gazette on 17 October 2017. The Act is anticipated to come into operation by the end of December 2018 or in January 2018 subject to approval of the ABS regulations by AGC and after all implementation mechanisms are in place.</li> <li>▪ The revised draft of ABS regulations along with AGC's comments was received on 2nd November 2018. A session with AGC will be conducted to review all feedbacks and comments received before the draft regulations can be finalized.</li> </ul>	On target
1.2: Institutional framework including national and state competent authorities and supporting measures established to enable implementation of the national ABS law at federal and state levels.	<p>Thirteen Competent Authorities (CA) representing all States in Malaysia have been appointed:</p> <ul style="list-style-type: none"> <li>• Johor – Johor Economic Planning Unit (EPU)</li> <li>• Melaka – Melaka Economic Planning Unit (EPU)</li> <li>• Pahang – Pahang Economic Planning Division (EPD)</li> <li>• Selangor – Selangor Economic Planning Unit (EPU)</li> <li>• Perak – Perak Economic Planning Unit (EPU)</li> <li>• Kedah – Kedah Economic Planning Unit (EPU)</li> <li>• Perlis – Perlis Economic Planning Unit (EPU)</li> <li>• Kelantan – Kelantan Economic Planning Unit (EPU)</li> <li>• Terengganu – Terengganu Economic Planning Unit (EPU)</li> <li>• Negeri Sembilan - Negeri Sembilan State Forestry Department</li> <li>• Sabah - Sabah Biodiversity Council</li> <li>• Sarawak – Sarawak Ministry of Urban Development and Natural Resources</li> <li>• Federal Territories (Kuala Lumpur, Labuan, Putrajaya) - Ministry of Federal Territories</li> </ul>	<p>On target, the weakness is the capacity of DBFM to act as the NCA and lead the process to get the national regulation passed by the AG's office and then the Ministry / parliament</p> <p>The draft regulations – state the</p>

Outputs	Achievements Reported by IP	TE Comment
	<p>The agencies appointed as official checkpoints are:</p> <ul style="list-style-type: none"> <li>• Intellectual Property Corporation of Malaysia (MyIPO)</li> <li>• National Pharmaceutical Regulatory Agency (NPRA),</li> <li>• Ministry of Science, Technology and Innovation (MOSTI)</li> <li>• Clinical Research Centre (CRC, MoH)</li> <li>• Ministry of Higher Education (MoHE)</li> <li>• Universiti Putra Malaysia (UPM); Universiti Teknologi Malaysia (UTM); Universiti Sains Malaysia (USM)</li> <li>• Universiti Malaya (UM); Universiti Kebangsaan Malaysia (UKM).</li> </ul>	<p>following as checkpoints: MyIPO; NPRA; and any public research body, public university or public institution funding research and development in relation to biological resource and TK may be determined by the NCA</p>
<p>1.3: Funding mechanisms at federal &amp; state levels to utilise proceeds from ABS agreements towards the conservation of biological diversity &amp; sustainable use of its components.</p>	<p>The final report on financial and funding mechanism(s) for ABS proceeds was completed in October 2017 and approved by the National Steering committee on 12 March 2018. The summary of the recommendations are as follows:</p> <ul style="list-style-type: none"> <li>▪ In the initial stage, for a period of 5 years, between 2018 and 2023, the ABS proceed from the ABS agreements are channeled into the National Conservation Trust Fund (NCTF) for effective management due to the uncertainty in the quantum of the proceeds that could be generated in immediate near future.</li> <li>▪ Beyond, 2023, based on the development of bioprospecting and generation of ABS proceeds, decision can be made to form the funds at the State level.</li> <li>▪ The eligibility of the ABS fund in all circumstances in the above recommendation should be made to only clearly identified stakeholders of the ABS framework and priority should be given to ILCs. This is to ensure the ownership and incentive for the protection of TK and the biological resources.</li> <li>▪ The decision-making process for disbursement of the funds should include representative from ILCs or NGOs for inclusive decision making.</li> <li>▪ The capacity to manage the fund at the federal and state level needs to be assessed and a fulltime management needs to be created to manage and administer the ABS fund.</li> <li>▪ Monitoring and evaluation of the fund is important to ensure its efficiency and effectiveness in meeting the objective.</li> </ul>	<p>Not on target, except for Sabah, Sarawak and for two FRIM States</p> <p>The focus should have been on the peninsular states and not the national level</p>

Outputs	Achievements Reported by IP	TE Comment
	<ul style="list-style-type: none"> <li>▪ As recommended from the study, KATS will have a discussion with State Authorities/State Economic Planning Units on the proposal to channel ABS proceeds into a sub-fund under the NCTF.</li> </ul>	
<p>1.4: Institutional framework for sui generis (~of their own kind) systems for protecting traditional knowledge, innovations and practices and customary uses of biological resources in Sabah</p>	<ul style="list-style-type: none"> <li>▪ Melangkap Community Protocol is completed. SaBC has agreed to publish the protocol using the state publication fund. This protocol was written by the community themselves with guidance from facilitator (BC Initiative). The community protocol consists of 7 chapters which covers the documentation of history and traditional knowledges of the villages and the PIC and MAT procedures to access the resources and traditional knowledge of the community.</li> <li>▪ Long Pasia/Mio Community Protocol (first edition) is completed. However, the document is yet ready for publish as the community wish to further enhance the inputs in the details of the document. This protocol was written by the community themselves with guidance from facilitator (BC Initiative). Like the Melangkap community protocol, the Long Pasia/Mio community protocol consists of 7 chapters which covers the documentation of history and traditional knowledges of the villages and the PIC and MAT procedures to access the resources and traditional knowledge of the community.</li> <li>▪ These protocols along with previous study conducted by The Centre of Excellence for Biodiversity Law (CEBLAW) &amp; Ministry of Natural Resources and Environment on community protocols for communities involves in Sarawak and Peninsular Malaysia (Perak and Pahang) will be used as a reference/lessons learnt in developing the standard community protocol template that highlighting the minimum standard and procedures.</li> </ul>	On target
<p>1.5: Community protocols constitute the basis for clarifying PIC and MAT requirements between users and providers of traditional knowledge and biological resources</p>	<ul style="list-style-type: none"> <li>▪ This is the collective output together with output 1.4. Community Protocol of Melangkap and Long Pasia/Mio in output 1.4 captures the chapters specifically for PIC and MAT requirement. Meanwhile, there is a template of PIC and MAT has been included in the ABS Regulations and User's Guide.</li> </ul>	On target
<p>1.6: Ethical code of conduct or guidelines for research on traditional knowledge and genetic resources</p>	<ul style="list-style-type: none"> <li>▪ This is a collective output component included in output 1.4. The community protocols in output 1.4 consists of chapter on PIC procedures that will be the guidelines for researchers to do research on traditional knowledge and genetic resources. The Standard PIC Protocol is attached in the ABS User's Guide for reference.</li> </ul>	On target
<p>1.7: Consultation completed with all states and paper on accession to the Nagoya</p>	<ul style="list-style-type: none"> <li>▪ The Cabinet had approved the proposal for Malaysia to become a party to the Nagoya Protocol on 26 October 2018. Malaysia deposited its instrument of accession to the Nagoya Protocol to</li> </ul>	On target

Outputs	Achievements Reported by IP	TE Comment
Protocol developed for Cabinet's approval	the UN Treaty Section on 5 November 2018 and the protocol will enter into force for Malaysia on 3 February 2019.	
<b>Outcome 2: Strengthened national institutional and stakeholder capacity for implementation of the national ABS framework</b>		
2.1: Improved capacities of state & national competent authorities and related agencies through training of 100 staff on processing access applications, negotiating ABS agreements and monitoring / tracking to ensure compliance.	<p>The capacity workshop has been conducted with more than 100 personnel trained:</p> <ul style="list-style-type: none"> <li>▪ 21 Mar 2016 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 43 Participants (23 Male; 20 Female).</li> <li>▪ 9-10 Aug 2018 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 46 Participants (24 Male; 22 Female)</li> <li>▪ 12 October 2018: ABS Capacity Building Workshop for Researchers, NGOs, and other Stakeholder: 51 Participants (21 Male; 30 Female)</li> </ul>	Partially on target
2.2: Training programme & modules on bio-prospecting & research procedures developed / made available to federal / state research institutions	<ul style="list-style-type: none"> <li>▪ The ABS Users' Guide, guidelines on the National Competent Authority and Competent Authorities roles and responsibilities as well as ABS training modules have been prepared to ensure effective implementation of Act 795.</li> </ul>	Partially on target – user's guide yet to be finalized
2.3: Mechanisms institutionalized to facilitate access to information and support compliance under the national law and the NP.	<ul style="list-style-type: none"> <li>▪ The ABS Clearing-house Mechanism is in the initial phase of development and will be incorporated into the existing Malaysian Biological Diversity Clearing House Mechanism (MyBIS). ABS online permit application will be developed in-house by MyBIS technical team.</li> <li>▪ The ABS portal has been developed and can be accessed via <a href="http://www.abs.mybis.gov.my">www.abs.mybis.gov.my</a> by public.</li> </ul>	ABS CHM portal not on target nor national permit application system
2.4 Campaign to raise awareness on the ABS law, CBD and Nagoya Protocol targeting researchers, local communities, and relevant industry	<ul style="list-style-type: none"> <li>▪ The concepts of ABS have been instilled among the Indigenous and Local Communities with the implementation of pilot projects for output 1.4, 3.1, 3.2, 3.3 in Sabah, Sarawak, Perak, and Kedah.</li> <li>▪ Communication materials such as information leaflet, bookmark, and posters have been printed and being distributed to all relevant agencies.</li> <li>▪ To promote ABS, KATS has also participated in public engagement exhibitions such as:</li> <li>▪ ASEAN Senior Officials on Forestry (ASOF) - Regional Seminar on Forest Landscape Seminar on 26 July 2017</li> <li>▪ Central Forest Spine (CFS) Seminar on 27-28 July 2017</li> </ul>	On target

Outputs	Achievements Reported by IP	TE Comment
	<ul style="list-style-type: none"> <li>▪ World Indigenous Day 8-10 August 2017 at Kota Kinabalu Sabah and the 10th Kuala Lumpur Eco Film Festival (KLEFF) 2017 in 23-29 October 2017</li> <li>▪ Asia Pacific Conference on Food Security 2018 (ARCOFS18) on 30-31 October 2018;</li> <li>▪ Malaysia Agriculture, Horticulture and Agrotourism Show (MAHA) 2018 from 22 November – 2 December 2018.</li> </ul>	
<p>2.5 Knowledge, attitudes &amp; practices (KAP) surveys targeting groups (researchers, communities, &amp; industry that may use / benefit from ABS transactions) to assess enhanced awareness about national ABS law, the CBD and Nagoya Protocol.</p>	<ul style="list-style-type: none"> <li>▪ The first phase of the assessment survey (baseline) for the Knowledge, Attitudes and Practices (KAP) on Awareness of ABS among the institutional stakeholders and the indigenous and local communities (ILC) has been conducted from July 2015-April 2016. A total of 910 respondents participated in the survey (336 institutional stakeholder; 574 ILCs)</li> <li>▪ The second phase of the Knowledge, attitude, and practices (KAP) second phase study has been completed and the final report was submitted in November 2017. A total of 1149 respondents participated in the Phase 2 of the study from March to October 2017 (550 institutional stakeholders, and 599 Indigenous and Local Communities).</li> </ul>	On target
<p><b>Outcome 3: Best practice ABS processes piloted recognizing the principles of biodiversity conservation, Prior Informed Consent (PIC) &amp; Mutually Agreed Terms (MAT) inc. fair &amp; equitable sharing of benefits</b></p>		
<p>3.1: Pilot project on the documentation of traditional knowledge associated with biological resources of Kensiu (Kedah) and Kintak (Perak) Orang Asli for the development of one prototype product for potential commercialization</p>	<ul style="list-style-type: none"> <li>▪ FRIM had developed an herbal medicine product prototype based on the medicinal Traditional knowledge of the Semai community of Perak named “Pengloy Semai” in 2017; and an herbal product prototype based on the medicinal Traditional knowledge of the Kensiu community of Kedah named “KaHerbs” in July 2018.</li> <li>▪ FRIM is in the stage to finalize the benefit sharing agreement with the Semai Community in Perak, and the Kensiu Community in Kedah.</li> </ul>	On target
<p>3.2: Pilot project on the development of a pilot ABS agreement with Semai Orang Asli (Perak) for the development of a prototype nutraceutical/healthcare product for initial commercialization</p>	<ul style="list-style-type: none"> <li>▪ FRIM is finalizing the benefit sharing agreement with the both Semai and Kensiu Community for initial commercialization of prototypes while ensuring fair and equitable sharing of benefits.</li> </ul>	On target
<p>3.3: Pilot project on the utilization of genetic resources associated</p>	<ul style="list-style-type: none"> <li>▪ Total 7 villages across Sarawak involved in the Litsara project. 5 villages participated in the project since 2014 (Kg Kiding, Long Kerebangan, Long Telingan, Pa’Ukat, Pa’Lungan), SBC upscaled and</li> </ul>	On target

Outputs	Achievements Reported by IP	TE Comment
with TK for the development of health and personal care products in Sarawak	<p>expanded the Litsara project to 2 more villages in 2017 – Bukit Sadok and Bakelalan which involve more community group of Iban and Lun Bawang.</p> <ul style="list-style-type: none"> <li>▪ Community benefited from extra income generated from selling the essential oil processed in the village with a competitive contracting amount set by SBC.</li> <li>▪ Sarawak Biodiversity Council successfully signed a benefit sharing agreement with 5 communities involved in the Litsara pilot project on Mar 2019. With the agreement, community will earn extra loyalty benefit from the marketing of Litsara products.</li> <li>▪ From series of capacity building conducted by SBC, communities involved have been empowered by sustainable harvesting method Good Wild Craft Practices (GWCP) to ensure the population of <i>Litsea cubeba</i> plant is maintained and prevent over-harvesting, propagation of the <i>Litsea cubeba</i> plants to ensure continuous contract farming; Distillation of the essential oil at respective villages in a sustainable manner; Total of 5 distillation shed equipped with 4 sets of the hydro-distillation equipment have been constructed in each of 5 villages.</li> </ul>	
3.4: Best practice pilot ABS agreement and PIC processes in Malaysia are made available to regional audiences	<ul style="list-style-type: none"> <li>▪ A website <a href="http://www.abs.mybis.gov.my">www.abs.mybis.gov.my</a>. dedicated for Malaysia ABS has been set up under the platform of Malaysia Biological Information System (MyBIS). The webpage is serving as ABS clearing house mechanism (ABS CHM) to enable better public engagement. The online permit application system is being developed to assist the permit application process after the law enforcement</li> </ul>	Partially on target
3.5: Awareness raising activities are integrated into pilot projects to increase understanding of the values of biological resources under the stewardship of participating ILCs	<p>Through participation in a series of workshops and capacity building activities organized by FRIM, SBC, and SaBC, the communities have achieved the followings:</p> <ul style="list-style-type: none"> <li>▪ All communities involved are aware of the importance of fair and equitable sharing of benefits</li> <li>▪ Communities are empowered with the knowledge in sustainable harvesting and the skills in essential oil distillation technique</li> <li>▪ Traditional Knowledge of the community involved has been documented.</li> <li>▪ Groups of community researches have been trained in the ABS concepts and knowledge capacity built which enable them to produce the community protocol by their own.</li> <li>▪ The knowledge capacity provided empowered the community to safe guard their Traditional Knowledge and associated biological resources from being illegal exploitation.</li> <li>▪ Feedbacks and comments obtained from communities on the ABS framework and mechanisms via field documentation have been used in developing the ABS guidelines, regulations and a model ABS agreement.</li> </ul>	On target



## 3.0 IMPLEMENTATION REVIEW

### 3.1 MANAGEMENT ARRANGEMENT/ PROJECT GOVERNANCE

The project was overseen by UNDP and a National Steering Committee (NSC), which was chaired by the Secretary-General of MWLNR (currently known as Ministry of Water, Land and Natural Resources, abbreviated KATS). The project was implemented via a Project Management Unit (PMU) which was housed within the MWLNR's Division of Biodiversity & Forest Management (DBFM). The PMU included a Project Director (as a leading member of DBFM), a Project Coordinator (PC, position created, hired through public competition and paid for by UNDP) and two support staff. The project was supported by three Implementing Partners (IPs) – FRIM, SaBC and SBC, as well as a number of other service providers (consultant firms or individuals). The latter included a legal consultant<sup>8</sup> to develop the ABS Act. The project was nominally under NIM, however effectively and especially for financial management purposes, it was under DIM. There was no M&E officer, and a technical working group was only utilised during project preparation. Monitoring of service contracts and tracking of deliverables and payments was undertaken by the PC.

A full description of stakeholders – those who are responsible for the implementation of the project and those associated with the project, is provided as **Annex 1**.

### 3.2 PARTNERSHIPS

The key institutional mechanisms are described below with a full list of stakeholders presented in **Annex 7**.

#### Division of Biodiversity & Forest Management (DBFM)

The DBFM is under the Ministry of Water Lands & Natural Resources (MWLNR)<sup>9</sup>. DBFM is responsible for the National Biodiversity Centre (NBC, est. 2005) who now act as the National Competent Authority (NCA) for the coordination of regulations and procedures on ABS.

#### National Competent Authority (NCA)

NCA have five staff with funds available for particular sub-projects / requirements<sup>10</sup>. An advisory committee under NCA has yet to be established<sup>11</sup>. The regulations regarding Act 795 (draft as of July 2019) outline the role of the advisory committee under NCA (see **Annex 5**). The NCA is chaired by the secretary-general of MWLNR. The line management of 13 'state-level' Competent Authorities (CAs) is through the NCA.

The functions of the NCA are: to fulfil the requirements under the NP and its ABS stipulations; maintain a register of permits issued by CAs; support customary laws & practices of ILCs, and the development of community protocols and ABS agreements; act as the national representative under the NP and ABS and maintain the national Clearing House Mechanism (CHM); and where the collection of biological resources (e.g. *ex-situ* and/or of unknown origin) doesn't fall under the remit of any of the 13 states CAs, then to act as the CA.

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<sup>8</sup> formerly listed as CEBLAW

<sup>9</sup> Formerly Ministry of Natural Resources & Environment (MoNRE)

<sup>10</sup> Under MWLNR, the DBFM have five core staff who were originally from the Natural History Museum, who in addition to some residual NHM duties now act as the NCA. The NBC despite establishment in 2005, is not particularly active.

<sup>11</sup> Formal establishment has not taken place, thus there were no recorded minutes of meetings. The reasoning was that the regulations of Act 795 had not been finalised.

### Competent Authorities (CAs)

For nine out of ten peninsular states, the designated CAs are their respective state Economic Planning Units (EPUs). For the other CA in Negeri Sembilan State it is their Forestry Department. For the federal territories of Kuala Lumpur, Labuan and Putrajaya, the CA are the Ministry of Federal Territories. For Sabah State, the CA is the Sabah Biodiversity Council (SaBCo), and for Sarawak State, the CA is their Ministry of Urban Development & Natural Resources (MUDNR).

The CAs act as advisory bodies to process applications for research and commercial work in ABS, TK documentation and utilization of biological resources. The process includes issuing access permits to biodiversity areas. The CAs are also responsible for compliance and record-keeping. The CAs report annually to MWLNR including any non-compliance offences. The CA advisory bodies should include representatives of ILCs. The functions of the 13 CAs are to follow their role as described in the ABS Act (2017). The draft regulations under Act 795 outline the role of the advisory bodies under the CAs (see **Annex 5**). Roles are also outlined in the 'User's Guide to the Access to Biological Resource and Benefit Sharing Act 2017.' Malaysia receives ~200 applications/year for research (Vilm ABS Dialogue, 2018), although the actual figure is likely to be significantly higher.

The readiness of CAs is varied.<sup>12</sup> Perak CA (who are holding the FRIM ABS agreement), are not fully aware of ABS. They have the Act, but have not seen the draft regulations and are unsure of the federal – state jurisdiction. However, they have a biodiversity officer within their EPU unit. Kedah CA didn't appear to be aware of the application for approval of the ABS agreement between FRIM, their state government and the Kensis ILC for the development of 'KaHerbs'<sup>13</sup>.

Some CAs suggested that all peninsular permit applications could be directed through the Ministry of Economic Affairs (MEA), which would be more efficient. For national-level permits for research to be undertaken in the peninsular states, MEA currently only send a very short summary of the activity, but not details if the research is for internationals, for the pharmaceutical industry or otherwise. Melaka CA has not been involved in any research permitting to date and has no monitoring set-up, which is due to the regulations remaining in draft format. Pahang CA (Economic Planning Division) at present is not in control of research permitting or collecting fees for issuing permits, with researchers going direct to the forestry department.

The Negeri Sembilan CA (who are the Department of Forestry), had not been involved in an ABS meeting since 2017, so attending the TE workshop was useful. They indicated that most permits for forest research were issued via their forest headquarters office for the whole peninsular and that they only issued low-level university student permits. Selangor Department of Forestry (of behalf of the state CA – EPU), indicated that at present, they receive research applications (for within forest reserve), and are unclear of the CA role. For large applications, they refer the researchers to the national level.

### Forest Research Institute Malaysia (FRIM)

FRIM was a designated implementing partner, under project contract 2014-18, mainly to provide services under Outcome 3.

### Sabah Biodiversity Centre (SaBC)

SaBC (est. 2008) are an entity under the Natural Resources Office of the Sabah Chief Minister's Department. They have five officers. Their mandate is encapsulated under the Sabah Biodiversity Enactment (2018). As of June 2019, the ensuing regulations are in draft form. Sabah Biodiversity Council (SaBCo) are the state CA, who oversee SaBC in regards to laws/procedures and report to the NCA. SaBC is the secretariat to SaBCo.

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<sup>12</sup> CA units met included: EPUs of Perak, Kedah, Pahang, Melaka + Department of Forestry – Negeri Sembilan (state CA)

<sup>13</sup> FRIM separately mentioned that the CAs they were dealing with had a tendency to not be informed of ABS procedures and lose applications for research

SaBC processes and issues ~80 licences/year for research through the auspices of the Natural Resource Office of the Chief Minister's Department. Permission is also needed from the Sabah Forestry Department and District Officer (DO), but not from the local village committee. Thus, the Sabah Biodiversity Enactment (2018) and draft regulations appear to bypass the ABS 'standards', in this respect. Furthermore the 'Guidelines on Access Licence Application, SaBC (17pp, 2019)' do not mention PIC, MAT or ABS, although 'native and community land rights' are listed, with the ILC (native) community described as a resource management authority<sup>14</sup>. Those requiring licences involve all who wish to enter biological areas for research or trade. They include individuals or groups (national, international); researchers; students; NGOs; university / educational & research institutions; and corporate entities.

#### Sarawak Ministry of Urban Development & Natural Resources (SMUDNR) / Sarawak Biodiversity Council (SBCo)

SMUDNR is the Competent Authority (CA) for the state of Sarawak, and is a member of the Sarawak Biodiversity Council (SBCo). Under state law, SBC reports to MUDNR as the state CA on ABS<sup>15</sup> makes SBC also reports to the SBCo who meet quarterly. SBCo membership includes the state departments for forest, agriculture, MUDNR, and education. There is also a research & development council that oversees SBCo. SMUDNR report to the NCA.

#### Sarawak Biodiversity Centre (SBC)

SBC was established in 1998, but largely developed from 2003 turning from bus shed distillation to a modern biochemistry laboratory facility.' SBS focuses on bio-extraction mainly of plant kingdom materials with scientific / TK documentation. They have an extensive Natural Product library of extracted compounds.

SBC is a government agency, incorporated under the Sarawak Biodiversity Centre Ordinance (1997, Chpt 24, Laws of Sarawak). It describes itself as the leading research organisation in Sarawak.<sup>16</sup> It is governed by Sarawak Biodiversity Council (SBCo), with public servants as council members<sup>17</sup>. The SBC *modus operandi* is to function as a modern research facility with a legal system established for biological resources development<sup>18</sup>. It has a high technical capacity and institutional drive with the aim to create revenue for itself and Sarawak State. SBC check patents for bio-piracy, for which there have been cases<sup>19</sup>.

Research applications are made online and depending on the land ownership or tenure, the relevant body is directed to assess the application for a permit: SBC issue the permits for research & development (R&D) collection; the Forest Department issue for Protected Areas. If the research is only for *in-situ* identification of species and not damage or extract plant material, then only a permit from the Forest Department is needed.

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<sup>14</sup> In the future, there may be cases of those with issued licences, believing in a diminished need for PIC and ABS, especially where the village does not wish to engage with the 'researcher or bio-pro prospector'.

<sup>15</sup> However, SBC is under Sarawak Ministry of Education, Science & Technological Research (SMESTR) for funding and policy direction.

<sup>16</sup> [www.sbc.org.my/](http://www.sbc.org.my/)

<sup>17</sup> Thus, it does not issue shares or dividends or allow private investment (though public-private partnership programs are usually encouraged in Malaysia).

<sup>18</sup> To reduce 'technology-rich countries gaining advantage over biodiversity-rich countries' e.g. int'l researchers can use facilities (e.g. DNA analysis) on-site. So there is no need for Sarawak to be a supplier-only of biological resources to other countries. SBC don't share TK with outside researcher as it is unregistered IPRs. FRIM is not established with the same mandate and SaBC has nothing comparable, except research facilities at state universities.

<sup>19</sup> E.g. Tarantula bio-piracy – named after the collector's children – A picture was put on facebook with GPS, then others collected, illegally killed and took to US and published in a scientific journal.

SBC maintains a webpage.<sup>20</sup> There is a section on the PIC approach with a flowchart. SBC have a 'general collaboration agreement' template (for working with partners), and a TK methodology. TK Documentation starts with the Consultative meetings with community leaders at the Resident Office/District Office or Sub-District Office. Interested communities will be provided with a PIC and documentation will only start if the community has signed the PIC.

SBC Organogram is presented in **Annex 7**.

The SBCo was established in February 1998, followed by the establishment of the SBC in the same year to assist the Council with the implementation of the legislation (Ordinance from 2007, since amended 2014)

SBC's Natural Product Library is extensive: >25,000 plant extracts (note there are ~5,000 plant on Sarawak); ~500 essential oil extracts; ~650 algal strains<sup>21</sup>; ~21,000 microbe strains with ~30,000 extracts; ~10 plant / fungal / bacterial genomes mapped; and 15 compounds characterised. The NPL consists of the cold storage unit and the scientific / TK database of knowledge<sup>22</sup>.

SBC holds two intellectual property right (IPR) patents, two trademarks and two geographic indications, of which LitSara is registered under Class 3, 5, 16 and 21 as a Trademark; and Sarawak Litsara (Class 3) as a geographic indication (2011)\_(SBC Annual Report, 2017).



*Figure 2: Distillation unit used to obtain Litsara essential oil*

<sup>20</sup> [www.sbc.org.my/](http://www.sbc.org.my/) and [www.sbc.org.my/programmes/access-benefit-sharing-abs](http://www.sbc.org.my/programmes/access-benefit-sharing-abs) - with annual reports to 2017 available

<sup>21</sup> Many algae categorised – for enhance fish food, biofuels, drugs, animal feed – have an algal production plant running

<sup>22</sup> <https://www.sbc.org.my/programmes/natural-product-library>

### Sarawak State Planning Unit (SSPU)

SSPU oversees research in Sarawak. SSPU is the overall coordinator of access permits. It owns (hosts) the Sarawak Online Research Application System (SORAS).<sup>23</sup> All applications to conduct research or study in the State of Sarawak must be made online via SORAS. SORAS took three years to develop and went on-line in March 2019. It receives 40 applications/year. It is a one-stop system with three main agencies involved – SSPU, SBC and Sarawak Forest Department Sarawak (SFD). SPU see comments from all three on applications made, then SPU determines which of the three bodies to allocate the research to oversee. To note, access to marine research is under SFD control if a marine Protected Areas (PAs), or within territorial waters (12 nautical miles). SSPU also provides permits for socio-economic research and conduct all immigration and police record background checks. Online payment is the only remaining part of the system yet to be completed. (In comparison, Sabah have an access control system, whereas nationally or on the peninsular, DBFM / NCA and the state CAs lack such a system<sup>24</sup>).

### Centre of Excellence for Biodiversity Law (CEBLAW, University of Malaya)

The drafting of the ABS Act and regulations were commissioned to CEBLAW under the UNDP ABS I project. Under UNDP ABS II, they were designated as one of the implementing partners, however, under ABS II, their director was independently engaged by UNDP.

### Land tenure system and ILCs customary land ownership

There are five designated types of land<sup>25</sup>:

- State-land - land areas which are owned by the state government and not developed for any specific purpose, managed by State Lands and Surveys Department / Land Offices
- Alienated land - land areas which have been alienated under tenure under Country Lease, Town Lease, Native Title, Provisional Lease, etc. The tenure maybe 99 years or shorter. They are administered by State Lands and Surveys Department / Land Offices.
- Land areas set aside as parks and wildlife reserves, managed by state agencies such as SFD / Sabah Parks / State Parks Corporation / State Wildlife Department
- Forest production land as Forest Reserve, managed by State Forestry Departments
- Other land areas yet to be utilised by the government as a future land bank, managed by State Lands and Surveys Department / Land Offices

On the peninsular, aboriginal peoples have a legal right to own aboriginal reserves and to take forest produce from these reserves under the Aboriginal Peoples Act (1954, revised 1974).<sup>26 27</sup>. Indigenous reserve lands also include lands given by state governments to the ILCs (they are often interpreted as gifted allocations; a practice that is more common in Peninsular Malaysia – e.g. Ulu Legong village, Kedah State - Indigenous reserve land (428 ha) [so they have land for planting medicinal plants]. However, the commonly held view by government is that the ILCs own neither the land nor the resources that they contain.

Whereas, ILCs in Sabah and Sarawak are protected by their respective native customary land enactments/ordinances. These are Native Customary Rights (NCR) lands that are heritages passed on or

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<sup>23</sup> <https://soras.sarawak.gov.my/soras/>

<sup>24</sup> National on-line ABS permit application system is planned for in-house development by the MyBIS technical team

<sup>25</sup> There is often a difference between land classification (state or people's ownership), land tenure (land use certificate / title) and land management right / land use contract (e.g. for forest farming use by a third party)

<sup>26</sup> [www.commonlii.org/my/legis/consol\\_act/apa19541974255/](http://www.commonlii.org/my/legis/consol_act/apa19541974255/); and [www.malaymail.com/news/malaysia/2019/07/30/no-orang-asli-ancestral-land-perak-mb-shouldve-asked-legal-advisor-first-sa/1776126](http://www.malaymail.com/news/malaysia/2019/07/30/no-orang-asli-ancestral-land-perak-mb-shouldve-asked-legal-advisor-first-sa/1776126)

<sup>27</sup> The Aboriginal Peoples Act 1954 and the Recognition of Orang Asli Land Rights" was published in the UUM Journal of Legal Studies 2015 Vol 6 No 1. ([www.uumjls.uum.edu.my/](http://www.uumjls.uum.edu.my/))

inherited from generation to generation. This term is more commonly used in Sabah and Sarawak. Under Sarawak Land Code (Amendment, 2018), the term 'native territorial domain' is used for ILCs (Ibans and other communities) and land title certificates are issued. The right to land is based on the Land Code (Section 5), if the 'usufruct rights' were exercised by the ILC prior to 1958, and now also includes access areas to this land<sup>28</sup>.

Sabah and Sarawak are also the only states with the legal power to decide on the cadastral land survey and native & customary law. In Sarawak, Native Customary Right (NCR) land is under Sarawak MUDNR whose survey department issue land title certificates<sup>29</sup>.

### 3.3 NATIONAL OWNERSHIP & AND SUSTAINABILITY OF PROJECT RESULTS

The country ownership and mainstreaming was high, especially in terms of creating the necessary legislation and institutional structures.

#### 3.3.1 FINANCIAL RISKS TO SUSTAINABILITY

The on-going civil service staffing allocation of the NCA is of concern, as is the ability of MWLNR (DBFM) to fund and oversee a national ABS database and monitoring system. Project funding was allocated for this, but the task is far from complete. Some TK research is being undertaken by universities. Funding proposals are being made within the remit of the 12<sup>th</sup> Malaysia Plan. These include FRIM for further TK documentation across the peninsular, and they have a proposal for an R&D plantation for extracted plants. Sabah is said to rely mainly on state funds.

Sarawak is preparing a state master plan for biodiversity (State MYR 2m, UNDP MYR 1m). SBC receive state funds. SBC is expected to significantly expand its commercialization of biological resources. As of August 2019, a tender for the production of a study to prepare a master plan for this Bio-Industrial Park was launched.<sup>30</sup> SBC also expect to make some revenue from LitSara sales with Pullman hotels as a new potential buyer for products.

#### 3.3.2 SOCIO-ECONOMIC RISKS TO SUSTAINABILITY

The 11<sup>th</sup> Malaysia Plan (2016-20) requires Malaysia to become a developed nation by 2020 in a sustainable and inclusive manner. It underscores the importance of harnessing biological resources as a new source of wealth. The mid-term review of the plan (2018) reiterated this via the empowerment of ILCs in generating income through enforcement of the ABS Act 2017 (Strategy B3) – this is an example of mainstreaming.

Three dimensions of 12<sup>th</sup> Malaysia Plan:

- New sources of growth including Industrial Revolution 4.0, digital economy, integrated regional development as well as growth enablers such as sustainable energy and infrastructure connectivity
- Environmental Sustainability - includes the blue economy, green technology, renewable energy as well as adaptation and mitigation of climate change
- Social Re-engineering – included enhancing societal values, improving purchasing power, strengthening social security networks and improving the well-being of people

These dimensions should reduce pressure on biodiversity, especially if the value of biodiversity begins to increase (e.g. under TK documentation and plant compound development). However, as yet ABS is not providing much socio-economic benefit in a local context. In terms of the status of the 12<sup>th</sup> MP, preparation is due to start in August 2019.

<sup>28</sup> [www.nst.com.my/news/nation/2018/07/390061/ncr-lands-be-given-legal-recognition](http://www.nst.com.my/news/nation/2018/07/390061/ncr-lands-be-given-legal-recognition)

<sup>29</sup> <https://landsurvey.sarawak.gov.my/>

<sup>30</sup> [www.sbc.org.my/ms/berita/muat-turun/fail-tender/643-masterplan-study-for-bioindustrial-park-in-sarawak-1](http://www.sbc.org.my/ms/berita/muat-turun/fail-tender/643-masterplan-study-for-bioindustrial-park-in-sarawak-1)

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### 3.3.3 INSTITUTIONAL & GOVERNANCE RISKS TO SUSTAINABILITY

The NCA is a new entity within the ABS unit of DBFM. It is established under ABS Act 795, but its ability to develop itself with a new team now that the project has finished is unknown. The Act only mentions a chairman and who the chairman wishes to appoint. The director of the PMU remains as director of the Biodiversity Section (under DBFM), so the institutional knowledge remains at present. Other PMU positions, such as the PC was dissolved at the end of the project. MWLNR is the focal point for CBD and NP. For the project, on the ground, most workshops were attended by the Principal Assistant Secretary to DBFM, not designated NCA staff for example. Also, the NCA wasn't effectively established at project start (2014), but rather waited until the ABS Act was passed (2017), and was then only set up at the end of 2018, i.e. at the end of the project. The result of this is also limited institutional capacity at national level, partly because the project had difficulty to target its ABS training at the national level.

Governance of ABS is good, but the awaited national ABS regulations are still impacting on the CAs (mostly the EPU) and the checkpoints. However, the EPU was part of the consultations on ABS structures and were included in the ABS Act. SaBC and SBC were established prior to the project and were able to be much more proactive in developing their state-level legislation, institutions, and (on-line) procedures for research permits, PIC and ABS.

At present research institutions, and particularly universities, are not so good in ABS compliance. They tend to collect biological resources and publish plant compound knowledge without IPRs or patent, so competitors/companies can just take the knowledge to exploit without benefit to resource providers and TK holders.

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### 3.3.4 ENVIRONMENTAL RISKS TO SUSTAINABILITY

In some cases, *ex-situ* (off-site) plantation is being undertaken which reduces pressure on important biological resources/biodiversity, but this is being undertaken for commercial reasons by product developers. i.e. away from the village, on the researchers/developer's land. However, it is *in-situ* (on-site) biodiversity resource conservation that needs attention, not only to maintain the integrity of these ecosystems but also to support nursery production/plantation at village level (near-site) with the ILCs in order to maintain equitable benefit-sharing from production. An example of *ex-situ* plantation includes FRIM's proposal for an R&D plantation of Pengloy Semai. These 3<sup>rd</sup> party plantations are essentially for commercial supply.

Sarawak is planning for state-wide certification of palm oil plantations, which would include small growers. Thus, further conversion to oil palm by smallholders is unlikely to be economic due to compliance and certification costs. This change in environmental sustainability methods could have a large impact in reducing further land conversion to palm oil<sup>31</sup>.

Environmental sustainability issues and solutions are captured within NBSAP to 2030, although the political willpower and governmental effectiveness in implementation are not assessed here.

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<sup>31</sup> There is already a case of 40,000 ha of forest with agarwood that has become more economic with the agarwood and ecotourism, than the opportunity cost of conversion to and certification cost of a new palm oil plantation.



Figure 3: The Litsea tree

## 4.0 MONITORING, EVALUATION AND REPORTING

### 4.1 M&E SYSTEMS – DESIGN & IMPLEMENTATION

The overall rating is **Moderately Satisfactory**

The prodoc outlined the expected M&E activities which included a mixture of standard reporting and an expectation that the Project Manager would oversee the monitoring of progress (outputs) and achievement of targets against indicators. The list included Inception workshop/report, APR, PIR, Quarterly progress, CDRs, Risk log, Lessons learned log, MTR, ESSP review, TE, Final Report (not seen) and Audit – these are all considered within their relevant ‘reporting’ sections of this TE. With respect to monitoring progress and achievement of targets, the PC completed the two tables for the TE (see **Annex 1 and 2**).

In addition, the UNDP Capacity Development Scorecard was prepared at baseline and end-term, with the results reported under the 1<sup>st</sup> indicator for Outcome 2. A mid-term review was not required as the GEF project fund was <\$2m. A separate ‘exit strategy’ was not developed but would have been useful.

Other aspects of M&E were included as part of the project design and consultant deliverables. This included two ‘Knowledge, Attitudes and Practices (KAP)’ surveys (Output 2.5). It targeted ILCs, researchers and relevant industries that use or benefit from ABS transactions in order to determine the project’s impact on awareness of the national ABS law, CBD and the Nagoya Protocol; as well as on the value of biological resources among ILCs.



## 4.2 ADAPTIVE MANAGEMENT (WORK PLANNING, REPORTING & COMMUNICATIONS)

### Annual Workplan & Budgets (AWPBs)

- AWPBs were produced and signed-off for 2015-18<sup>32</sup>. They were signed by the government (EPU, Prime Minister's Office), IP (DBFM, MWLNR), and UNDP Resident Representative. The AWPBs were endorsed at NSC meetings

### **Reporting**

#### Mid-year Progress Reports (MYPRs)

- These were produced 2014-17 and were distributed to partners including the EPU
- 2017 gradings were: Objective / Outcomes – MS; Implementation – MU
- There was no MYPR to cover the last 13 months of the project

#### Project Implementation Reports (PIRs)

- These ran from 'start-July to end-June' and were produced for: 2014-15; 2015-16; 2016-17; 2017-18;
- The 2017-18 grading: Implementation was MS
- There was no PIR to cover the last 7 months of the project

#### Annual Progress Reports (APRs)

- These were produced 2014-17 and were distributed to partners
- There was no APR to cover the last 13 months of the project

There was no project final report produced (by August 2019) which would have indicated the cumulative achievement of the project.

### **Communications**

As mentioned, project management was not effective until the PC was engaged. This meant that coordination and communications were affected which in turn had a clear impact on the slow delivery of the project for the first 2.5 years. As late as 2017, UNDP was still investing time in standardising reporting from the pilot projects, which indicated that the system was lacking, which was in part due to government, institutional and personnel changes and a high loss of institutional and project memory.

## 5.0 IMPACT & CATALYTIC EFFECT

### 5.1 Impact

#### Reduction in stress on ecological systems

The reduction in ecological stress (ecosystem integrity) is slight at present, but could significantly increase in localised areas if extraction of resources is not monitored and controlled. The CAs on the peninsular are not yet in a position to do this. In the future, marine resource extraction (mangrove, seaweed) from territorial waters (12 nautical miles) is likely to increase and may need to come under ABS. Another area of interest may be the Luconia shoals Marine Protected Area which cover 1m ha of reefs<sup>33</sup>. As a result of SBC training in PIC, the Bario highland villages are now aware of illegal bio-prospecting (including by eco-tourists) without permission.

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<sup>32</sup> AWPB 2014 was not assessed

<sup>33</sup> There are at least 44 marine parks in Malaysia ([www.mybis.gov.my/one/pamaps.php?search=&type=3&state=0&iucn=0&org=0](http://www.mybis.gov.my/one/pamaps.php?search=&type=3&state=0&iucn=0&org=0)). The biological resources of Luconia are not well documented (it is a fairly new park). Marina Parks in Sabah have among the highest biodiversity in Southeast Asia

## Regulatory & policy change

Regulations are virtually in place and are having an impact on bio-prospecting / research which is now under ABS licensing. However, at the national level, the ability to provide technical leadership and coordination to the peninsular states is limited as is the national ability to track and monitor bio-prospecting research. Awareness of regulations outside of dedicated research institutions is also limited. The new ABS systems are not benchmarked internationally but could provide valuable lessons learned (see also the lessons learned section of this report)

Concerning the links between ABS and patent / IPR laws, the Geneva-based Intellectual Property Watch reported (Nov 2018) that ‘there are very few links between IPRs and ABS.’<sup>34</sup> A 2012 paper on TK stated ‘The IPR law (i.e. Malaysian Patents Act 1983) does not explicitly protect TK, but it seeks to prevent acts of misappropriation of TK by inventors’ and ‘furthermore, the IPR system [international under Trade-Related Aspects of IPRs Agreement - TRIPS Agreement and in Malaysia] does not have requirements for benefit-sharing as provided in the CBD’.<sup>35</sup> The Trademarks Act (1976) also protects against the appropriate representation of parties to a trademark.<sup>36</sup> The representative of MyIPO expressed the same opinion at the TE Workshop (JW Marriot Hotel, 3 July 2019). There have been efforts by the WTO and WIPO to bridge IPR laws and CBD’s ABS requirements, although particular incompatibilities have not been identified to date.<sup>37</sup>

## 5.2 Catalytic Effect

### Scaling-up

The project provided a limited window to support the development of ABS from effectively ‘on paper’ to effectively ‘in practice’. The implementation of a national ABS system has largely been achieved, thus there is the opportunity now for Malaysia to lead regionally. At the regional level, there is an effort to harmonise regional guidelines on ABS (1<sup>st</sup> draft), which is being undertaken by the ASEAN Biodiversity Centre. Sarawak Biodiversity Centre Ordinance (1997) was the 1<sup>st</sup> legislation regionally, so can be used as a template. Bhutan is said to be following the Malaysia – Sarawak model.

### Replication

Replication is mainly being achieved via TK documentation. FRIM is working with 18 ethnic groups, concerning TK documentation and with eight other communities on ABS. Under the project, they work with two ILCs. SBC has a clear TK documentation programme and are working with a significant number of ILCs on Sarawak. Under ABS, SBC has expanded Litsea oil production from five to seven communities in 2017 (Bukit Sadok and Bakelalan with ILCs of Iban and Lun Bawang peoples).

### Demonstration

The project has provided a clear demonstration that has been very successful. The demonstration has been achieved at the following levels: legislative; institutional mechanisms; user guidelines, implementation systems (e.g. research application procedures), and not least pilot PIC (and / or CP) and ABS agreements. The

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<sup>34</sup> [www.ip-watch.org/2018/11/29/economically-sound-fair-global-genetics-benefit-sharing-system-possible-panellists-say/](http://www.ip-watch.org/2018/11/29/economically-sound-fair-global-genetics-benefit-sharing-system-possible-panellists-say/)

<sup>35</sup> ISSN: 0128-7702 - *Pertanika J. Soc. Sci. & Hum.* 20 (S): 11 - 22 (2012) Traditional Knowledge Documentation: Preventing or Promoting Biopiracy R Nordin, K Halili Hassan and Z A. Zainol  
[www.pertanika2.upm.edu.my/Pertanika%20PAPERS/JSSH%20Vol.%2020%20\(S\)%20Jun.%202012/02%20Pg%2011-22.pdf](http://www.pertanika2.upm.edu.my/Pertanika%20PAPERS/JSSH%20Vol.%2020%20(S)%20Jun.%202012/02%20Pg%2011-22.pdf)

<sup>36</sup> [www.wipo.int/edocs/mdocs/mdocs/en/wipo\\_ip\\_grtkf\\_bra\\_12/wipo\\_ip\\_grtkf\\_bra\\_12\\_topic\\_2\\_presentation\\_lim\\_heng\\_gce.pdf](http://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_grtkf_bra_12/wipo_ip_grtkf_bra_12_topic_2_presentation_lim_heng_gce.pdf)

<sup>37</sup> [www.wto.org/english/tratop\\_e/trips\\_e/art27\\_3b\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/art27_3b_e.htm)

demonstration now needs to be finished off, with the passing of the national regulations on ABS and government commitment to sustaining a national ABS unit / NCA with an on-line system for national / peninsular research.

#### Production of new technologies /approaches

New technologies and modern equipment are being utilized by two research institutes – FRIM and SBC. Indeed, under the draft regulations, it is the permit holder (Access Party's) responsibility to ensure biodiversity conservation and ecological system integrity.

## 6.0 PROJECT FINANCIAL ANALYSIS

### 6.1 FINANCIAL MANAGEMENT

The Spending & accounting was based on the approved AWPBs, with invoicing against its activities with reimbursement thereafter. Combined delivery reports (CDRs) were produced and the annual expenditures (US\$) were amounting to USD 85,913 (2014); USD 316,770 (2015); USD 443,225 (2016); USD 598,893 (2017); USD 280,605 (2018); Totalling to USD 1,725,405. At the end of the project, there is a balance of USD 244,595.

In terms of cost-effectiveness, spending on budget lines was kept within 10%. Cumulative delivery against the prodoc budget was 88%. In 2017, USD 24,000 and USD 16,000 was spent on printing, publications and promotional materials. In 2015, USD 31,000 was spent on office supplies, excluding office machines or computer equipment. This seemed excessive in a digital age and when tree supply for paper is an issue (**Annex 6**).

The PMU maintained a spreadsheet with to track GEF finances and disbursement. For contractual services, the Project Coordinator tracked payments in particular to the three sub IPs – FRIM, SaBC and SBC.

### 6.2 CO-FINANCING

The funding commitment for ABS has been high during the project, especially in terms of co-financing in comparison to the GEF funding volume. This has been matched at the same time by the volume of work that the project partners have put in to develop an institutionalized and frame-worked ABS system and demonstrated its operation through pilots in four states. The PMU kept a record of co-financing by the government department which amounted to \$6.53m in comparison to the \$2m from GEF and UNDP (**Annex 5**).

## 7.0 LESSONS LEARNED (ISSUES/CHALLENGES AND MANAGEMENT RESPONSES)

Greater national leadership on ABS is required (and training delivered) if the progress of the UNDP project is going to be maintained. The national ABS unit needs to be legally mandated with dedicate staff and capacity. The ABS regulations are now around two years behind the ABS Act and need technical support to be finalized and passed by the government. An on-line one-stop access permit system is urgently needed for biological resource and TK research on the peninsular. At present, the national level and the 11 states (including the federal territories) rely on the old system of multi-layer permissions which do not incorporate the requirements under the ABS Act (2017). There is also a need to build the capacity of government to support specific ABS provisions relating to ILCs including an enhanced understanding of their customary laws and practices.

There is a lack of understanding of the ABS framework, mainly by the 11 peninsular state EPU who are the designated CAs. ABS is complex and a detailed knowledge is required such as for issuing permits, reporting, enforcement, and expected or guideline royalty payments / revenues within ABS agreements for products developed. This is not helped by the subsidiary ABS regulation (to ABS Act 795), yet to be passed into law. Until the regulations and guidelines become approved, the peninsular states lack direction or power to act effectively. There are also some communication issues with peninsular states not being made aware of nationally issued permits for researchers entering their state territories, in part due to the NCA not yet being fully functional.

The CAs have concerns over IPR ownership (owned by state, firm or by a community?), data sharing and confidentiality – again with the national user’s guideline not yet approved for use. The peninsular state CAs also have concerns over the present multi-level access licensing requirements, which is discouraging researchers.

At present, pilot project stakeholders are aware of biodiversity value, but ‘trusting’, when it comes to ‘known’ Access Parties, who have built up long-term relationships. Concerning the drafting of ABS agreements, FRIM and SBC have their own lawyers for PIC and ABS, PIC and ABS is developed through consultation with communities and engagement is by Prof Dato Dr Gurdial Singh Nijar, the ABS negotiator for Malaysia. The communities can elect representatives to negotiate benefit-sharing agreement (Reg 24(7)).

Product prototypes are being ‘branded’ with community names which increases local ownership and suggests more equitable sharing of future benefits. However, ABS project ownership by ILCs on the peninsular was very low. The TE suggested their empowerment through the establishment of local cooperatives, which was taken up by the authorities in Kedah and Perak in instructing FRIM to accomplish such an action so that the ILCs could be a legal entity in the registration of products under ABS agreements (e.g. ‘Kensiu village TK plants cooperative’). For such ILCs, such empowerment is important for their future development.

*Ex-situ* propagation is being practised by the project implementation partners – which is not always allowing equitable benefit-sharing of income generation. i.e. benefits already moving away from the communities. FRIM and SBC both have established community farm and individual farm without the resource provider, the ILCs involved. At present these plantations are being established under the label of ‘for R&D’ which is step towards 3<sup>rd</sup> party production for increased supply. The communities are empowered and supported by SBC through propagation capacity building to ensure sustainable and sufficient supply of material for commercialization. Our work with the communities ensures that benefits are shared.

The conservation of biological resources is provided under the Wildlife Protection Ordinance and the Forest Ordinance. The ABS regulations and ordinances don’t stipulate any methods for bio-resource conservation, yet CBD and NP are directly underpinned by such. Thus, this leaves it for any regulations still in draft, or especially to ABS guidelines still being developed to promote such conservation. This can be on two levels – *in-situ* or *ex-situ* conservation. The former means to promote on-site conservation (e.g. in the forest through managing natural regeneration, mother tree seed supply, controlling access and NTFP harvesting volumes to sustainable levels). Off-site conservation traditionally means maintaining genetic resources at a different location, typically a zoo or plant breeding station, which ultimately is less cost effective and lacks overall protection of the ecosystem integrity/biodiversity on-site.

Under ABS, where the biological resource supply needed is high, there may be a case for off-site plantation, but ultimately, if the ILCs are not empowered to be the local guardians with *in-situ* conservation, then it won’t happen. Thus *in-situ* conservation is preferred, plus on-farm’ conservation with propagation / cultivation in the first instance to be undertaken by the communities with support from the researcher / developer.

SBC implements the Good Wild Craft Practice where communities are provided with the technical know-how of harvesting the plants in a sustainable manner. Previously communities used to cut the whole tree. Now the trees are maintained in-situ. Communities are also empowered through propagation capacity building using different techniques. Some techniques are easier for communities such as establishing nurseries and farm using wildlings and propagation using seeds.

There is a need to continuously engage and empower the communities through capacity building on the topics of: sustainable harvesting; propagation; and understanding ABS (SBC Implementation Report November 2018). The ILCs lack the modern skills for *in-situ* conservation in the face of high resource pressure, or for production on their farm when particular horticulture techniques are needed. The TE was asked at every village visited (~10) if the project could supply plant nursery expertise to help the ILCs grow the particularly important plants. This was also partly because they knew stocks would diminish with the continued collection, but also due to the dangers and difficulties of forest collection.

## 7.1 THE LITSARA STORY - FROM TRADITIONAL KNOWLEDGE TO INNOVATION

The serenity of the highlands of Sarawak has an enigmatic hold on those who set foot on its soil. From the cool mountain climate of the Lawas and Bario highlands in the north, to the remoteness of the Padawan range in the south, these areas are blessed with breath-taking views, peaceful remoteness and rich soil that leaves one with a feeling of calm and content.

Amidst these gentle hills and rolling valleys, we find the Kelabit villages of Pa'Ukat and Pa'Lungan in the Bario Highlands, Long Kerebangan and Long Telingan which are homes to the Lun Bawang in Lawas and the Bidayuh community of Kampung Kiding in the Padawan Range. These are five villages that share a common resource, the *Litsea cubeba* tree which each community has long utilized for its culinary and healing properties. Through its Traditional Knowledge (TK) Documentation Programme and UNDP/GEF ABS pilot programme, the Sarawak Biodiversity Centre (SBC) has partnered with indigenous communities to study and develop innovative products from this exciting plant species.

Known to the Bidayuh as "Pahkak" and to the Kelabits and Orang Ulu as "Tenem", the tree produces a scintillating scented essential oil that invigorates, rejuvenates and inspires. Laboratory tests have found that the essential oil derived from the Litsea trees in Sarawak differs from the same species which is found in China and other parts of the region. The essential oil show anti-microbial, anti-inflammatory properties, and is able to repel insects which making it suitable as an active ingredient in personal care products. This potential multipurpose oil derived from the fruits and leaves of the Litsea tree has led to Intellectual Property certifications - Geographical Identification (GI) for the tree (Sarawak Litsea) and Trademark for essential oil (LitSara®).

LitSara® project demonstrates the good spirit of ABS which utilises the acquisition of Prior Informed Consent (PIC) from participating communities, who themselves, are actively involved in the project which including the *in-situ* conservation of the *Litsea cubeba* plant's natural habitat by the sustainable harvesting using Good Wild Craft Practice. The project ensures that valuable traditional knowledge is recognised and benefits, both in a monetary and non-monetary way, are appropriately shared.

The project creates a value chain from the utilization of traditional knowledge associated with biological resources to the development of products for healthcare, personal care and cosmeceutical industries. The

sharing of benefits with local indigenous communities allows them to improve their livelihood and at the same time preserve their traditional knowledge while promoting the sustainable use of the biological resources.



Figure 4: Sample of the Litsara Products from the ABS project

## 7.2 RECOMMENDATIONS

The recommendations are listed with the responsible party identified in brackets.

1. The national ABS unit needs to be legally mandated with dedicate staff and capacity. It needs to show leadership as the NCA.
2. The ABS regulations need technical support to be finalized and passed by the government.
3. An on-line one-stop access permit system is urgently needed for biological resource and TK research on the peninsular [the in-house MWLNR software designers need to be assessed for competency – the designers of the Sabah and Sarawak systems could be engaged]
4. The peninsular CAs require a training programme based on the ABS regulations, the ABS User Guidelines (both to be approved), and national one-stop research permitting system (to come on-line) [DBFM]
5. SBC needs to develop a stronger ethical wall between being both researcher and research licensor [SBC]
6. FRIM and SBC need to establish propagation nurseries at village level for the main products being developed (Pengloy, KaHerbs and *Litsea*).
7. FRIM and SBC need to establish near-site village plantations of ULG004 and *Litsea* respectively to ensure equitable sharing of benefits.
8. Under the draft ABS regulation, the legal obligation for biodiversity conservation is with Access Parties (researchers, permit holders), i.e. FRIM and SBC. They both need to establish Good Wild Craft Practices to ensure wild plants are not depleted.
9. The project communities that FRIM are working with on the peninsular need to be empowered. FRIM need to identify an NGO (with horticulture skills) who can work with them to develop village nursery and plantations and create an institutional set-up (e.g. cooperative committee)
10. DIPD to establish cooperatives for the ILCs working with FRIM [DIPD of Perak and Kedah]

11. The peninsular CAs need to establish financial accounting / Trust Fund accounts for the royalties of ABS.
12. The national NCA and Ministry of Federal Territories need to establish Trust Fund accounts for the royalties of ABS
13. ILCs need independent legal advice when making PIC and ABS agreements. The CAs need to ensure that this is provided.

## APPENDIX

### Annex 1: Stakeholder List

Organisation	Role
Ministry of Water, Land and Natural Resources	Implementing partner; Chair of National Steering Committee
Federal Economic Planning Unit	National Steering Committee Member
Minister of Agriculture and Agro-based Industry	National Steering Committee Member
Department of Wildlife and National Parks (DWNP) Peninsular Malaysia	National Steering Committee Member
Department of Marine Parks	National Steering Committee Member
Forestry Department Peninsular Malaysia	National Steering Committee Member
Department of <i>Orang Asli</i> (Indigenous People) Development, Ministry of Rural Development	National Steering Committee Member
Forest Research Institute Malaysia (FRIM)	Implementing Entity; National Steering Committee Member
Sarawak Biodiversity Centre (SBC)	Implementing Entity; National Steering Committee Member
Sabah Biodiversity Centre (SaBC)	Implementing Entity; Competent Authority; National Steering Committee Member
Centre of Excellence for Biodiversity Law (CEBLAW)	Implementing Entity; Consultant of the Project on Developing the ABS Bill
UNDP	Enabling Partner; National Steering Committee Member
Perak State Economic Planning Unit	Competent Authority; National Steering Committee Member
Kedah State Economic Planning Unit	Competent Authority; National Steering Committee Member
Ministry of Federal Territories	Competent Authority
Johor State Economic Planning Unit	Competent Authority
Kelantan State Economic Planning Unit	Competent Authority
Melaka State Economic Planning Unit	Competent Authority
Negeri Sembilan State Economic Planning Unit	Competent Authority
Pahang State Economic Planning Unit	Competent Authority
Penang State Economic Planning Unit	Competent Authority
Perlis State Economic Planning Unit	Competent Authority
Selangor State Economic Planning Unit	Competent Authority
Terengganu State Economic Planning Unit	Competent Authority
Ministry of Urban Development and Natural Resource, Sarawak	Competent Authority
Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC)	GEF Focal Point; Designated Checkpoint
Intellectual Property Corporation of Malaysia (MyIPO)	Designated Checkpoint

National Institutes of Health (NIH)	Designated Checkpoint
Department of Higher Education	Designated Checkpoint
National Pharmaceutical Regulatory Agency (NPRA)	Designated Checkpoint
Universiti Malaya (UM)	Designated Checkpoint
Universiti Sains Malaysia (USM)	Designated Checkpoint
Universiti Kebangsaan Malaysia (UKM)	Designated Checkpoint
Universiti Teknologi Malaysia (UTM))	Designated Checkpoint
Universiti Putra Malaysia (UPM)	Designated Checkpoint
SHELL Bhd	The donor for the community mapping activities in Melangkap pilot project
Natural Justice	Partner of the Melangkap pilot project
Kensiu	Local community at a pilot site in Kedah
Semai	Local community at a pilot site in Perak
Lundayeh & Melangkap	Local communities at pilot sites in Sabah
Kelabits, Lun Bawang, Bidayuh, Iban	Local communities at pilot sites in Sarawak
UPM Consultancy & Services Sdn. Bhd.	Consultant of Project on Knowledge, Attitudes and Practices (KAP) Assessment Survey on Awareness & Access to Biological Resources and Benefit Sharing from their utilization (ABS) in Malaysia (Phases 1 & 2)
AkarAsia Consulting	Consultant of the Project on developing an ABS financing mechanism
Bio-community Initiative (BCI), Sabah	Consultant of the Project on developing tLundayeh Community Protocol & Melangkap Community Protocol

## Annex 2: Rating Scales

The following UNDP-GEF grading scales were applied in the evaluation

### Evaluation Criteria

Criteria	Definition
<b>Effectiveness - Objective</b>	- The extent to which an objective has been achieved or how likely it is to be achieved.
<b>Effectiveness - Outcomes</b>	- Results include direct project outputs, short to medium-term outcomes
<b>Relevance</b>	- The extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time. - The extent to which the project is in line with the GEF Operational Programs or the strategic priorities under which the project was funded.  (Retrospectively, relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.)
<b>Efficiency</b>	- The extent to which results have been delivered with the least costly resources possible; also called cost effectiveness or efficacy.
<b>Sustainability</b>	- The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion - Projects need to be environmentally, as well as financially and socially sustainable



<b>Impact</b>	<ul style="list-style-type: none"> <li>- The positive and negative, foreseen and unforeseen changes to and effects produced by a development intervention.</li> <li>- Longer term impact including global environmental benefits, replication effects and other local effects.</li> </ul>
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**Rating Scale for Outcomes (Overall, Effectiveness & Efficiency)**

<b>Highly Satisfactory (HS)</b>	<p>The project had no shortcomings in the achievement of its objectives in terms of effectiveness (outcomes), or efficiency.</p> <p>The project is expected or has achieved its global environmental objectives.</p> <p>The project can be presented as 'good practice'.</p>
<b>Satisfactory (S)</b>	<p>There were only minor shortcomings</p> <p>The project is expected or has achieved most of its global environmental objectives.</p>
<b>Moderately Satisfactory (MS)</b>	<p>There were moderate shortcomings</p> <p>The project is expected or has achieved most of its relevant objectives but with moderate / significant shortcomings or modest overall relevance.</p> <p>The project isn't going to achieve some of its key global environmental objectives</p>
<b>Moderately Unsatisfactory (MU)</b>	<p>The project had significant shortcomings</p> <p>The project is expected to achieve its global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.</p>
<b>Unsatisfactory (U)</b>	<p>There were major shortcomings in the achievement of project objectives in terms of effectiveness, or efficiency</p> <p>The project is not expected to achieve most of its global environment objectives</p>
<b>Highly Unsatisfactory (U)</b>	<p>The project had severe shortcomings</p> <p>The project has failed to achieve any of its major environment objectives</p>

Or Not Applicable (N/A); Unable to Assess (U/A)

**Note**

**Overall Outcome:** Achievement of the project objective will be rated HS to U.

**Effectiveness:** Each of the project's three outcomes will be rated HS to U. The colour coding of the individual indicator targets in **Annex 1** will partially help determine the grade. Each of the outcome indicators will also each be given a grade (in the justification column), however the final rating for each of the three outcomes will be due to appropriate weighting in terms of attaining project objectives. This means that professional judgement of the TE team will also be a key consideration.

**Efficiency:** An overall rating for cost-effectiveness will be provided

### Rating Scale for Outcome (Relevance)

<b>Relevant (R)</b>	<b>Not relevant (NR)</b>
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### Rating Scale for Implementing Agency (IA) and Executing Agency (EA) Execution

<b>Highly Satisfactory (HS)</b>	<p>The agency had no shortcomings in the achievement of their objectives in terms of quality of implementation or execution.</p> <p>Implementation of all five given management categories – IA or EA coordination &amp; operational matters, partnership arrangements &amp; stakeholder engagement, finance &amp; co-finance, M&amp;E systems, and adaptive management (work planning, reporting &amp; communications, including update to project design) – has led to an efficient and effective project implementation.</p> <p>The agency can be presented as providing ‘good practice’</p>
<b>Satisfactory (S)</b>	<p>The agency had only minor shortcomings in terms of the quality of implementation or execution.</p> <p>Implementation of most of the five management categories has led to an efficient and effective project implementation</p>
<b>Moderately Satisfactory (MS)</b>	<p>The agency had moderate shortcomings</p> <p>Implementation of some of the five management categories has led to a moderately efficient and effective project implementation</p>
<b>Moderately Unsatisfactory (MU)</b>	<p>The agency had significant shortcomings</p> <p>Implementation of some of the five management categories has not led to efficient and effective project implementation</p>
<b>Unsatisfactory (U)</b>	<p>The agency had major shortcomings in the quality of implementation or execution</p> <p>Implementation of most of the five management categories had not led to efficient and effective project implementation</p>
<b>Highly Unsatisfactory (U)</b>	<p>The agency had severe shortcomings with poor management leading to inefficient and ineffective project implementation</p>

### Rating Scale for Monitoring & Evaluation

<b>Highly Satisfactory (HS)</b>	<p>The M&amp;E system – its design and implementation had no shortcomings in the support of achieving project objectives.</p> <p>The M&amp;E system was highly effective and efficient and supported the achievement of major global environmental benefits.</p> <p>The M&amp;E system and its implementation can be presented as ‘good practice’.</p>
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<b>Satisfactory (S)</b>	<p>The M&amp;E system – its design and implementation had minor shortcomings in the support of achieving project objectives.</p> <p>The M&amp;E system was effective and efficient and supported the achievement of most of the major global environmental benefits, with only minor shortcomings</p>
<b>Moderately Satisfactory (MS)</b>	<p>The M&amp;E system – its design and implementation had moderate shortcomings in the support of achieving project objectives.</p> <p>The M&amp;E system supported the achievement of most of the major relevant objectives, but had significant shortcomings or modest overall relevance</p>
<b>Moderately Unsatisfactory (MU)</b>	<p>The M&amp;E system – its design and implementation had major shortcomings in the support of achieving project objectives.</p> <p>The M&amp;E system supported the achievement of most of the major environmental objectives, but with modest relevance</p>
<b>Unsatisfactory (U)</b>	<p>The M&amp;E system – its design and implementation had major shortcomings and did not support the achievement of most project objectives.</p> <p>The M&amp;E system was not effective or efficient</p>
<b>Highly Unsatisfactory (HU)</b>	<p>The M&amp;E system failed in its design and implementation in terms of being effective, efficient or supporting project environmental objectives or benefits.</p>

**Rating Scale for Sustainability**

<b>Likely (L)</b>	Negligible risks to sustainability with key Outcomes achieved by the project closure and expected to continue into the foreseeable future
<b>Moderately Likely (ML)</b>	Moderate risks, but expectations that at least some Outcomes will be sustained
<b>Moderately Unlikely (MU)</b>	Significant risk that key Outcomes will not carry on after project closure, although some outputs should carry on
<b>Unlikely (U)</b>	Severe risks that project Outcomes as well as key outputs will not be sustained

According to UNDP-GEF evaluation guidelines, all risk dimensions of sustainability are critical: i.e., the overall rating for sustainability is not higher than the lowest-rated dimension.

Ratings should take into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

Risk definitions:

- a) Whether financial resources will be available to continue activities resulting in continued benefits
- b) Whether sufficient public stakeholder awareness and support is present for the continuation of activities providing benefit
- c) Whether required systems for accountability / transparency & technical know-how are in place
- d) Whether environmental risks are present that can undermine the future flow of the project benefits.

### Rating Scale for Impact

Significant (S)	Minimal (M)	Negligible (N)
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Project Impact is rated as Significant; Minimal or Negligible, but also the positive or negative aspect of the impact will be stated.

Concerning impact, the TE will consider the extent of

- a) Verifiable improvement in ecological status; and/or
- b) Verifiable reductions in stress on ecological systems
- c) Regulatory and policy changes at regional, national and/or local levels

Process indicators will be specified to demonstrate achievement of stress reduction and/or ecological improvement.

Part of the impact assessment, will concern catalytic effect. The TE will consider if the project exhibited

- a) Scaling up (to regional and national levels)
- b) Replication (outside of the project),
- c) Demonstration, and/or
- d) Production of a public good, such as new technologies /approaches)

### Annex 3: Delivery of Project Objective & Outcomes against Performance Indicators

**Assessment Key:**

**Green:** Completed / Achieved

**Yellow:** On target to be completed / achieved

**Red:** Not on target to be completed / achieved

Extracted from project document (IP indicate if there have been approved changes)			IP to fill out this column with detail text on achievement	TE team	TE team fills out
Indicator	Baseline	End of Project target	2018 End term Level & Assessment	Rating	Justification for Rating
<b>Objective: Strengthen the conservation &amp; sustainable use of biological &amp; genetic resources in Malaysia through developing the national framework for the implementation of Access &amp; Benefit Sharing (ABS) under CBD</b>					
1. National ABS law, regulations and institutional framework in place which will enable Malaysia to accede to the Nagoya Protocol	No national law, regulations or operational institutional framework; state legislation on ABS only exists for Sabah and Sarawak	National law and implementing regulations on ABS come into force by end of project and are applied by national and state Competent Authorities	The Malaysian Access to Biological Resources and Benefit Sharing Act 2017 [ACT 795] was adopted by the Parliament on 15 August 2017 and then published in the Gazette on 17 October 2017.  The Act consists of 10 parts (63 sections) and 2 schedules that cover key provisions on the requirement for permit to access biological resources, benefit sharing agreement, prior informed consent (PIC), mutually agreed terms (MAT), measures for monitoring and tracking, user measures, payment into fund and transitional provisions.  The final draft of the Access and Benefit Sharing Regulations is currently being reviewed by the Attorney General's Chamber (AGC).  The enforcement of the Act and its regulation will take effect once the draft regulation is approved by the Attorney General's Chamber followed by the Minister, and its implementation mechanism is in place.	S	The Act 795 was passed in 2017.  The ABS regulations as of August 2019 remain in draft format.
2. Financial and funding mechanism(s) for the management of ABS monetary benefits	No mechanism exists	Financial / funding mechanism(s) established and operational for the reinvestment of proceeds from ABS agreements into conservation	The final report on financial and funding mechanism(s) for Access and Benefit Sharing proceeds has been completed in October 2017 and approved by the National Steering Committee for ABS on 12 March 2018.	MS	Sabah and Sarawak have established ABS bank accounts. Although at present funds are being used for the administration of ABS, not conservation per se. FRIM have established an R&D account as a portion

					of the royalties. The NCA and peninsular states lack any TF
<b>Outcome 1: An operational national regulatory &amp; institutional framework on ABS</b>					
National law and implementing regulations on ABS come into force	No national law; state legislation on ABS only exists for Sabah and Sarawak	National law and implementing regulations on ABS come into force by year 2	The Malaysian Access to Biological Resources and Benefit Sharing Act 2017 (Act 795) was adopted by the Parliament on 15 August 2017 and then published in the Gazette on 17 October 2017.  The draft ABS regulation is currently being reviewed by the Attorney General's Chamber (AGC).	S	
National and State Competent Authorities identified and operational for full implementation of national law and regulations on ABS	No national competent authority; state competent authorities only exist for Sabah and Sarawak (Sabah Biodiversity Centre; and Sarawak Biodiversity Centre and Sarawak Forestry Corporation)	National and State Competent Authorities identified for all (13) States and operational for full implementation of national law and regulations on ABS by end of project	13 Competent Authorities (CA) representing all States in Malaysia have been identified:  <ol style="list-style-type: none"> <li>1. Johor – Johor Economic Planning Unit (EPU)</li> <li>2. Melaka – Melaka Economic Planning Unit (EPU)</li> <li>3. Pahang – Pahang Economic Planning Division (EPD)</li> <li>4. Selangor – Selangor Economic Planning Unit (EPU)</li> <li>5. Perak – Perak Economic Planning Unit (EPU)</li> <li>6. Kedah – Kedah Economic Planning Unit (EPU)</li> <li>7. Perlis – Perlis Economic Planning Unit (EPU)</li> <li>8. Kelantan – Kelantan Economic Planning Unit (EPU)</li> <li>9. Terengganu – Terengganu Economic Planning Unit (EPU)</li> <li>10. Negeri Sembilan - Negeri Sembilan State Forestry Department</li> <li>11. Sabah - Sabah Biodiversity Council</li> <li>12. Sarawak – Sarawak Ministry of Urban Development and Natural Resources</li> <li>13. Federal Territories (Kuala Lumpur, Labuan, Putrajaya) - Ministry of Federal Territories.</li> </ol> The agencies appointed as official checkpoints are:  <ol style="list-style-type: none"> <li>1. Intellectual Property Corporation of Malaysia (MyIPO)</li> </ol>	MU	NCA and CAs of peninsular states are not fully functioning, despite being established under the Act 795.  The checkpoints are listed in the ABS regulation, with the main two being MyIPO and NPRA. They communicate formerly with each other, but not with the NCA – until such time that the ABS regulation is passed by government

			<ol style="list-style-type: none"> <li>2. Ministry of Science, Technology and Innovation (MOSTI)</li> <li>3. Clinical Research Centre (CRC) Ministry of Health</li> <li>4. Ministry of Higher Education (MoHE)</li> <li>5. National Pharmaceutical Regulatory Agency (NPRA),</li> <li>6. Universiti Putra Malaysia (UPM)</li> <li>7. Universiti Teknologi Malaysia (UTM)</li> <li>8. Universiti Sains Malaysia (USM)</li> <li>9. Universiti Malaya (UM)</li> <li>10. Universiti Kebangsaan Malaysia (UKM).</li> </ol>		
<p>Institutional framework for <i>sui generis</i> systems for protection of traditional knowledge and customary uses of biological resources developed under the auspices of SaBC and used to inform national framework development</p>	<p>No institutional framework for <i>sui generis</i> systems for protection of traditional knowledge and customary uses of biological resources exist for Malaysia</p>	<p>Supportive institutional framework for <i>sui generis</i> systems for protecting traditional knowledge, innovations and practices and customary uses of biological resources developed for Sabah State and used to inform national framework development.</p>	<p>Two community protocols have been produced during the project implementation. Melangkap Community Protocol (English and Malay) has been completed and published by Sabah Biodiversity Centre. The protocol is written by the community themselves with the guidance from the Bio-Community Initiative (BCI) as project facilitator. The community protocol consists of 7 chapters which covers the documentation of history and traditional knowledge of the villages, the Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) procedures to access the resources and traditional knowledge of the community.</p> <p>First completed draft of the Long Pasia/Mio Community Protocol (Malay version) has been completed in July 2018.</p> <p>These protocols alongside with the previous studies and lesson learned by The Centre of Excellence for Biodiversity Law (CEBLAW), Ministry of Natural Resources and Environment, FRIM, SBC has been used as the reference in developing the standard community protocol template in the ABS regulation.</p>	S	2 CPs produced
<p>Financial and funding mechanism(s) established at federal and state</p>	<p>No formal governmental financial mechanism exists for reinvesting</p>	<p>Financial and funding mechanism(s) established at federal and state</p>	<p>The final report on financial and funding mechanism(s) for ABS proceeds has been completed in October 2017 and approved by the National Steering committee on 12th March 2018.</p> <p>The summary of the recommendations are as follows:</p>	MS	<p>Despite, there being no national ABS fund, Sabah and Sarawak have established Trust Fund accounts. For FRIM ABS</p>

levels to receive and reinvest proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	levels by end of Year 3 to receive and reinvest proceeds from ABS agreements towards the conservation of biological diversity and sustainable use of its components	<ul style="list-style-type: none"> <li>The decision-making process for disbursement of the funds should include representative from Indigenous and Local Communities or Non-Governmental Organisations for inclusive decision making.</li> <li>The capacity to manage the fund at the federal and state level needs to be assessed and a fulltime management need to be created to manage and administer the ABS fund.</li> <li>Competent Authorities/State Economic Units to discuss on the interim setup before the enforcement of National ABS Act.</li> </ul>		proceeds, they have royalties for the state and royalties for R&D.  It is yet to be seen if funds are directed towards biodiversity conservation
<b>Outcome 2: Strengthened national institutional and stakeholder capacity for implementation of the national ABS framework</b>					
Improved capacities of national and state competent authorities for ABS implementation as shown by an increase of at least 30% in the draft ABS Capacity Development Scorecard	ABS Capacity Scorecard baselines NRE: 33% Sabah: 35% Sarawak: 31% Other states: 0% Other agencies:0%	Targets NRE: 75% Sabah: 75% Sarawak: 75% Other states: 30% Other agencies: 30%	KATS (NRE): 51.28% Sabah/SaBC: 77.27% Sarawak/SBC: 68.33% FRIM: 42.86%	S	The capacity of MWLNR (DBFM and its ABS Unit and NCA) remains limited and lacks leadership.  The capacity and leadership of FRIM and SBC is exceptional.  SaBC is functioning well within its administrative design / role
Number of NCA, state and related agencies trained on ABS and bio-prospecting related subjects to facilitate implementation of the national ABS framework. <sup>38</sup>	No staff have been trained	100 staff from the NCA, 13 state CAs and related agencies (see footnote) are trained	The capacity workshop conducted: 1. 21 Mar 2016 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 43 Participants (23 Male; 20 Female). 2. 9-10 Aug 2018 - ABS Capacity Building Workshop for Competent Authority and Enforcement Officer: 46 Participants (24 Male; 22 Female) 3. 12 October 2018: ABS Capacity Building Workshop For Researches, NGOs, and other Stakeholder: 51 Participants (21 Male; 30 Female)	MU	National level and peninsular state level training has been insufficient, bearing in mind this is a new piece of legislation defined within an Act.

<sup>38</sup>Potentially staff in MOSTI in charge of public research grants, university staff in charge of research grant administration, product approval under MOH and MyIPO



Percentage of the population of researchers, local communities, and relevant industry targeted by the campaign is aware of the national law and CBD and NP provisions related to ABS and traditional knowledge (TK) among stakeholders including researchers, public, ILCs and industries	0%	80%	<p>The second phase of the Knowledge, attitude, and practices (KAP) second phase study has been completed and the final report was submitted in November 2017. A total of 1149 respondents participated in the Phase 2 of the study from March to October 2017 (550 institutional stakeholders, and 599 Indigenous and Local Communities). The findings of the study:</p> <ul style="list-style-type: none"> <li>Overall, the knowledge on regulations related to ABS among institutional stakeholders were good. Knowledge on access to genetic resources and benefit sharing arising from their utilization among institutional stakeholders was high.</li> <li>Knowledge on regulations related to ABS remain low among the ILCs. Compared to phase 1, there was a small increase in the percentage of ILCs who had heard either one of the Convention of Biological Diversity, Nagoya Protocol and Malaysian ABS Bill. A majority of the Indigenous and Local Communities (ILCs) appeared to understand the principles of the ABS. Most ILCs were positive in terms of their attitude towards Access &amp; Benefit Sharing. Access and Benefit Sharing practices among ILCs were low, and if any form of procedure or process existed, they were mostly informal. Among the ILCs, there was no clear procedure about access to traditional knowledge or the fair and equitable sharing of benefits by non-members of the communities.</li> <li>There was no formal procedure in place although a few communities had some form of informal procedures or protocol.</li> <li>ILCs were concerned whether the implementation of the Access to Biological Resources and Benefit Sharing law in Malaysia could restrict their use of resources in performing their traditional and customary practices.</li> </ul>	MS	<p>The ILCs that FRIM, SaBC and SBC have been working with have good knowledge as do the other ILCs that they work with.</p> <p>SaBC and SBC have informative webpages and on-line application systems to support ABS awareness and processes. In contract, this is lacking at a national level (no webpage or permitting system that includes ABS)</p>
<b>Outcome 3: Best practice ABS processes piloted recognizing the principles of biodiversity conservation, Prior Informed Consent (PIC) &amp; Mutually Agreed Terms (MAT) inc. fair &amp; equitable sharing of benefits</b>					
Number of ABS pilot agreements negotiated for initial commercialization of prototypes with fair and equitable benefit sharing provisions	No ABS agreements in Malaysia that fully comply with CBD requirements	At least 2 ABS pilot agreements negotiated for initial commercialization of prototypes with fair and equitable benefit sharing provisions	<p>Sarawak Biodiversity Council (SBC) successfully signed a benefit sharing agreement with 5 communities involved in the Litsara pilot project on Mar 2019. The project demonstrated the complete value chain which involved 7 villages across the Sarawak State. Community involved benefited from capacity building in sustainable essential oil production skills, extra income from selling the raw essential oil as well as the loyalty generated from the marketing of Litcea oil products by SBC.</p> <p>Forest Research Institute Malaysia (FRIM) produces 2 prototypes named "Pengloy Semai" and "KaHerbs" from the medicinal plant from the Traditional Knowledge</p>	HS	7 ABS agreements have been developed

			of the indigenous community in Kedah and Perak State. FRIM is in the final process of negotiating 2 ABS agreements with both the Semai and Kensiu communities for initial commercialization of the 2 prototypes.		
Number of PIC processes <sup>39</sup> with ILCs implemented in accordance with the planned PIC/community protocol	Some developmental work in Sabah and Sarawak on PIC processes	At least 3 PIC processes with ILCs implemented in accordance with the planned PIC/community protocol	Both SBC and FRIM conducted full PIC practices during the engagement with the communities.  The standard Prior Informed Consent (PIC) template has been developed based on the experiences drawn from the pilot demonstration project conducted by the Forest Research Institute Malaysia (FRIM), Sarawak Biodiversity Centre (SBC) and Sabah Biodiversity Centre (SaBC). It is included in the ABS regulation and user guide.	S	All 7 ABS agreements underwent a prior PIC process as did preparation of the 2 CPs in Sabah. The CPs include TK  There is a standard PIC template
Number of best practice pilot ABS agreements and PIC processes disseminated at regional level	Malaysia participates in UNEP-GEF ASEAN ABS project, but has limited experience to contribute to date	Best practice pilot ABS agreements and PIC processes presented at international workshop for ASEAN countries, published in workshop proceedings and made available through NRE website	A website <a href="http://www.abs.mybis.gov.my">www.abs.mybis.gov.my</a> dedicated for Malaysia ABS has been set up under the existing platform of Malaysia Biological Information System (MyBIS). The webpage is serving as ABS clearing house mechanism (ABS CHM) to enable better public engagement. The online permit application system is being developed to assist the permit application process after the law enforcement.	MS	7 ABS agreements, although unfortunately they are not open to public access / dissemination.  The national website has no ABS information on it. It doesn't function either as a portal for the ABS CHM or as a portal for on-line research applications
Number of ABS agreements arising from the pilot projects that specify conservation measures to ensure the security of the concerned biological resources	No ABS agreements in Malaysia that fully comply with CBD requirements or include specified conservation measures for related biological resources	At least 2 ABS pilot agreements negotiated that, when necessary, include <i>in situ</i> and/or <i>ex situ</i> conservation measures to ensure the	Sarawak Biodiversity Council successfully signed a benefit sharing agreement with 5 communities involved in the Litsara pilot project on Mar 2019.  Total 7 communities around Sarawak have been participated in the Litsara project. They were benefited from the capacity building activity in how to sustainably harvest the forest product and produce the essential oil by using modern equipment. they also manage to generate extra income form the selling of essential oil. Now with the benefit sharing agreement signed, the community involved managed to receive loyalty from the commercialisation of the Litsara	MU	The agreements made by FRIM and SBC (7 in total) are weak in terms of the Access Party's (i.e. themselves as the researchers) obligations towards biodiversity conservation (including any monitoring

<sup>39</sup> These would be the processes leading up to the signing of ABS pilot agreements above.

		security of the concerned biological resources	<p>Product by SBC.</p> <p>Forest Research Institute Malaysia (FRIM) produces 2 prototypes named “Pengloy Semai’ and “KaHerbs” from the medicinal plant from the Traditional Knowledge of the indigenous community in Kedah and Perak State. FRIM is in the final process of negotiating 2 ABS agreements with both the Semai and Kensiu communities for initial commercialization of the 2 prototypes.</p>		<p>stipulations as per the draft ABS regulation</p> <p>The Sarawak good wild practices guide is not fit for CBD purposes.</p>
At least 80% of the population of ILCs participating in the pilot projects are aware of the existence, use and option values of the biological resources under their stewardship.	0%	80%	<p>The general awareness on ABS among the stakeholders has increased during the implementation of ABS Project in Malaysia since 2014. The government sectors are now more aware of ABS concept through participation in a series of workshops and promotional activity organized by the Ministry.</p> <p>In community level, through the pilot projects carried out by Forest Research Institute Malaysia (FRIM), Sarawak Biodiversity Centre (SBC), and Sabah Biodiversity Centre (SaBC), the communities have achieved the following:</p> <ol style="list-style-type: none"> <li>1. All communities involved are aware of the importance of fair &amp; equitable sharing of benefits.</li> <li>2. Communities are empowered with the knowledge in sustainable harvesting and the skills in essential oil distillation technique.</li> <li>3. Traditional Knowledge of the community involved has been documented.</li> <li>4. Groups of community researches have been trained in the ABS concept which enable them to produce the community protocol by their own.</li> <li>5. The strong knowledge capacity of the community enables them to safe guard their Traditional Knowledge and associated biological resources from being illegally exploited.</li> </ol> <p>Feedback and comments obtained from communities on ABS framework and mechanism via field documentation have been used in developing ABS guidelines, regulation and model ABS agreement.</p>	MS	<p>The KAP survey was well targeted.</p> <p>The TE would dispute the idea that the ILCs sustainable harvest – they get paid by the researcher to take plants from the forest without any conservation understanding</p>

## Annex 4: Risk Log

The Altas Risk table (edited) is taken from the UNDP management system. It identified 3 risks.

### Risk Log

	Risk	Mitigation measures if risk occurs	TE Comment
May 2018	Delay in the approval of draft ABS regulation due to government restructuring involving new ministerial set up and line agencies (Political)	DBFM is working closely with the Attorney General (AG) to finalise the regulation by Q1, 2019. The capacity building and training activities are being conducted from August 2018 to June 2019 as soon as the regulation is approved. (July 2018, Critical flag – Yes)	The project ended in January 2019. As of August 2019, the regulations still had not been approved
July 2016	Delay in approval of the ABS draft bill by AG and delay on adoption by Parliament will affect the implementation of activities under Component 1 and 2 (Regulatory)	(Critical – No)	The Act was passed by governmentc
January 2014	Difficulties in adopting the national ABS regulatory framework by stakeholders especially at the state level due to the federal-state constitutional structure (Regulatory)	The risk from state governments have been overcome with extensive dialogue between NRE and State AGs. At the start of 2015, it is noted that there is now additional comments from Research Institutions on some of the provisions in the draft ABS Act. NRE with CEBLAW is now in the process to make amendments to the Bill after the discussion with the Research Institutions. (May 2015, Critical No)	nc

## Annex 5: Co-financing Table

Co-financing							
Sources of Cofinancing <sup>1</sup>	Name of Co-financer	Description of Co-financing	Type of Cofinancing <sup>2</sup>	Confirmed at CEO Endorsement (US\$)	Amount Contributed at Stage of MTR (USD)	Expected Amount by Project Closure USD	Actual % of Expected Amount USD
GEF / Partner Agencies	GEF	GEF-5	Grant	1970000	n/a	1970000	
	UNDP	UNDP TRAC Fund	Grant	33000		33000	
<b>UNDP &amp; Partner Sub-Total</b>				<b>\$2003000</b>		<b>\$2003000</b>	<b>100</b>
National Government	Ministry of Water Land & Natural Resources		In-Kind	5800000		6534557	
<b>Government Sub-Total</b>				<b>\$5800000</b>		<b>\$6534557</b>	<b>113</b>
<b>Total</b>				<b>\$7803000</b>		<b>\$8537557</b>	<b>109</b>

1. Sources of Co-financing may include: Bilateral Aid Agencies, Foundation, GEF Partner Agency, Local Government, National Government, Civil Society Organization, Multi-lateral agencies, Private Sector, Other
2. Type of Co-financing may include: Grant, Soft Loan, Hard Loan, Guarantee, In-Kind, Other
3. Government funding was not audited by the project
4. Excludes PPG

## Annex 6: Planned Budget and Expenditures at End-term

Outcome	2014 USD	2015 USD	2016 USD	2017 USD		Total USD
<b>Indicative Breakdown of Project Budget in Project Document:</b>						
Component 1: Legal and Institutional Framework	115200	144700	96000	22000		<b>377900</b>
Component 2: Capacity Building	71000	147000	135000	117500		<b>470600</b>
Component 3: Pilot ABS Agreement	258500	336000	279500	76500		<b>950500</b>
Project Management	54200	56342	59700	758		<b>171000</b>
<b>Total</b>	<b>498900</b>	<b>684042</b>	<b>570300</b>	<b>216758</b>		<b>1970000</b>
Outcome	2014 USD	2015 USD	2016 USD	2017 USD	2018 USD	Cumulative Totals at 31 DEC 2018
<b>Annual Work Plan Budgets and Actual Expenditures Incurred through Endterm:</b>						
<b>Component 1: Legal and Institutional Framework</b>						
Annual Work Plan	73000.00	49088.00	125423.00	268000.00	26904.76	
Disbursed	36382.57	27371.08	39264.59	262355.79	26239.27	<b>391613.30</b>
Balance (AWP-Disbursed)	36617.43	21716.92	86158.41	5644.21	655.49	

<b>Component 2: Capacity Building</b>						
Annual Work Plan	30000.00	27500.00	64800.00	130000.00	255125.01	
Disbursed	8193.16	15114.52	75104.76	38428.36	104664.29	<b>241716.86</b>
Balance (AWP-Disbursed)	21806.84	12385.48	-10304.76	91571.64	150460.72	
<b>Component 3: Pilot ABS Agreement</b>						
Annual Work Plan	65000.00	251024.00	251477.00	228726.00	88542.68	
Disbursed	24578.46	247023.77	294303.61	270252.33	86486.28	<b>922644.45</b>
Balance (AWP-Disbursed)	40421.54	4000.23	-42826.61	-41526.33	2056.40	
<b>Project Management</b>						
Annual Work Plan	46000.00	14848.00	73300.00	246000.00	83222.45	
Disbursed	10832.10	11816.57	37291.84	27865.10	63215.03	<b>151011.64</b>
Balance (AWP-Disbursed)	35167.90	3031.43	36008.16	218134.90	20007.42	
<b>Grand Totals:</b>						
Annual Work Plan	214000.00	342460.00	515000.00	872726.00	453794.90	
<b>Total Disbursed</b>	<b>85912.51</b>	<b>316769.79</b>	<b>443225.14</b>	<b>598892.58</b>	<b>280604.87</b>	<b>1725404.95</b>
<b>Balance (AWP-Disbursed)</b>	<b>128087.49</b>	<b>25690.21</b>	<b>71774.86</b>	<b>273833.42</b>	<b>173190.03</b>	

## Annex 7: Sectoral plans, Technical reports & Miscellaneous

### Table of Contents

- NSC Attendance
- Training
- Draft ABS Regulations - Advisory Committee & Advisory
- User's Guide to ABS – Draft - An overview of ABS (p14)
- PIC Beneficiary Framework (in use nation-wide, Sarawak example given)
- Sarawak Biodiversity Centre Organigram
- Steps to Access BR / TK
- National Policy on Biological Diversity 2016 – 25 (Draft Framework, 2015)
- Forest Ownership
- Project Institutional Structure
- Output 1.1 and 1.2 Package
- Summary of ABS institutional arrangement
- UNDP Capacity Development Scorecard – 2019 edit for National Capacity i.e. MWLNR
- Selected field notes
- FRIM Process

### NSC Attendance

Entity	Q1, 2014	Q3, 2014	Q4, 2014	Q2, 2015	Q4, 2015	Q2, 2016	Q1, 2017	Q4, 2017	Q1, 2018	Q4, 2018	Attend (%)
Biodiversity & Forestry Management Division (BFMD), MWLNR	√	√	√	√	√	√	√	√	√	√	100
Ministry of Finance	√	√	√	√			√				50
Ministry of Agriculture and Agro-based Industry	√	√	√	√		√		√	√	√	80
Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC)	√	√	√		√	√	√	√		√	80
Ministry of Economic Affairs (MEA)	√	√	√	√	√	√	√	√	√	√	100
Department of Indigenous People Development (JAKOA)	√	√		√	√	√	√		√	√	80
Ministry of Primary Industries		√	√	√	√	√	√				60
Forestry Department of Peninsular Malaysia	√	√	√	√	√	√	√	√	√	√	100
Department of Wildlife and National Parks Peninsular Malaysia	√	√	√	√	√	√	√	√	√	√	100
Marine Park Department of Malaysia		√	√	√	√	√	√	√	√		80



Entity	Q1, 2014	Q3, 2014	Q4, 2014	Q2, 2015	Q4, 2015	Q2, 2016	Q1, 2017	Q4, 2017	Q1, 2018	Q4, 2018	Attend (%)
Forest Research Institute of Malaysia (FRIM)	√	√	√	√	√	√	√	√	√	√	100
Sarawak Biodiversity Centre (SBC)	√	√	√	√	2	√	√	√	√	√	100
Sabah Biodiversity Centre (SaBC)	√	√	√	√	√	√	√	√	√	√	100
Third World Network	√	√	√	√		√		√			60
Perak State Economic Planning Unit		√	√		√	√	√		√	√	100
Kedah State Economic Planning Unit						√	√	√	√		40
Indigenous Peoples Network of Malaysia (JOAS)				√			√	√			30
UNDP	√	√	√	√	√	√	√	√	√	√	100
Perak State Park Corporation (3)										√	10
Putra University of Malaysia (UPM) (3)						√			√		20
WWF Malaysia (3)					√						10
<b>Chairman</b>											
Deputy Secretary General (Environment), Ministry of Water, Land and Natural Resources (MWLNR)	√	√	√	√							
Secretary General, MWLNR					√	√	√	√	√		
Under Secretary, Biodiversity & Forestry Management Division (BFMD), MWLNR										√	

1 MRD at 1<sup>st</sup> meeting, then declined the NSC membership. DIPD took over MRD's place

2 Ministry of Urban Development & Natural Resources Sarawak (MUDNR) stood in for SBC

3 Non NSC member

#### Training

Title	Date	Topics	Participants	TE comment
Capacity Building Workshop for Kintak Community Phase 1 & PIC 2	5-8 Aug 2014	Output 3.1	24 (18 m, 6 w)	Low female participation
Capacity Building Workshop for Kintak Community Phase 2	2-4 Sept 2014	Output 3.1	dd	
Capacity Building Workshop for Kensiu Community Phase 1 & PIC 2	28-30 Oct 2014	Output 3.1	25 (20 m, 5 w)	Low female participation
Capacity Building Workshop for Kensiu Community Phase 2	25-27 Nov 2014:	Output 3.1	dd	

Workshop on ABS Bill with competent authority and enforcement officer	21 Mar 2016	Output 1.2	40 (18 m, 20 w)	Workshop report not seen
1st Community Researcher Training, Long Pasia/Long Mio	20 May 2016	Outputs 1.4 & 1.5	dd	Workshop report not seen
2nd Community Researcher and Community Leaders Training, Long Pasia/Long Mio	18 Jan 2017	Outputs 1.4 & 1.5	4 (3 m, 1 w)	4 out of the total 7 community researchers were in attendance
3rd Community Workshop on FPIC, Long Pasia/Long Mio	19 Jan 2017	Outputs 1.4 & 1.5	Session 1: 23 (13 m, 10 w) Session 2: 19 (10 m, 9 w)	Only 2 participants from Long Mio
4th Community Workshop on International Law, Community and TK and Ecosystem, Long Pasia/Long Mio	20 Jan 2017	Outputs 1.4 & 1.5	Session 1: 21 (12 m, 9 w) Session 2: 10 (12 m, 8 w)	Only 2 participants from Long Mio
ABS Funding	27 Feb 2017	Output 1.3	37 (13 m, 24 w)	All EPU's attended
1st Community Workshop Community Mapping, Melangkap	19 Jun 2017	Outputs 1.4 & 1.5	31 (17 m, 14 w)	Two more experienced village elders were not in attendance
2nd Community Workshop on PIC Workshop and Community Participatory Mapping Meeting, Melangkap	12-13 Aug 2017	Outputs 1.4 & 1.5	Day 1: 19 (12 m, 7 w) Day 2: 14 (13 m, 1 w)	4 of the 5 villages in Melangkap sent representatives; No person from Melangkap Kapa
3rd Community Workshop Access and Benefits Sharing Mutual Agreed Terms, Melangkap	14 Oct 2017	Outputs 1.4 & 1.5	13 (10 m, 3 w)	Low turnout as communities were busy with tourism over the weekend
Participatory 3 Dimension Mapping Workshop, Long Pasia/Long Mio	15-16 Nov 2017	Outputs 1.4 and 1.5	Day 1, Session 1: 43 (15 m, 28 w); Day 1, Session 2: 21 (9 m, 12 w); Day 2, Session 1: 41 (11 m, 30 w)	High female participation rate. No participants from Long Mio
Capacity Building Training on the implementation of Act 795 - with CA&EO	9-10 Aug 2018	Output 2	46 (24 m, 22 w)	Workshop report not seen
ABS Capacity Building Workshop with Researchers	12 Oct 2018	Output 2	51 (21 m, 39 w)	Workshop report not seen
Capacity building program on farm establishment and distillation with community at Kpg. Kiding	Apr-Oct 2018	Output 3.3	Dd	
Capacity building program on farm establishment and distillation with community at Long Kerebangan	Apr-Oct 2018	Output 3.3	Dd	

Capacity building program on farm establishment and distillation with community at Long Telingan	Apr-Oct 2018	Output 3.3	Dd	
Capacity building program on farm establishment and distillation with community at Pa Lungan	Apr-Oct 2018	Output 3.3	Dd	
Capacity building program on farm establishment and distillation with community at Pa Ukak	Apr-Oct 2018	Output 3.3	Dd	
Capacity building program on farm establishment and distillation with community at Bukit Sadok	Apr-Oct 2018	Output 3.3	Dd	
Capacity building program on farm establishment and distillation with community at Bakelalan	Apr-Oct 2018	Output 3.3	Dd	

Dd data deficient

Awareness Activities for Sarawak Biodiversity Centre Ordinance 1997, Sarawak Biodiversity Regulations, 2016 and Access and Benefit Sharing (2015 – 2018)

No.	Program	Date	Venue
<b>2015</b>			
1.	Joint Awareness Briefing on the SBC Ordinance 1997, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Customs officers, Custom Department, Kuching.	26 November 2015	56 Hotel, Kuching
2.	Joint Awareness Briefing on the SBC Ordinance 1997, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Malaysia Airport Berhad & Sarawak Tourism Association	27 November 2015	56 Hotel, Kuching
<b>2016</b>			
1.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Customs, Malaysia Airport Berhad, Jabatan Laut Sibul in Sibul & Sarikei	24 August 2016	Premier Hotel, Sibul
2.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Customs, Malaysia Airport Berhad, Jabatan Laut in Limbang & Lawas	25 August 2016	Purnama Hotel, Limbang
3.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Aviation Security (AVSEC) for Kuching International Airport	29 August 2016	Kuching Int'l Airport
4.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with UPM Bintulu Campus	19 September 2016	UPM Bintulu
<b>2017</b>			

1.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Aviation Security (AVSEC) Sibul Airport, Custom & DCA in Sibul Airport	09 May 2017	Sibul Airport Meeting Room
2.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with DOA, JPJ, NREB, SFD, SFC, PDRM, Sarawak Tourist Guide Association, District & Municipal Council and UCTS College in Sibul	09 May 2017	Premier Hotel, Sibul
3.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with Aviation Security (AVSEC) Miri Airport	28 July 2017	Miri Airport Meeting Room
4.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with DOA, JPJ, NREB, SFD, SFC, PDRM, District & Municipal Council and CURTIN University in Miri	28 July 2017	Mega Hotel, Miri
5.	Joint Awareness Briefing on the SBC Ordinance 1997, Sarawak Biodiversity Regulations 2016, Wildlife Protection Ordinance 1998 & Forests Ordinance 2015 with UNIMAS	10 August 2017	Dewan Kristal, UNIMAS
<b>2018</b>			
1.	Awareness Briefing on the SBC Ordinance 1997 and Sarawak Biodiversity Regulations 2016 for the Conservation Internship Program under the Forest Management Certification, RIMBA Sarawak	04 May 2018	Sarawak Forestry Corp. (SFC) Kuching
2.	Awareness Briefing on the SBC Ordinance 1997 and Sarawak Biodiversity Regulations 2016 for Swinburne Sarawak Undergraduate students	12 October 2018	SBC Lecture Theatre

#### Draft ABS Regulations

Part 1 of the draft ABS Regulations provide an indication of the organisational structure of the Advisory Committee & Advisory Body

#### “PART I AUTHORITIES

##### Advisory Committee

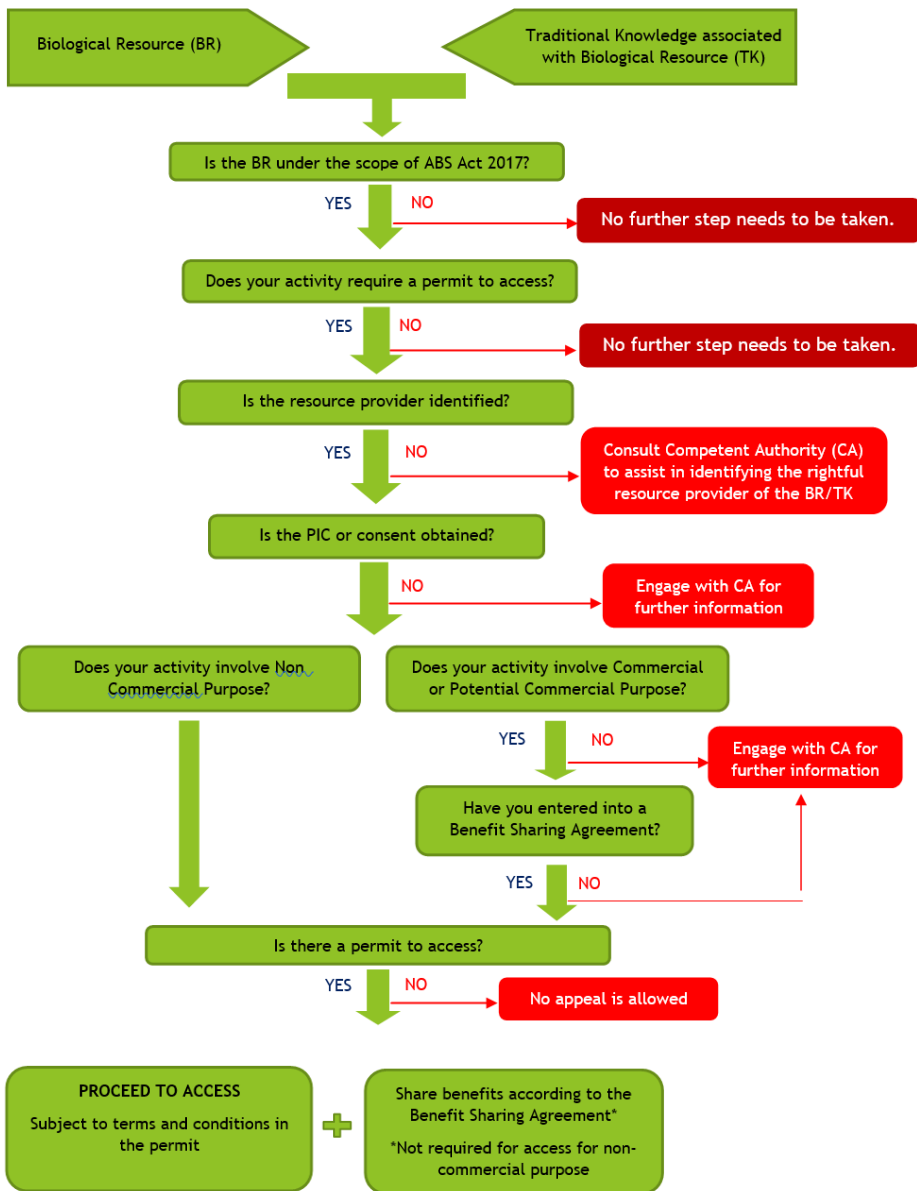
2. (1) The Advisory Committee established under subsection 11(1) of the Act shall consist of not less than seven and not more than fifteen members.
- (2) The National Competent Authority shall appoint a Chairman of the Advisory Committee from amongst the members of the Advisory Committee.
- (3) The National Competent Authority may, at any time, revoke the appointment of any member of the Advisory Committee.
- (4) Any member of the Advisory Committee may, at any time, resign by giving a one month written notice to the National Competent Authority.
- (5) All meetings of the Advisory Committee shall be presided by the Chairman or, in the absence of the Chairman, any members of the Advisory Committee.
- (6) The Advisory Committee may invite any person with relevant expertise to attend any meeting of the Committee for the purpose of advising the Committee on any matter under discussion, but that person shall not be entitled to vote at the meeting.
- (7) The Advisory Committee may regulate its own procedure relating to the meetings of the Committee.
- (8) The Advisory Committee shall be responsible to the National Competent Authority.

##### Advisory body

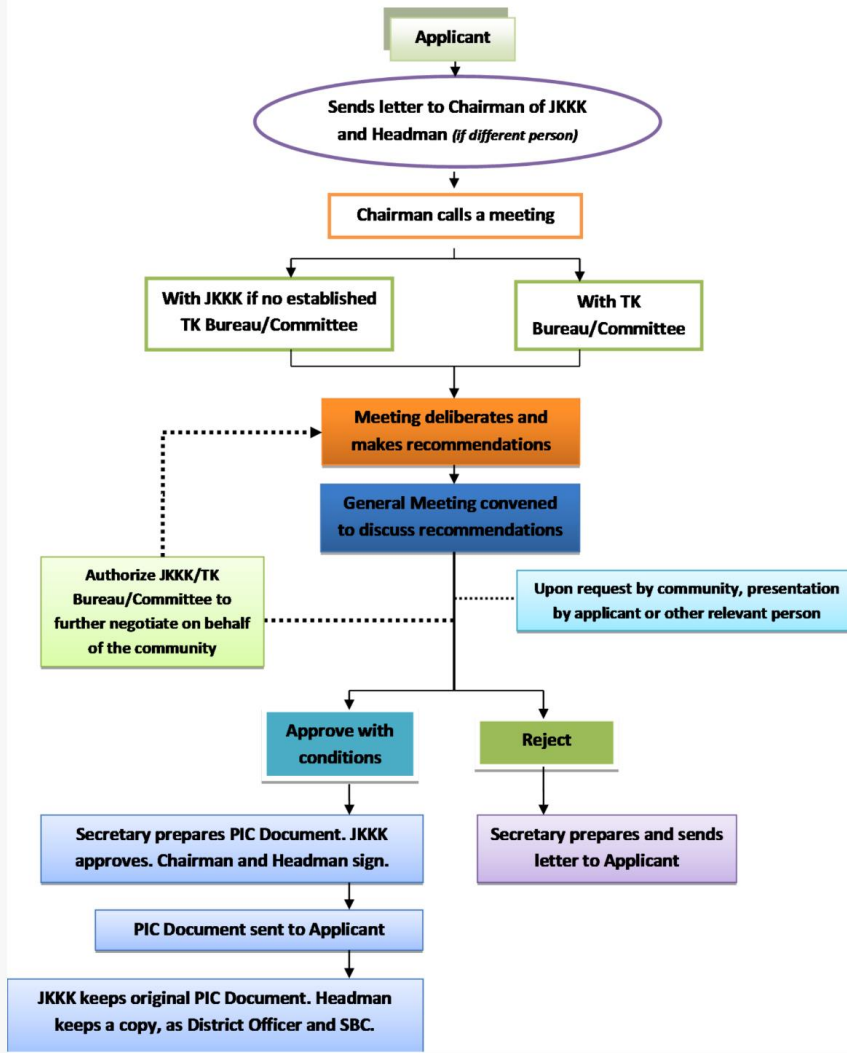
3. (1) The representatives of indigenous community and local community referred to in subsection 9(2) of the Act shall be the members of the advisory body and nominated by the indigenous community and local community.

- (2) The advisory body may elect a chairman from amongst its members.
- (3) The advisory body may regulate its own procedure.
- (4) The advisory body may invite any person to attend any meeting of the advisory body for the purpose of advising the advisory body on any matter relating to indigenous community and local community.
- (5) A member of advisory body shall, unless he resigns or vacates his office or his appointment is revoked, hold office for such term as may be specified in his instrument of appointment and shall be eligible for reappointment.
- (6) The Competent Authority may, at any time, revoke the appointment of any member of the advisory body.
- (7) Any member of advisory body may, at any time, resign by giving a one month written notice to the Competent Authority.”

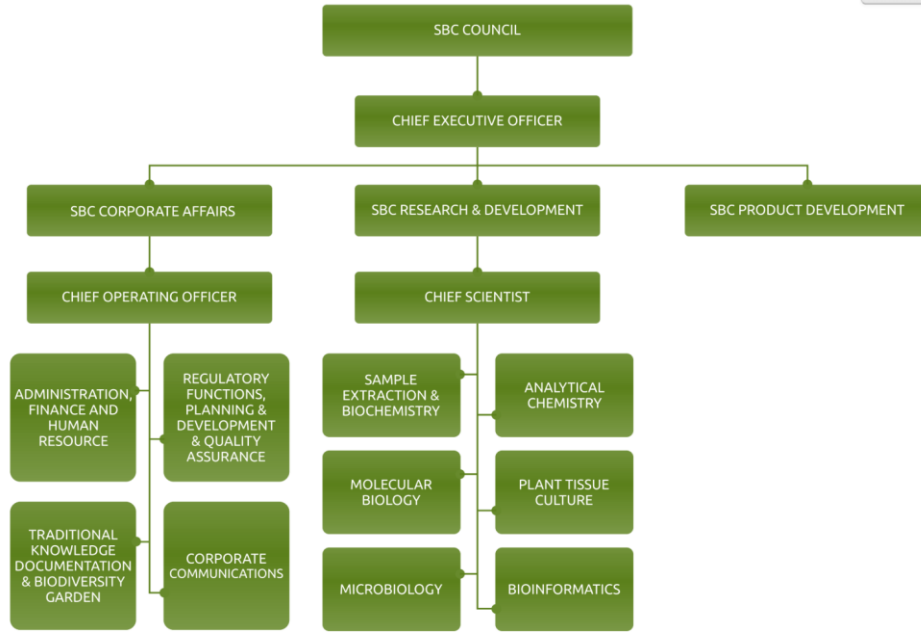
User's Guide to ABS – Draft - An overview of ABS (p14)



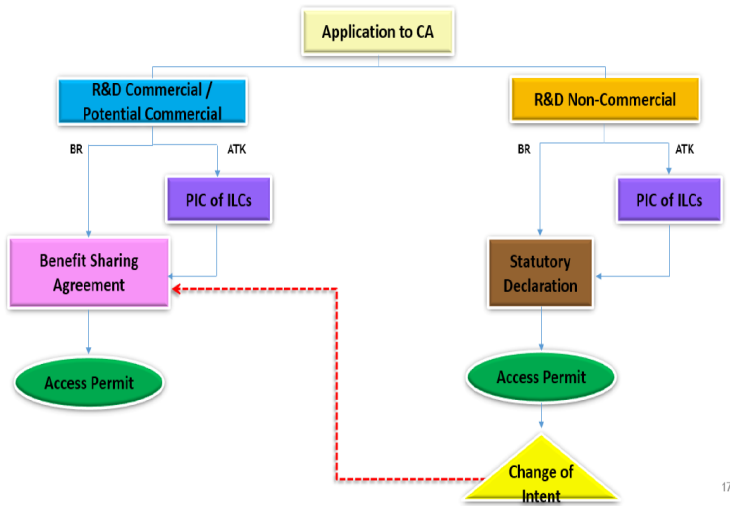
PIC Beneficiary Framework (in use nation-wide, Sarawak example given)



Sarawak Biodiversity Centre Organigram



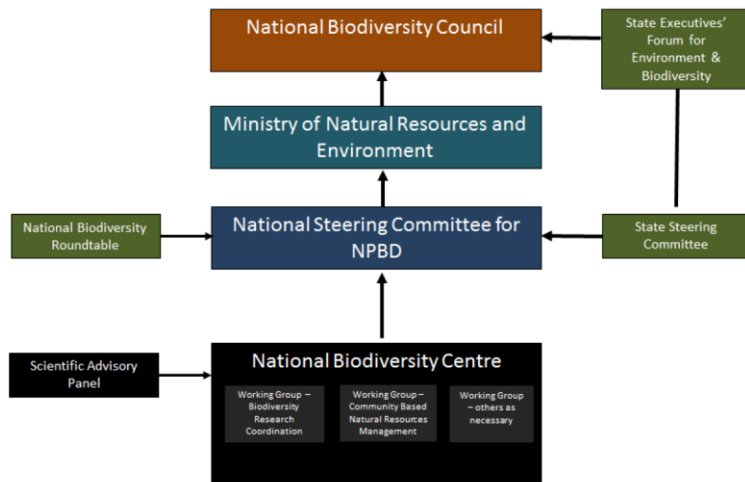
Steps to Access BR / TK



Source - Vilm ABS Dialogue 2018 – Informing about Domestic Measures for Access to Genetic Resources (BfN-Skripten 524, 2019, Suhel al-Janabi, U. Feit, E. Fenster, T. Greiber and P. Schauerer (Eds.)

National Policy on Biological Diversity 2016 – 25 (Draft Framework, 2015)





### Forest Ownership

Region	Forest	Functions	Ownership & management*
Peninsular Malaysia	Permanent Forest Estate	Protection Forest, Production Forest, Amenity Forest Research and Education Forest	Forestry Department Peninsular Malaysia
	National parks	National parks	Department of Wildlife & National Parks Peninsular Malaysia
	State parks	State parks	State Park Corporations
	Wildlife sanctuaries & reserves	Wildlife sanctuaries & reserves	Department of Wildlife and National Parks Peninsular Malaysia
	State-land forests	Multiple**	State Governments
Sabah	Permanent Forest Reserves	Class I: Protection Forest (totally protected area (TPA)) Class II: Commercial Forest Class III: Domestic Forest Class IV: Amenity Forest Class V: Mangrove Forest (TPA) Class VI: Virgin Jungle Reserve (TPA) Class VII: Wildlife Reserve (TPA)	Sabah Forestry Department (SFD).  Sabah Foundation manages 3 areas under Class 1, namely Danum Valley, Maliau Basin & Imbak Canyon
	Parks	There are currently 7 parks gazetted under the Parks Enactment, 1984. Three areas are Terrestrial Parks and 4 are Marine Parks	Sabah Parks
	Conservation Areas, Wildlife Sanctuaries and Wildlife	Wildlife /Bird / Marine Sanctuary	Sabah Wildlife Department

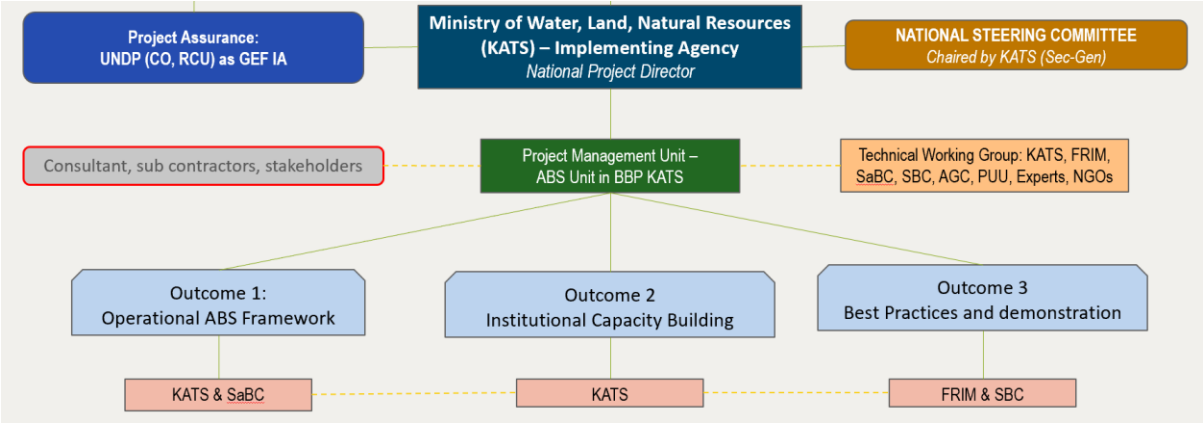
	Hunting Areas		
	State-land forests	Multiple**	State Government of Sabah
Sarawak	Permanent Forest Estate	Forest reserves, Protected forests, Communal forests & Government reserves	Forest Department of Sarawak
	Totally Protected Area	National Parks Wild Life Sanctuary Nature Reserves	Forest Department of Sarawak
	State-land forests	Multiple**	State Government of Sarawak

\* In accordance with Malaysia’s Federal Constitution, the legislative control of land and forests is a state matter and the state governments have complete jurisdiction over their respective forest resources. However, the federal government (through Forestry Department Peninsular Malaysia (& for wildlife matters, through Department of Wildlife & National Parks Peninsular Malaysia) does provide technical advice on forest management and development, undertakes research and education, and promotes industrial development of wood-based industries and trade.

\*\*State-land forests are not under any of the national or state forestry and protected area laws. They can be alienated and converted to other uses such as agricultural, industrial and timber harvesting.

NB – The TE has not conducted an analysis of customary law of natural resources

**The project organizational structure:**



NB – The TWG was only active during project preparation

**Output 1.1 and 1.2 Package**

- The development of national ABS law and implementing regulations with full stakeholders’ participation.
- The establishment of the institutional framework including the designation of national and state competent authorities and supporting measures - to enable the implementation of the national ABS law at federal and state levels.
- The establishment of the Prior Informed Consent (PIC) Protocol which constitutes the basis for clarifying PIC and MAT requirements between users and providers of associated traditional knowledge (ATK) and biological resources has been established.

- The completion of consultations with all stakeholders and the finalisation of the paper on accession to the Nagoya Protocol for approval by the Cabinet.
- Training provided to enhance the capacities of the state Competent Authorities (CA), National Competent Authority (NCA) and related agencies with regard to processing access applications, negotiating ABS agreements and monitoring and tracking measures to ensure compliance.
- The development of training programme, modules and relevant tools which were made available to the above authorities.
- The conduct of awareness-raising campaigns on the ABS law, CBD and Nagoya Protocol targeting researchers, indigenous and local communities, and relevant industries.