



**PUBLIC SUMMARY
SURVEILLANCE 1 AUDIT (THIRD CYCLE) ON
KEDAH FOREST MANAGEMENT UNIT
FOR FOREST MANAGEMENT CERTIFICATION
(NATURAL FOREST)**

**Certificate Number: FMC 0003
Date of First Certification: 9 June 2010
Audit Date: 7-10 November 2016
Date of Public Summary : 17 July 2017**

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1.0 EXECUTIVE SUMMARY

Surveillance 1 audit on the Kedah Forest Management Unit (hereafter referred as the Kedah FMU) was conducted on 7-10 November 2016 to assess the continued compliance of the overall forest management system of the Kedah FMU against the requirements of the Malaysian Criteria and Indicators for Forest Management Certification (Natural Forest) [MC&I (Natural Forest)] using the verifiers stipulated for Peninsular Malaysia. The scope of this first surveillance audit was limited to the forest management system and practices on the Permanent Reserved Forest (PRF) within the Kedah FMU.

This first surveillance audit was conducted by a 4-member team comprising Mohd Razman bin Salim (Lead Auditor), Khairul Najwan bin Ahmad Jahari (Auditor) and Prof. Mohd Basri bin Hamzah (Auditor). Dr Mohd Nazre Saleh participated in this audit process as Trainee Auditor.

Based on the findings of this first surveillance audit, it was found that Kedah FMU had continued to comply with the requirements of the MC&I(Natural Forest). This first surveillance audit had resulted in the issuance of one (1) major and six (6) minor Non-Conformity Reports (NCRs). No (0) Observation for Improvement (OFI) was raised. The major NCR was subsequently closed out,

This public summary contains the general information on the Kedah FMU, the findings of the first surveillance audit, NCRs raised as well as the decision on the continued certification of the FMU.

2.0 INTRODUCTION

2.1 Name of FMU

Kedah Forest Management Unit

2.2 Contact Person and Address

Mohd Nasir Hj Abu Hassan
Director, Kedah State Forestry Department
Level 8, Bangunan Sultan Abdul Halim
Jalan Sultan Badlishah
05000 Alor Setar, Kedah
Phone # : 04 733 3911
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2.3 General Background on the Kedah FMU

The Kedah State FMU is managed by the Kedah State Forestry Department (KSFD). The KSFD is committed to the management of the Kedah State FMU on a sustainable basis. The PRFs within the FMU comprise mainly of inland Dipterocarp forests and mangrove forests. The administration of the FMU is divided into three forest districts namely the North, Central and South Kedah Forest Districts.

The inland forest is managed under a Selective Management System (SMS) on a 30-year rotation period. Under the Tenth Malaysia Plan, RMK10 (2011-2015), the Annual Allowable Cut (AAC) for the Kedah State FMU had been set at 2,340 ha. A draft Forest Management Plan (FMP) covering the period from 2016 to 2025 was presented during the audit.

The scope of audit in 2012 was 300,046 ha, after, a total of 7,000 ha PRF being removed from the scope. The areas affected were as follows:

- I. Gunung Inas PRF - Compartments 4, 5, 6, 7, 8, 9 & 10
- II. Pedu PRF – Compartments 48 & 50
- III. Rimba Teloi PRF – Compartment 1
- IV. Bukit Perangin PRF – Compartments 27 & 28

During the Recertification audit in 2015, a total of 34,937 ha of forest area gazetted as PRF had been added into the scope of audit, which increased the FMU size from 300,046 ha in 2014 to 334,983 ha in 2015. The newly gazetted PRF areas, which had been included in the scope for the audit are as follows:

- 1) Bukit Keramat PRF – 11,105 ha
- 2) Bukit Kemunting PRF – 5,928 ha
- 3) Bukit Genting Iboi PRF – 6,394 ha
- 4) Bukit Kerong PRF – 391 ha
- 5) Bukit Payong PRF – 1,188 ha
- 6) Bukit Siong PRF - 8,191 ha
- 7) Ulu Muda Tambahan PRF – 1,359 ha
- 8) Terenas Tambahan PRF – 381 ha

A map of the Kedah State FMU showing the locations of the PRFs is shown in Attachment1

2.4 Date First Certified

9 June 2010

2.5 Location of the FMU

The FMU is located between 6° 14' 48" N, 101° 19' 59" E and 4° 33' 0" N, 102° 39' 56" E.

2.6 Forest Management System

The FMU had followed the principles of sustainable forest management (SFM) and the requirements of the Licence Agreement of the State government. A draft Forest Management Plan (FMP) 2016 to 2025 was presented during this audit.

2.7 Annual Allowable Cut/Annual Harvest under the Forest Management Plan

Under the Tenth Malaysia Plan RMK10 (2011-2015), the annual allowable cut (AAC) for the FMU had been set at 2,340 ha. During this first surveillance audit, the size of the FMU is 334,983 ha.

2.8 Environmental and Socioeconomic Context

Macro-level environmental impact audit (MEIA) had been completed in 2007 appropriate to the scale, intensity of forest management and the uniqueness of the affected resources and had adequately been integrated into the management systems. Consideration had also been given during the planning and harvesting stages whereby high elevation areas (1,000 m or higher), steep slopes (>40 degrees), riparian buffers had been identified and protected. High Conservation Value Forest (HCVF) within the FMU, had also been identified, demarcated, mapped and systematically protected. The report also contained a list of endangered, rare and threatened (ERT) species found in the FMU. Measures to mitigate impact of forestry operations on ERT were also mentioned in the draft new Forest Management Plan 2016-2025.

Aboriginal lands and resources, which are located outside the PRF, were being controlled by the Orang Asli and the Department of Orang Asli Development or *Jabatan Kemajuan Orang Asli* (JAKOA). The customary rights of the Orang Asli were respected in forest management planning and implementation, as verified during this audit, there was no land claims on certified PRF areas. KSF had practiced to carry out impact assessments (social, environmental, economic) of the surrounding areas prior to, during and after harvesting and in the PRFs adjacent to local and indigenous communities and actions were taken to prevent or mitigate adverse impacts.

3.0 AUDIT PROCESS

3.1 Audit Dates

7-10 November 2016 (12 man-days)

3.2 Audit Team

Mohd Razman bin Salim (Lead Auditor, Forester)
Khairul Najwan bin Ahmad Jahari (Auditor, Forester)
Dr. Mohd Basri bin Hamzah (Auditor, Forester)
Dr Mohd Nazre Saleh (Trainee Auditor, Botanist)

The details on the experiences and qualifications of the audit team members are as in **Attachment 2**.

3.3 Standard Used

Malaysian Criteria and Indicators for Forest Management Certification (Natural Forest) [MC&I (Natural Forest)] using the verifiers stipulated for Peninsular Malaysia.

3.4 Stakeholder Consultations

A one-month stakeholder consultation was conducted in October 2016 to solicit feedback from stakeholders on the compliance of the Kedah FMU against the requirements of the MC&I(Natural Forest). The comments by the stakeholders and responses by the audit team are shown in **Attachment 3**.

3.5 Audit Process

The audit was conducted primarily to evaluate the level of continued compliance of the Kedah FMU's current documentation and field practices in forest management with the standard of performances (SOPs) listed in the MC&I(Natural Forest), using the verifiers stipulated for Peninsular Malaysia.

For each Indicator, the auditors had conducted either a documentation review, consultation with the relevant personnel of the FMU, local community or stakeholders or field audit or a combination of these methods. Depending on the compliance with the verifiers for a particular indicator, the auditors then decided on the degree of the FMU's overall compliance with the indicator and decided whether or not to issue a major or minor NCR or an OFI which is defined as follows:

- (i) a major NCR is a non-compliance with the requirements of the MC&I(Natural Forest);
- (ii) a minor NCR is a deviation or a lapse in complying with the requirements of the MC&I (Natural Forest); and
- (iii) an OFI is a situation where the auditor has noted an area of concern on the capability of the forest management system to achieve conformance to the requirements of the MC&I (Natural Forest) but without sufficient objective evidence to support a non-conformance.

Consultations were held with the Orang Asli community representative, En. Razali Kulim, the Tok Batin or Village Head of the Kaum Konsiu and Kaum Kertak from Ulu Legong which is located outside the Kedah PRF; the JAKOA officer (*Pejabat Kemajuan Orang Asli*) for Daerah Hulu Perak and Baling); FMU contractors; and also the officers and uniformed field staff of the KSFD.

The coverage of the first surveillance audit is shown in the Audit Plan in **Attachment 4**.

The KSFD had sent a corrective action plan to the audit team to address the major and minor NCRs which the audit team had reviewed and accepted. The audit team had first prepared an interim surveillance audit report and had sent it to the KSFD for comment. A final surveillance audit report which had incorporated the comments received from the KSFD was then prepared.

4.0 SUMMARY OF AUDIT FINDINGS

Based on the findings of this first surveillance audit, it was found that the KSFD had continued to manage the Kedah FMU in compliance with the requirements of the MC&I(Natural Forest). This first surveillance audit had resulted in the issuance of one (1) major and six (6) minor NCRs and zero (0) OFIs. The details on the NCRs/OFIs raised are shown in **Attachment 5**.

The audit team had reviewed, accepted and verified the corrective actions taken by the KSFD to address the one (1) major NCR raised during this first surveillance audit. The audit team was satisfied that the corrective action had been effectively implemented and had therefore closed out the major NCR. The audit team had also reviewed and accepted the KSFD's proposed corrective actions to address the six (6) minor NCRs. However, these corrective actions shall be verified by the audit team during the next audit.

The audit team had also verified on the corrective actions taken by the KSFD to address the one Major and two Minor NCRs raised during the previous audit. The response made by the audit team leader on the respective corrective actions taken and on the final status of the NCRs are as in **Attachment 6**.

On indigenous peoples' rights, there were mechanisms in place to resolve disputes over tenure and use rights through meetings held with the Department of Orang Asli Development or *Jabatan Kemajuan Orang Asli (JAKOA)*. It was observed that there was no recorded civil court case pertaining to legal or customary tenure or use rights filed against the KSFD.

With regard to Criterion 6.10, there was no new conversion of the PRF to forest plantations or other non-forest land uses during the intervening period since the last audit. The PRF in the Kedah FMU has remain unchanged at 334,983 ha since the recertification audit in August 2015.

As the major NCR raised during this first surveillance audit had been closed out, the audit team had therefore recommended that the Certificate for Forest Management awarded to the Kedah FMU be maintained.

The summary on the findings of the first surveillance audit on the KFMU against the requirements of the MC&I(Natural Forest) are as follows:

Principle	Strengths	Weaknesses
<p>Principle 1 Compliance With Laws and Principles</p>	<p>All relevant national and local laws and regulations and policies related to forest management were up-dated and available. Forest managers were aware of the regulations and forest violations, including follow-up actions which were recorded.</p> <p>Current list of all legally prescribed fees, royalties, taxes, and other charges was sighted. Records of payment, including on royalty, premium and deposit, were kept and the receipts had been verified.</p> <p>The forest managers were aware of all the binding international agreements and their relevance to forest management. The documents were sighted at the KSFD head office.</p> <p>There was no documented conflict between the Principles and Criteria with laws and regulations as verified by the head office of the FDPM. The forest managers demonstrated willingness to participate in resolution of such conflicts if they were to arise.</p> <p>The state FMU is legally protected by the provisions in the National Forestry Act 1984 Section 7 to Section 13 which guided the gazettelement or degazettelement of its area. The FMU is demarcated on the ground, to ensure resource safety, with well-defined compartment boundaries regularly verified during audit. The FMU conducted various monitoring activities, some integrated with other relevant agencies, to check and control forest encroachment. Records for 2016 were verified in the audit. Some cases were referred to the police for legal action.</p> <p>Policies and statements of commitment to manage forest resources on a sustainable basis are clearly stated in the National Forestry Policy 1984 which had been adopted by the KSFD and incorporated in its mission and vision statements of the draft new Forest Management Plan 2016-2025. Interviews with KSFD officers together with documented records, revealed policies/statements of commitment to</p>	<p>There were no negative findings.</p>

Principle	Strengths	Weaknesses
	<p>good management practices which are consistent with the principles and criteria of the MC&I(Natural Forest). This had also been communicated throughout the organisation and to the contractors.</p>	
<p>Principle 2 Tenure and Use Rights and Responsibilities</p>	<p>Copies of the gazette records of FMU areas were available as referred to the state-level <i>Warta Kerajaan Negeri Kedah</i> (Register of Reserves). There was no change in FMU area of 334,983 ha within the audit period. Legal use rights of logging contractors in the PRF were clearly stated in concession agreements, forest harvesting licenses, entry permits, road permits and other permits issued by the KSFD. There were no recorded claims by local communities on FMU land during the audit period. The KSFD has instituted relevant mechanism to resolve any such claim if necessary.</p> <p>Relevant documentations of legal or customary tenure or use rights of local communities (e.g. the National Forestry Act, 1984, Aboriginal Peoples Act, 1954 and United Nations Declaration on Rights of Indigenous Peoples, 2007) were available.</p> <p>The Orang Asli community interviewed affirmed that the forest manager recognized the community customary tenure and use rights. They were consulted every time logging operations were to commence in nearby compartments.</p> <p>Mechanisms to resolve disputes over tenure and use rights were in place at various levels. Relevant transactions were documented such as in minutes of the responsible committee (<i>Jawatankuasa Tanah Negeri Kedah Darul Aman</i>).</p>	<p>There were no negative findings.</p>
<p>Principle 3 Indigenous People's Rights</p>	<p>The Aboriginal Peoples Act, 1954 (Sections 2, 3, 6, 7, 8, 10, 11, 12 and 19) which addresses customary rights of indigenous peoples' (Orang Asli) lands were available.</p> <p>In general, the customary rights of the Orang Asli within PRFs, were respected in forest management planning and</p>	<p>There were no negative findings.</p>

Principle	Strengths	Weaknesses
	<p>implementation. The community was permitted to use forest resources, in particular non-timber resources, for their subsistence needs.</p> <p>Procedures to identify significant sites of Orang Asli community within the PRFs were documented and made available. Such sites were protected by the management although the community resides outside PRF boundary.</p> <p>Mechanisms to resolve disputes over tenure and use rights were in place at various levels. Disputes related to tenure and use rights were brought to the attention of the —“<i>Jawatankuasa Tanah Negeri Kedah Darul Aman</i>” in which the Kedah State Director of Forest is a member. A perusal of the minutes of the meetings showed that issues raised were discussed and resolved.—In land tenure and use rights related to the Orang Asli meetings were also held between the Kedah SFD and the “<i>Jabatan Kemajuan Orang Asli</i>” or JAKOA (Department of Orang Asli Development). There is in addition a complaint form, <i>Borang Maklumat Aduan Pelanggan</i> (Customers’ Complaint Form) developed by Peninsular Malaysia FD and made readily available to the public. Members of the public with complaints could use this form to submit their complaints to the FD</p> <p>Orang Asli community affirmed that their traditional forest-related knowledge and practices were not used by the FMU in the forest management system. The KSFD has established a mechanism for fair and equitable compensation on traditional knowledge, entitled ‘<i>Compensation Mechanism For The Utilisation of Traditional Knowledge and Practices of Orang Asli</i>’.</p>	
<p>Principle 4 Community Relations and Workers’ Rights</p>	<p>Department workers and staff were given sufficient training in facilities such as those located in Jeniang Forest Range and Gurun Forest Nursery.</p> <p>The department also gave preference to the local community for employment. Local Malays for example, were employed by logging contractors in Ulu Muda PRF.</p>	<p>There were no negative findings.</p>

Principle	Strengths	Weaknesses
	<p>Field workers were aware of applicable laws on occupational safety and health including the need for the use of PPE during operation. They were regularly briefed on various aspects of forest management including safety.</p> <p>Field inspection in Ulu Muda showed that proper safety procedures were followed and related safety equipment displayed was well maintained.</p> <p>Use and maintenance records for equipment, including chainsaws and bulldozers, were kept updated and were sighted.</p> <p>KSFD employees were members of CUEPACS, the public sector employees union and of the Malay Forest Officers Union of Peninsular Malaysia. Contract workers however were not members of any union.</p> <p>Department employees have the right to collective bargaining through their unions. The KSFD resolves grievances and conflict among its staff members through the designated mechanism, the <i>Majlis Bersama Jabatan</i> (MBJ). Contract workers of logging contractors on the other hand were covered by the Employment Act and their grievances were channelled to their employers.</p> <p>Various laws and regulations were available to assure the right of workers to benefits and protection. Employees of SFD for example were assured with contribution to a government pension fund (EPF).</p> <p>Appropriate procedures to address grievances by KSFD staff were available in accordance with various Acts. These were documented and were sighted. Forest managers had carried out social impact assessments of logging operations in Ulu Muda PRF as provisioned in department procedures. Results of the assessments were incorporated in the forest planning stage (prior to undertaking logging operation).</p> <p>Legal provisions exist within national legal frameworks to prevent loss or damage affecting local communities. Article 8 and Article 13 of the Federal</p>	

Principle	Strengths	Weaknesses
	<p>Constitution of Malaysia were specifically relevant.</p> <p>Further, the Aboriginal Peoples Act 1954, Article 134 requires that all forestry operations to observe all the legal requirements.</p>	
<p>Principle 5 Benefits From the Forest</p>	<p>Investments and reinvestments were made in forest management, including aspects of forest administration, research, human resource development, protection, economy, conservation, environment and social. The 2016 budget was RM 6.07 mil. with 26% spent up to Q3 over a range of activity sectors. Department income up to Q3 2016 was RM 26 mil. or 53% of the projected amount. The wood-based industry recorded 177 registered mills in 2016 with 33 mills pending registration. Provisions and management prescriptions were made to maintain, restore or enhance the productive capacity and ecological integrity of the FMU to ensure its economic viability mainly through the adoption of sustainable forest management (SFM) principles.</p> <p>Forest management practices in the FMU encouraged the optimal use of forest resources mainly through production of non-timber forest products (NTFP) and broadening the wood-based industry sector. Important NTFP products were the supply of water and provision for forest recreation. Ecosystem functions were also important (resource protection and conservation, environmental safety) but are presently of intangible values. Diversification on wood-based products from timber sourced from the FMU has been mentioned above in Criterion 5.1.1 RIL guidelines for reduced / low impact logging (Guidelines for Reduced Impact Logging in Peninsular Malaysia, 2003) were implemented to minimise damage and wastage to residual stand. RIL procedures (including tree tagging, directional felling and protection trees) were seen implemented in harvesting operation in Ulu Muda PRF.</p> <p>KSFD staffs were given regular training on RIL techniques for reduced-impact logging. The 2016 training programme</p>	<p>There were no negative findings.</p>

Principle	Strengths	Weaknesses
	<p>was sighted.</p> <p>Forest management has no restriction for harvesting NTFP products such as rattan and bamboo, particularly by local community enterprises. However, there was no application on harvesting of such products throughout 2016.</p> <p>Guidelines and/or procedures to identify and demarcate sensitive areas for the protection of soil and water, watercourses and wetlands (FMP, National Forestry Act 1984 (Section 10)) were implemented in the FMU. Such measures (e.g. soil conservation/protection above 1000m and >40 degrees slope; buffer strips on waterways; RIL compliance in harvesting) were observed in Ulu Muda which contributes to maintaining/enhancing forest values and resources.</p> <p>Harvest was ensured not to exceed the estimated regrowth of the residual stand as calculated from permanent sample plot (PSP) data within a pre-defined cutting cycle.</p> <p>Allegation by NGO Aidenvironment Asia of overharvesting (by 283% AAC in 2009-2014) by KSFD was found to be erroneous by a verification team from SIRIM QAS. The error was mainly due to large difference in average yield from primary virgin stands (82.2 m³/ha) and second-entry logged-over stands (68 m³/ha). Estimation of AAC for 2011-2014 was 11,400 ha or an average of 2,850 ha per year. Actual harvested area over the period, as verified, was 10,934 ha which was slightly (by 4%) below the projected figure.</p>	
<p>Principle 6 Environmental Impact</p>	<p>The state-wide area of the Kedah FMU was covered in a macro-level environmental impact assessment (MEIA) conducted in 2007. Recommendations were later incorporated in the mid-term review of the FMP and made available at the KSFD headquarters office and other forest districts.</p> <p>The MEIA covered rare and threatened species of flora and fauna in the FMU and suggested the need for biological</p>	

Principle	Strengths	Weaknesses
	<p>corridors for greater wildlife movement. The Dipterocarp flora revealed 11 species, native to the FMU, as endangered out of 60 for the whole country. The FMP also listed endemic and rare flora in the FMU including a list of protected flora.</p> <p>Guidelines exist and were implemented for identifying and protecting ERT species including features of special biological interest. Some of the trees were tagged and maintained as mother and protection trees.</p> <p>Guidelines also exist and were made available or establishing conservation and protection areas, in accordance with existing forest ecosystems. The FMU has 12 categories of forest uses for production and conservation purposes.</p> <p>Cooperation exists and documented between forest managers, conservation organizations and regulatory authorities in implementing conservation and management activities. Department of Environment (DOE) was invited to pre-operation briefing.</p> <p>Activities such as illegal hunting, fishing and collecting were controlled and inappropriate activities prevented in the FMU. The KSFD listed various offences recorded within and adjacent to the FMU for 2016. Recent records of forest offences were sighted.</p> <p>Local communities were aware of the existence of ERT species in the FMU. Information relating to their protection and conservation were disseminated during pre-operation briefings.</p> <p>Allegations/queries made by the NGO Aidenvironment Asia, and corresponding response by SIRIM verification audit team were as follows:</p> <p>1. <i>Large-scale logging in Ulu Muda was conducted in catchment area, with implication on sustainability of water supply, and that plantation forests, the objective of the conversion logging, was excluded from the scope of certification.</i> Verification audit confirmed the absence of logging in the referred compartment in Ulu Muda PRF (Compartment 106).</p>	<p>Verification audit conducted in Chebar Besar PRF (Compartment 1B) and Perangin PRF (Compartment 40 and Compartment 50), in response to issues highlighted by the NGO Aidenvironment Asia, confirm that conversion of the PRF areas into forest plantation did not comply with Indicator 6.10.1. The surveillance audit</p>

Principle	Strengths	Weaknesses
	<p>Further, prior approval had been given to KSFD for the conversion of natural stands to forest plantation of part of Pedu PRF (in Compartment 48 and Compartment 50) based on consultations between KSFD and the relevant authorities in 2011 and 2012.</p> <p>2: <i>The KSFD undertook logging in watershed of Ulu Muda and whether such operation was allowed.</i> SIRIM verification audit confirmed that Water Catchment Forest falls under the "Protection Forest" and no harvesting is allowed. The statistics from Aidenvironment indicating that Kedah FMU has over 120,000 ha of Water Catchment Forest, is <u>inaccurate</u> because effectively from 23rd March 2014, the gazetted Water Catchment Forest in Kedah stood at 99,023 ha. The claim by Aidenvironment that the whole of Ulu Muda FR being Water Catchment Forests was not correct. The Ulu Muda FR has an area of 106,418 ha and is classed into Production Forest (88,232 ha) and Protection Forest (18,186 ha). Logging in Ulu Muda FR was confined to the production forest.</p> <p>Guidelines to assess post-harvest natural regeneration and their promotion in the FMU, was available and documented in the standard Forestry Manual (2003).</p> <p>Guidelines for the conservation of genetic, species and ecosystem diversity in the FMU was also available as documented in various documents (Forest Management Plan, National Policy on Biological Diversity 1998, Forestry Manual 2003 and Guidelines for the Establishment and Maintenance of Virgin Jungle Reserves, 1987).</p> <p>Harvesting was designed in the FMU taking into consideration the need for the conservation of biological corridors and buffer zones for features of special biological interest for wildlife. Buffer zones along streams were clearly demarcated out in logging map of the Ulu Muda PRF. In addition, the KSFD were also an active participant in the state committee overseeing the Central Forest Spine (CFS) project to provide biological corridors for unrestricted</p>	<p>team accordingly raised a Major NCR MRS 01/2016 for both the areas as stated.</p>

Principle	Strengths	Weaknesses
	<p>movement of wildlife.</p> <p>Representative areas of existing forest ecosystems, appropriate to the scale and intensity of forest management operations as identified and selected under Indicator 6.2.2, were demarcated and protected in their natural state. Such areas were protected and managed. The full list of virgin jungle reserves (VJR), for example, was documented in the FMP. These were periodically inventoried and monitored. Water catchment forests, which comprised the next largest designated use of the FMU, were strictly protected and monitored. The forests were separately managed for the production of water.</p> <p>Harvesting procedures to protect the soil from compaction by harvesting machinery and erosion during harvesting operations were available and implemented following relevant guidelines (Guidelines for Reduced Impact Logging in Peninsular Malaysia, 2003, <i>Garis Panduan Jalan Hutan, 2010</i> (Guidelines for Forest Roads, 2010) and the Forest Harvesting Plan).</p> <p>The practice of reduced/low impact logging (RIL) was strictly observed in order to minimize damage to the environment in the FMU. Workers were informed through pre-operation briefings. Field verification in Ulu Muda showed that roading guidelines (<i>Garis Panduan Jalan Hutan, 2010 (Pindaan 2013)</i>) were adequately implemented including the demarcation and establishment of buffer zones along waterways.</p> <p>Regarding the Aidenvironment Asia query on downstream buffering of the Sg. Muda, which feeds into the reservoir lake of Tasik Muda, and potential impact of logging road in adjacent compartment, SIRIM audit team verified that buffer zone had been established alongside the river to the standard 5m strip where the river width was 4m. The adjacent compartment boundary of the Ulu Muda PRF (Compartment 105A) was found located approximately 160m from the buffers (Lat: N6.078^o, Long: E101.033^o). The FMU had used pesticides for nursery operation in accordance with procedures on chemical handling and consistent with the pesticides act.</p>	<p>Field audit in Compartment 41A, Ulu Muda PRF recorded that two skid trails inspected (LP 28/1 and LP 34/1) were constructed prior to the approval of the KSFD. A Minor NCR, MBH – 01/2016, for indicator 6.5.2 was thus raised.</p> <p>Field audit in Ulu Muda PRF (Compartment 41A and Compartment 69A) had detected unmarked buffer zones beyond selected skid trails (LP 34/1 and LP 8/4, respectively). A Minor NCR KN 01/2016 for Indicator 6.5.4 was raised for this non-compliance.</p>

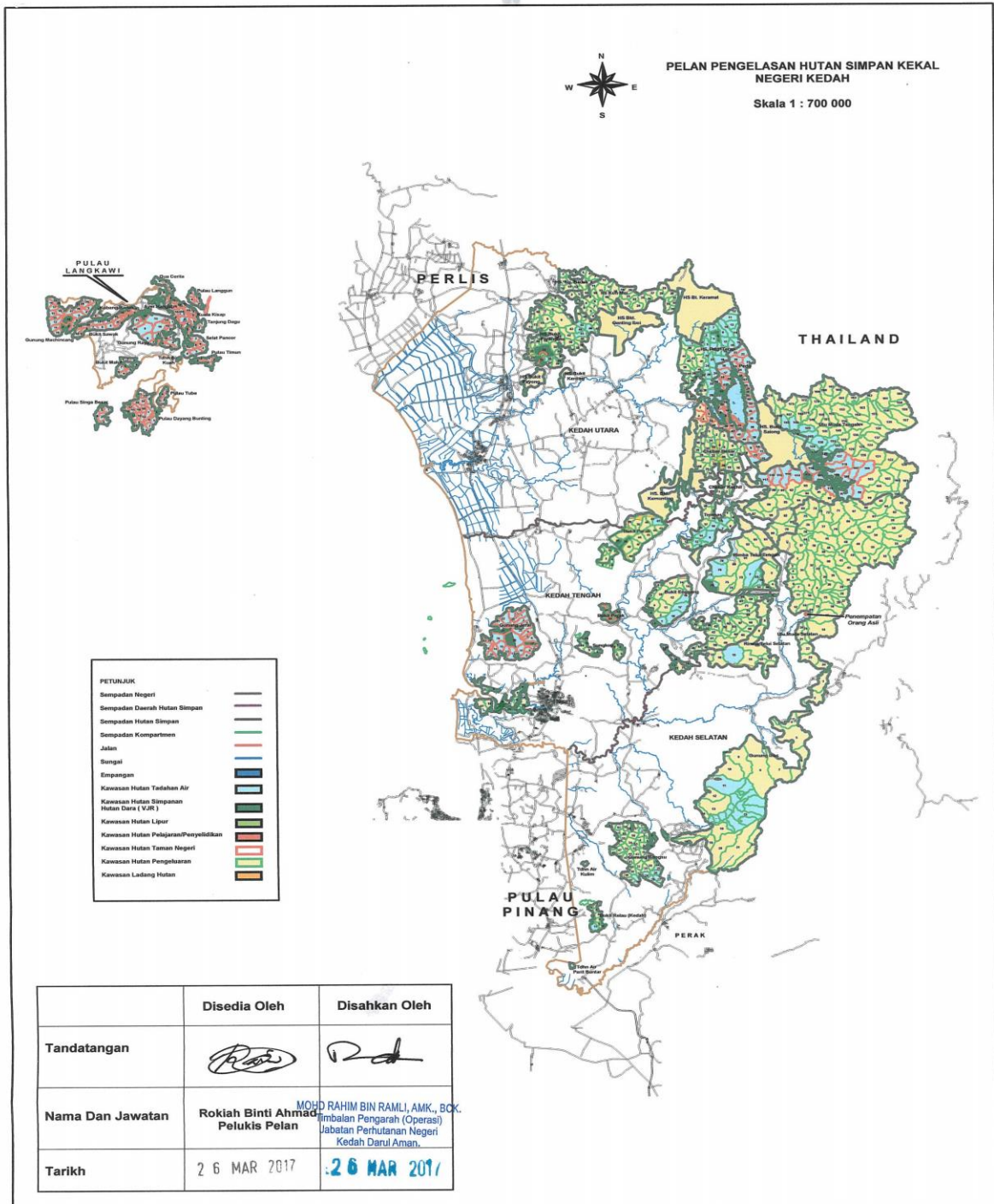
Principle	Strengths	Weaknesses
	<p>Nursery operations, stock, storage and handling of poisons and fertilizers were found satisfactory and in accordance with SOP. Workers were given training on chemical handling by the department.</p> <p>KSFD had established SOPs on waste disposal and re-cycling of liquid and solid non-organic wastes and records of disposal of containers, liquid and solid non-organic wastes, including fuel and oil for Kedah FMU. Appropriate waste disposal procedures were verified during field inspection in Ulu Muda.</p> <p>To date, biological control agents have not been used in the FMU management. Only indigenous forest species from the locality, as a matter of policy, were used in all reforestations of natural stands in the FMU.</p> <p>Allocation of PRF areas for conversion into forest plantation by the KSFD was conducted according with legal requirements (minutes of meeting of the plantation development committee - <i>Jawatankuasa Pembangunan Ladang Hutan Bil. 1/2015</i> dated 22 October 2015). The designated area in Perangin PRF was first degazetted from the reserve by the Kedah Land and Mines Office (<i>Pejabat Tanah dan Galian</i>) and were owned by a private plantation company.</p>	
<p>Principle 7 Management Plan</p>	<p>A draft of the new FMP (2016-2025) was made available and sighted. The audit team however noted the exclusion of some primary elements from the draft.</p> <p>New information on the FMU continued to be collated and the relevant ones incorporated in the FMU revision to enhance further management capacity. Recent information was sourced from reports of two scientific expeditions conducted on the FMU: namely, the expedition on the Merbok mangrove forest (<i>Ekspedisi Saintifik Kepelbagaian Flora Hutan Paya Laut Merbok</i>) on 22 September 2014, and on the forest areas of Gunung Raya in Langkawi, on 23-25 October 2015.</p> <p>The KSFD staff were mostly trained at the training centre in Jeniang Range</p>	<p>The primary elements in draft of Forest Management Plan (2016-2025) on Management objectives (page 6), description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands (page 5 and 50) and plans for the identification and protection of rare, threatened and endangered species (page 31) were made available. However the other important primary elements that were not enough in the draft of the FMP are listed below:</p> <ol style="list-style-type: none"> a. Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories

Principle	Strengths	Weaknesses
	<p>(Pusat Latihan Perhutanan Jeniang). The 2016 programme sighted (<i>Senarai Kursus yang dianjurkan oleh Jabatan Perhutanan Negeri Kedah Tahun 2016</i>) offered a comprehensive coverage in management training. The staff training records and certificates issued were also made available.</p> <p>The FMP summary was made public on the department official website – http://www.kedforestry.gov.my/en/maklumat-pengenalan/mc-i/ringkasan-rancangan-pengurusan-hutan</p>	<p>b. Rationale for rate of annual harvest and species selection c. Provisions for monitoring of forest growth and dynamics d. Environmental safeguards based on environmental assessments h) Maps describing the forest resource base including protected areas, planned management activities and land ownership (not completed) i) Description and justification of harvesting techniques and equipment to be used</p> <p>For this oversight a Minor NCR KN 02/2016 was raised.</p> <p>The public summary of the FMP on the department website (http://www.kedforestry.gov.my/en/maklumat-pengenalan/mc-i/ringkasan-rancangan-pengurusan-hutan) was not up-to-date. Therefore, a Minor NCR KN 03/2016 was raised.</p>
<p>Principle 8 Monitoring and Assessment</p>	<p>The KSFD has complied with the regulatory monitoring procedures in accordance with relevant federal and state guidelines of the Forestry Departments and other relevant agencies.</p> <p>The forest managers have identified and implemented appropriate monitoring procedures, in accordance with the scale and intensity of the forest management operations, for assessing social, ecological, environmental and economic impacts. Active logging areas were routinely monitored and regular report submitted. Recent monitoring reports covering Ulu Muda PRF, Bkt. Perangin PRF and Rimba Teloi PRF were verified.</p> <p>The KSFD has gathered the relevant information, appropriate to the scale and intensity of the forest management operations, needed to monitor the items (a) to (e) listed in Criterion 8.2.</p> <p>Records of log movement from removal passes at the Pokok Sena and Weng Forest Checking Station were found to be in sync with tagging records.</p> <p>The relevant documents i.e. exit pass (<i>Pas bagi Memindahkan Hasil Hutan</i>),</p>	<p>Recent audit found that important information on growth, regeneration, flora and fauna were not included in the draft new FMP (2016-2025). For this oversight a Minor NCR NS 01/2016 was raised.</p> <p>Missing information from the latest monitoring indicators included (c) composition and observed changes in the flora and fauna; which was based on data on 2004. While, (b) data on growth rate, regeneration and condition of the forest were not included. Thus, a Minor NCR 02/2016 was raised.</p>

Principle	Strengths	Weaknesses
	<p>extraction control book (<i>Buku Kawalan Pengeluaran Kayu</i>), and report on timber tagging (<i>Laporan Ringkasan Aktiviti Menanda Pokok Secara 'Timber Tagging' dan Taksiran Isipadu Pokok Berdiri</i>) for Compartment 69A Ulu Muda PRF (KS 01-24-2016) and Compartment 36B, Bukit Perangin PRF (KU 01-08-2016)) and licenses were kept in order.</p> <p>Draft of the new FMP (2016-2025) contain results and findings of the monitoring activities stated in chapter 7, <i>Penyelidikan dan pembangunan</i> (R&D) (page 141).</p> <p>The latest summary on results of monitoring indicators, including those listed in Criterion 8.2, was found outdated.</p>	
<p>Principle 9 Maintenance of High Conservation Values</p>	<p>HCVF stands of Tualang trees (<i>Koompassia excelsa</i>, Compartment 36, Pedu PRF) were established earlier and new areas for Slipper Orchid or <i>Orkid Selipar</i> (<i>Paphiopedilum rothschildianum</i>) at Compartment 23, Gunung Jerai PRF; a mangrove hybrid tree in Compartment 4, Kisap PRF, Langkawi; and mangrove Date Palm or <i>Kurma laut</i> (<i>Pheonix paludosa</i>) in Compartment 4, Merbok PRF) had been identified and proposed to KSFD. Record of Stakeholder consultation r in the HCVF identification process was sighted.</p> <p>In response to allegation by Aidenvironment Asia that KSFD had retracted a large area of PRF from HCVF function, SIRIM conducted a verification audit in the Pedu PRF forest concerned, covering Compartments 1, 61 and 62. No HCVF elements were found. The remaining Compartment 41 was already classified as water catchment (a HCVF feature).</p> <p>The KSFD consulted 18 stakeholders in the recent development of two HCVF sites in the FMU. A workshop was also held on 11 October 2016 regarding the new sites.</p> <p>Interviews with forest managers confirmed their awareness of the need to incorporate HCVF areas in operation activities. The draft of new Forest Management Plan (2016-2025) does</p>	<p>There were no negative findings.</p>

Principle	Strengths	Weaknesses
	<p>incorporate the HCVFs in chapter 5.5.7, High Conservation Value Forest (HCVF) (page 32)</p> <p>The draft FMP clearly stated the requirement for identified HCVF areas to be specifically managed and their attributes maintained and where necessary enhanced. The KSFD closely adhered to the Guidelines for the Establishment and Management of Areas with High Conservation Value (HCVF) in Permanent Reserved Forest (PRF) in Peninsular Malaysia).</p> <p>These measures on HCVFs, as contained in the FMP, can be publicly accessed at; http://www.kedforestry.gov.my/my/maklumat-pengenalan/mc-i/kawasan-hutan-pemeliharaan-tinggi.html</p> <p>The HCVF guidelines prescribed for annual monitoring to assess the effectiveness of protection and management of such sites. HCVF activities including records on new areas were also required to be incorporated in the new FMP. The draft of new Forest Management Plan (2016-2025) also incorporated HCVFs (in chapter 5.5.7).</p>	

Map of Kedah FMU



Experiences and Qualifications of Audit Team Members

Assessment Team	Role/Area of MC&I Requirement	Qualifications and Experience
<p align="center">Mohd Razman Salim</p>	<p align="center">Assessment Team Leader / Forester</p>	<p>Academic Qualification: B.Sc of Forestry (Forest Production), University Putra Malaysia.</p> <p>Work Experience: Five years experienced as Research Officer at the Forest Research Institute Malaysia (FRIM) since 2007 in a various area such as ecological research for lowland and hill dipterocarp forest, Geographic Information Systems, forest inventories, forest harvesting and forest management system (SMS). Participate in organizing committee member, division level activities and projects. Coordinate and collaborate a long term ecological plot and inventory data about 25 years at the Pasoh, Negeri Sembilan with Negeri Sembilan Forestry Department, universities (local & international) and NGOs. Published and presented research findings at the seminars and conferences. Currently as Auditor at the Food, Agriculture and Forestry Section (FAF), SIRIM QAS International Sdn Bhd, since 2013. Involved in conducting assessments on forest management certification [MC&I (Natural Forest)] & [MC&I (Plantations)], MYNI of RSPO P&C and other management systems on ISO 9001, 14001 and OHSAS 18001</p> <p>Training / Research Areas:</p> <p>Attended and passed in the following training programmes:</p> <ul style="list-style-type: none"> • Auditor Training Course on Malaysian Criteria and Indicators for Forest Management Certification [MC&I (Natural Forest)] & [MC&I (Plantations)] organized by MTCC, 1-4 December 2013. • EMS 14001: 2004 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 18-22 March 2013. • OHSAS 18001: 2007 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 11-15 March 2013. • QMS 9001: 2008 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 4-8 March 2013.
<p align="center">Khairul Najwan Ahmad Jahari</p>	<p align="center">Assessor</p>	<p>Academic Qualification: B.Sc of Forestry (Forest Management), Universiti Putra Malaysia.</p> <p>Work Experience: Appointed as contract Research Officer in the Natural Forest Division, Forest Research Institute of Malaysia (FRIM), since 2001. Conduct and coordinate a research on 8th Malaysian Plan Project. Produce technical reports, meeting, seminar and conferences reports as well as quarterly physical and financial reports. Coordinate and participate field works, multi-level meetings, seminars, conferences and workshops. Spent some time in other existing FRIM projects (inter divisional) as an organizing committee member, division level activities and</p>

		<p>projects. Currently as Auditor at the Food, Agriculture and Forestry Section (FAF), SIRIM QAS International, since 2009. Involved in conducting assessments on forest management certification (MC&I and FSC P&C), MYNI of RSPO P&C and other management system on ISO 9001, 14001 and OHSA 1800</p> <p>Training / Research Areas:</p> <p>Attended and passed in the following training programmes:</p> <ul style="list-style-type: none"> • Auditor Training Course on Malaysian Criteria and Indicators for Forest Management Certification [MC&I (2002)] organized by MTCC, 30 March - 2 April 2009. • EMS 14001: 2004 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 2-6 March 2009. • OHSAS 18001: 2007 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 23-27 Feb 2009. • QMS 9001: 2008 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 16 – 21 Feb 2009.
<p>Prof. Mohd Basri Hamzah</p>	<p>Assessor</p>	<p>Academic Qualification: M.Sc (Australian National University), UPM sponsorship. B.Sc (Forestry) (Australian National University), Colombo Plan Scholar. B.Sc (Botany) (University of Western Australia), Colombo Plan Scholar.</p> <p>Work Experience: Tiara Nusa Sdn Bhd (No.807309-P): Director, 2008-2016. UPM (University Putra Malaysia): INTROP (Institute of Tropical Forestry and Forest Products) – Consultancy Associate 2012-present; Consultancy Fellow, 2008-2011; Professorial Researcher (Penyelidik Khas), 2005-2008; Faculty of Forestry - Associate Professor, 1984 – 2001; Lecturer, 1976 – 1984; Tutor, 1973-1976; Deputy Dean, 1985 – 1986; Head, Department of Forest Production, 1983 – 1984; Head, Department of Forestry (Sarawak Campus) 1981 – 1982; Course Co-ordinator (Sarawak Campus) 1979-82. FDPM (Forestry Department Peninsular Malaysia): ITTO (International Tropical Timber Organisation), Consultant 2001-2004; ANU (Australian National University): Department of Forestry, Demonstrator, 1975-76</p> <p>Training / Research Areas: Main research area: Regeneration and rehabilitation problems of Malaysian Rainforest; with emphasis on Hill Dipterocarp Forests: Refinements of the Selective Management System: Forest Plantation Establishment</p> <p>Specialisation: Silviculture, Forest Ecology, Agroforestry. Latest research: Mapping and Assessment of Present and Future Potential Carbon Storage in Malaysian Forest: Soil Carbon, Woody Debris and Vegetation. RUGs, UPM, 2009-2011</p> <p><u>Other academic/university experience:</u> Faculty Research supervision of postgraduate and undergraduate students, up to 2001; Chairman, Faculty Curriculum Committee, 1985; Head, Faculty Research Thrust in</p>

		<p>Hill Dipterocarp Forest, 1983-88; Chairman, Faculty Student Affairs Committee, 1984-85.</p> <p>UPM Panel Chairman/Member for Postgraduate Theses Examination & Viva up to 2001; Chairman, UPM Diploma Curriculum Revision Committee, 1985; Member, UPM Curriculum Comm. 1984-85; College Master (Bangi College), 1984-85.</p>
Dr. Mohd Nazre Saleh	Trainee Auditor / Forester	<p>Academic Qualification: Diploma in Forestry, UPM B. Sc. Conservation Biology & Ecology (UKM) MSc. Botany (UKM) PhD. Botany (Edinburgh)</p> <p>Work Experience: One year as Research Assistant in WWF-Malaysia in the year from 1999-2000. Become an academic staff in Faculty of Forestry, Universiti Putra Malaysia (UPM), Serdang Selangor from 2000 to present (16 years), starting as a tutor promoted as Senior Lecturer in 2009, and currently as an Associate Professor since 2013. Main responsibility is teaching the undergraduates in the subject of Dendrology, Forest Ecology and Ethnobotany, and Forest Dynamics for postgraduate students. Main research subjects are botany, forest ecology and, forest conservation and management done by supervising both undergraduate and postgraduate (Master/PhD) students funded by local and international grants. Appointed as Head of Department since 2010 for Department of Forest Production (2010-2012) and Department of Forest Management (2013-present). Has sat in many committees for university and ministry (national) related to forestry subjects such as Mangrove Conservation, Forest Management, Forest Protection and Forest Plantation. Published more than 50 articles in local and international book, journals, chapters in books, conference proceeding and technical reports. Attended and presented in many workshops, conferences, seminars held at both local and international levels.</p> <p>Training / Research Areas: Attended and pass the following training programmes:</p> <ul style="list-style-type: none"> • Auditor Training Course on MC& I (Natural Forest) and MC&I (Forest Plantation V2) (SIRIM QAS Sdn. Bhd), 9th-10th July 2015. • EMS 14001: 2004 Lead Auditor Course organized by SIRIM Training Services Sdn Bhd, 18th – 22nd July 2016. • Forest Management Certification (FMC) Workshop, SIRIM Bhd, 6th –7th December 2016 • Training on Auditing Techniques (SIRIM QAS Int. Sdn. Bhd), 26th January 2016.

Comments Received from Stakeholders and Responses by Audit Team Leader

No.	Stakeholder	Comments/Issues Raised	Response by Audit Team
	Stakeholder 1	<p>Pemuliharaan tapak geowarisan di kawasan hutan perlu dititikberatkan sebagai satu produk geopelancongan dan pendidikan untuk generasi akan datang. Geowarisan merupakan tapak atau kawasan yang mempunyai fitur geologi dengan ciri-ciri saintifik, pendidikan, kebudayaan atau estetik yang bernilai tinggi. Sebagai contoh, Geopark Langkawi merupakan produk geopelancongan yang kaya dengan kepelbagaian landskap / struktur geologi dan biologi yang boleh dijadikan sebagai sumber rujukan atau pendidikan di masa akan datang.</p> <p>Di kawasan Hutan Simpan Gunung Jerai juga terdapat beberapa geotapak warisan yang mempunyai nilai semulajadi dari segi landskap, struktur geologi, kepelbagaian mineral, flora dan fauna yang perlu dipulihara dan selaras dengan itu boleh diangkat sebagai produk baru geopelancongan.</p> <p>Sebahagian kawasan hutan didapati kaya dengan sumber mineral berharga. Maka setiap permohonan eksplorasi mineral, perlombongan dan pengkuarian hendaklah mendapatkan ulasan daripada Jabatan Mineral dan Geosains Malaysia.</p>	<p>There are four (4) committees who work on Geopark Langkawi:</p> <ol style="list-style-type: none"> Scientific and Conservation of Langkawi <i>Jawatankuasa Penyelarasan</i> Geopark Langkawi Langkawi Geopark Advisory Council Promotion and Development of Geopark Langkawi Committee <p>For Geopark Jerai, there are two (2) committees who involved on conservation of this site:</p> <ol style="list-style-type: none"> National Geoparks Committee Promotion and Development of Geopark Jerai Committee <p>Kedah FMU has directly involved with these six (6) committees including Minerals and Geoscience Department with the target to make Geopark Jerai to be recognized as National Geopark in 2017 as published in Sinar Harian newspaper on 15 March 2017.</p> <p>The FMU is still in process for gazettement of Geopark Jerai as water catchment area under Section 10, National Forestry (Amendment) Act, 1993, which covered an area about 8,439 ha.</p> <p>While Geopark Langkawi has been recognized as the 49th Geopark in the world and 1st in South East Asia by UNESCO in 2007. The conservation programme for Machincang, Kilim and Dayang Bunting Geoforest Park is under management of Scientific and Conservation of Langkawi Committee, Langkawi Development Authority (LADA) with cooperation from National University of Malaysia (UKM).</p> <p>For activities such as mineral exploration, mining, quarry and etc, Forestry Department will issue an official request to one stop centre which is chaired by Department of Lands and Mines (PTG) in order to get any comments from Syarikat Air Darul Aman (SADA), Kedah State Water Resources, Minerals and Geoscience Department Malaysia (JMG), Administration and Diplomatic Officer (PTD), Economic Affairs Unit (UPEN), Department of Irrigation and Drainage (JPS), Malaysian</p>

			<p>Public Works Department (JKR), Department of Environment (JAS), etc.</p> <p>Auditors' Conclusion: Kedah Forestry Department has actively support and implemented national and state program to conserve and manage Geopark in Kedah since 2007. Jerai will soon be gazetted as the next Geopark in Kedah.</p> <p>All certified PRFs in the FMU can be converted to forest plantation or non-forest use. However, any conversion should follow the standard requirements as stated in the Criterion 6.10.</p>
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Surveillance 1 Audit Plan

DAY	TIME	PROGRAM		
		AUDITOR 1 (AUDIT TEAM LEADER) (Razman)	AUDITOR 2 (Najwan & Dr. Nazre)	AUDITOR 3 (Prof Mohd Basri)
Day 0 (6/11/2016)		<ul style="list-style-type: none"> Travel from KLIA to Alor Setar (MAS - MH 1252: 19:20 – 20:10) Briefing by Audit Team Leader on the surveillance 1 audit plan 		
Day 1 (7/10/2016)	9.00 am – 1.00 pm	<ul style="list-style-type: none"> Opening Meeting with representatives of FMU Briefing session by Forest Manager of the FMU on progress of forest activities Evaluation of changes to the management of the FMU Check on progress of planned activities Check on complaints, stakeholder comments and follow-up actions Check on verification for closing NCRs raised during the previous audit Evaluate on procedures for internal audit Evaluate on management review system 		
	2.00 pm – 4.00 pm	<ul style="list-style-type: none"> Documentation and records review Principle 4 – Community Relations and Workers' Right Principle 5 – Benefits from the forest Principle 6 – Environmental Impact 	<ul style="list-style-type: none"> Documentation and records review Principle 7 – Management Plan Principle 8 – Monitoring and Assessment Principle 9 – Maintenance of High Conservation on Value Forests 	<ul style="list-style-type: none"> Documentation and records review Principle 1 – Compliance with Laws and Principles Principle 2 – Tenure and Use Rights and Responsibilities Principle 3 – Indigenous Peoples' Right
	5.30 pm	<ul style="list-style-type: none"> Razman & Prof Basri – Travel to Sg Petani (Kedah Tengah) Najwan & Dr Nazre – Travel to Kulim (Kedah Selatan) 		
Day 2 (8/10/2016)	8.30 am – 5.30 pm	Site visit at active area: <u>Sg. Petani (Kedah Tengah)</u>	Site visit at active area: <u>Kulim (Kedah Selatan)</u>	
		<ul style="list-style-type: none"> Document review at District Office Inspection of active harvesting area - Compt. 71C Ulu Muda PRF Post-F – Compt. 82, Ulu Muda PRF Forest Checking Station - Gulau Interview with forest workers and local communities 	<ul style="list-style-type: none"> Document review at District Office Inspection of active harvesting area – Compt. 41A, Ulu Muda PRF Forest Checking Station - Weng Interview with forest workers and Orang Asli communities from Ulu Legong 	
	5.30 pm	<ul style="list-style-type: none"> All auditors travel to alor Setar 		
Day 3 (9/10/2016)	8.30 am – 5.30pm	Site visit at active area: <u>Kedah Utara & Pulau Langkawi</u>		
		<ul style="list-style-type: none"> Document review at District Office Inspection of active harvesting area – Compt. 36B, Bukit Perangin PRF Boundary inspection of Pulau Dayang Buting PRF Site visit at encroachment area by local communities in Pulau Langkawi 		
	8.30 – 9.30 pm	<ul style="list-style-type: none"> Review of Day 1, 2 & 3 Findings with Auditors 		

Day 4 (10/10/2016)	8.30 am – 1.00 pm	<ul style="list-style-type: none"> • Preparation of audit report and finding
	2.00pm- 3.30pm	<ul style="list-style-type: none"> • Briefing to representatives of FMU on the findings of audit • Closing Meeting and presentation of findings of audit and discussion on follow-up activities • Adjourn Closing Meeting • Travel from Langkawi Airport to KLIA (Malindo Air – OD 2201: 17:30 – 18:35)

Details on NCRs and OFIs Raised During Surveillance 1 Audit and Corrective Actions Taken

Indicator	Specification Major/Minor/OFI	Detail Non-conformances	Corrective Action Taken	Verification by Assessor
Indicator 6.5.2 NCR #: MBH – 01/2016	Minor	<p>Requirement : 6.5.2 Implementation of reduced/low impact logging to minimise damage to the environment.</p> <p>Guidelines for Reduced Impact Logging in Peninsular Malaysia, 2003.</p> <p>Finding : The construction of skid trails inspected in selected harvesting area did not follow the required specification in <i>Guidelines for Reduced Impact Logging in Peninsular Malaysia, 2003</i>.</p> <p>Objective evidence : Construction of skid trail was carried out before approval of forestry department as observed in Compartment 41A, Ulu Muda PRF (LP 28/1 and LP 34/1).</p>	KSFD will conduct a hands-on training on MC&I (Natural Forest) – SOP on construction of skid trail dated 6-8 February 2017 at Pusat Latihan Jeniang to staff and logging contractors. The training was included in the annual training program FY2017.	<p>Auditor has received official letter from Kedah FMU – PHNK 62/2014() dated 8 December 2016, where the FMU has issued a stop work order to the licensed area – PHDKS 25-68 Sj 791 Jld 2 (36) dated 7 December 2016. The licensee also has been directed to do replanting and construct water bars at the skid trail (LP 28/1 and LP 34/1) as mitigation action to prevent soil erosion.</p> <p>Status: The implementation and effectiveness of the corrective action will be verified during next audit.</p>
Indicator 6.5.4 NCR #: KN 01/ 2016	Minor	<p>Requirement : 6.5.4 Availability and implementation of guidelines for conservation of buffer strips along streams and rivers.</p> <p>Guidelines for Reduced Impact Logging in Peninsular Malaysia, 2003. <i>Garis Panduan Jalan Hutan, 2010.</i> (Guidelines for Forest Roads, 2010).</p> <p>Finding: Buffer zones inspected in selected harvesting areas, were found unmarked and thus did not follow the required specification</p> <p>Objective evidence : Stretches of buffer zones with unmarked boundaries were detected in two harvesting</p>	KSFD will conduct a hands-on training on MC&I (Natural Forest) – SOP on buffer zone dated 6-8 February 2017 at Pusat Latihan Jeniang to staff and logging contractors. The training was included in the annual training program FY2017.	<p>Kedah Selatan District Forest Office has directed the Weng Office Ranger to do the remarking/repainting at the buffer zone area at skid trail LP 34/1 (KS 01-26-2015) and LP 8/4 (KS 01-24-2016) at Ulu Muda PRF with official letter (PHDKS 25-68 Sj 791 Jld 2 (24) dated 7 December 2016.</p> <p>Status: The implementation and effectiveness of the corrective action will be verified during next audit.</p>

		<p>areas inspected;</p> <p>(i) Compartment 41A, Ulu Muda PRF, beyond skid trail LP 34/1 and,</p> <p>(ii) Compartment 69A, Ulu Muda PRF, beyond skid trail LP 8/4.</p>		
<p>Indicator 6.10.1</p> <p>NCR #: MRS 01/ 2016</p>	<p>Major</p>	<p>Requirement:</p> <p>Indicator 6.10.1: The forest manager shall ensure that conversion from natural forest to forest plantations or non-forest use:</p> <p>a) Shall not include any High Conservation Value Forest areas; and</p> <p>b) Covers a very limited portion* of the FMU and shall enable clear, substantial, additional, secure, long term conservation, economic and social benefits across the FMU</p> <p>GD-NF 2/2014: Guidelines for the Interpretation of Requirements in MC&I(Natural Forest)</p> <p>Finding:</p> <p>The KSFD had converted 2 licensed area of the PRFs to forest plantations and other non-forest uses. The conversion did not comply with the standard requirements; namely,</p> <p>i) record of forest conversion, including maps/aerial photographs/satellite imageries were not available,</p> <p>ii) and social, environmental and economic cost benefit analysis necessary in such conversion was not available</p> <p>Objective evidence:</p> <p>Auditor has found that record of forest conversion from natural forest to forest plantations and other non-forest use such as (i) map and (ii) social, environmental and economic cost benefit analysis were not available for:</p>	<p>1.Kedah FMU will conduct a meeting on preparation of cost analysis on environment, economic and social impact on 20-22 December 2016 with Department of Environment (DOE), Perbadanan Kemajuan Negeri Kedah (PKNK), Perbadanan Menteri Besar Kedah and Forest Research Institute of Malaysia (FRIM).</p> <p>2.The FMU has appointed Forest Research Institute of Malaysia (FRIM) as a consultant on 4 December 2016 to prepare the cost analysis on environment, economic and social impact titled 'Analisis Kos dan Faedah Projek Ladang Hutan Getah Klon Balak (TLC) Dalam Kawasan Hutan Simpanan Kekal (HSK) Negeri Kedah'. The report is expected to be completed by 30 April 2017.</p> <p>3.The FMU will brief all forest officers between the certified and non-certified PRFs in the Kedah FMU</p>	<p>Auditor has received, verified and accepted the corrective action plan and objective evidences for the non-conformities as below:</p> <p>1. Received letter of approval from Kedah State Forestry Department for rubber plantation area – Timber Latex Clone (TLC):</p> <p>i.<i>Pembangunan Ladang Hutan (Timber Latex Clone) di Sebahagian Kompartmen 1 Hutan Simpanan Chebar Besar Seluas 55 Hektar – PHNK 16-2011 SK1(16), dated 13 December 2016. Chebar Besar PRF had been approved for 'Pembangunan Ladang Hutan' by 'Jawatankuasa Tetap Hasil Bumi (JKTHB) on 13 April 2015. Approval for clear felling was approved on 12 October 2015. Kedah FMU also has approved for establishment of rubber plantation (TLC) on 13 December 2016.</i></p> <p>ii.<i>Pembangunan Ladang Hutan (Timber Latex Clone) di Sebahagian Kompartmen 49 & 50 Hutan Simpanan Bukit Perangin</i></p>

		<p>1. Compartment 49 & 50, Perangin PRF had been cleared (approximately 244.0 ha based on ArcGis, Landsat 8 Image dated February 2016).</p> <p>2. Compartment 1B, Chebar Besar PRF (55.0 ha) had been converted to forest plantation (KU 01-(P)-10-2015).</p>	<p>including the requirements of Criterion 6.10 related with forest conversion.</p>	<p><i>Seluas 250 Hektar – PHNK 16-2011 SK1(17), dated 18 December 2016. The clear felling was approved in February 2016. While approval for rubber plantation was on 18 December 2016.</i></p> <p>2. Social, environmental and economic cost benefit analysis titled '<i>Laporan Kajian Analisis Kos dan Faedah Projek Ladang Hutan Getah Klon Balak (TLC) Dalam Kawasan Hutan Simpanan Kekal (HSK) Negeri Kedah</i>' including map of the conversion area for Compartment 49 & 50, Perangin PRF and Compartment 1B, Chebar Besar PRF was completed on 10 June 2017. This report has stated objective of this TLC, Program forest plantation in Kedah, Financial analysis (cost, production & sales price estimation), and also Income/benefit expectation (community, forestry department and state). Based on this analysis report, audit team has concluded that this project will give benefit to state government, increase production of sawntimber and also increase employment opportunities to community. Thus, audit team has decided that this analysis report was</p>
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				<p>sufficient as required by the standard.</p> <p>Status: Closed</p>
<p>Indicator 7.1.1</p> <p>NCR #: KN 02/ 2016</p>	<p>Minor</p>	<p>Requirement: Indicator 7.1.1 Availability and implementation of Forest Management Plan</p> <p>Finding: The main criteria in the draft of Forest Management Plan for 2016-2025 was not available</p> <p>Objective evidence: Draft of Kedah Forest Management Plan for (2016-2025) did not include;</p> <p>e. Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories</p> <p>f. Rationale for rate of annual harvest and species selection</p> <p>g. Provisions for monitoring of forest growth and dynamics</p> <p>h. Environmental safeguards based on environmental assessments</p> <p>i. Maps describing the forest resource base including protected areas, planned management activities and land ownership (not completed)</p> <p>j. Description and justification of harvesting techniques and equipment to be used</p>	<p>Kedah FMU had conducted series of meeting with Forest Research Institute of Malaysia (FRIM) to closely monitor the preparation of the Forest Management Plan for Kedah FMU 2016-2025. The FMP is expected to be ready before 15 February 2017.</p>	<p>KSFD has a revised draft of FMP on 21-23 December 2016. Final draft of the FMP will be prepared by consultant before 15 February 2017.</p> <p>Status: The implementation and effectiveness of the corrective action will be verified during next audit</p>
<p>Indicator 7.4.1</p> <p>NCR #: KN 03/ 2016</p>	<p>Minor</p>	<p>Requirement: Indicator 7.4.1 A summary of the primary elements of the forest management plan as prepared and implemented under Indicator 7.1.1 shall be made available to the public</p> <p>Finding : A summary of the primary elements of the forest management plan which has been made available to the public was not up-to-date</p> <p>Objective evidence : The summary of the primary</p>	<p>Kedah FMU is still in the process of finalising the Forest Management Plan 2016-2025. Once the FMP is completed in February 2017, KSFD will upload the summary of the FMP at the Kedah Forestry Department official website before 15 February 2017.</p>	<p>KSFD has revised a draft of FMP on 21-23 December 2016. Final draft of the FMP will be prepared by consultant before 15 February 2017. Executive summary of the FMP 2016-2025 will be uploaded on the website once approved by State Government.</p> <p>Status: The implementation and effectiveness of</p>

		elements of the FMP at the Kedah Forestry Department official website http://www.kedforestry.gov.my/en/maklumat-pengenalan/mc-i/ringkasan-rancangan-pengurusan-hutan was not up-to-date		the corrective action will be verified during next audit
Indicator 8.2.1 NCR #: NS 01/ 2016	Minor	Requirement: Indicator 8.2.1 Forest managers shall gather the relevant information, appropriate to the scale and intensity of the forest management operations, needed to monitor the items (a) to (e) listed in Criterion 8.2. Finding : Relevant information as listed in Criterion 8.2 (items a - e), not sufficiently included in the documentation Objective evidence : Draft of New Forest Management Plan (2016-2025) does not contain; b) Growth rates, regeneration and condition of the forest. c) Composition and observed changes in the flora and fauna.	KSFD has revised the draft FMP on 21-23 December 2016. Relevant information as listed in Criterion 8.2 (items a - e) in the FMP 2016-2025 will be included in the FMP. Final draft of the FMP will be prepared by consultant before 15 February 2017.	KSFD has revised the draft FMP on 21-23 December 2016. Relevant information as listed in Criterion 8.2 (items a - e) in the FMP 2016-2025 will be included in the FMP. Final draft of the FMP will be prepared by consultant before 15 February 2017. Status: The implementation and effectiveness of the corrective action will be verified during next audit
Indicator 8.5.1 NCR #: NS 02/ 2016	Minor	Requirement: Indicator 8.5.1 A summary of the results of monitoring indicators, including those listed in Criterion 8.2, shall be made available to the public. Finding: An up-to-date summary of the results of monitoring indicators, including those listed in Criterion 8.2, was outdated or not included Objective evidence: Outdated information on; c) composition and observed changes in the flora and fauna; is based on data for 2004 Not included; b)growth rate, regeneration and condition of the forest	KSFD has updated summary of the results of monitoring for (b) and (c) based on 'Keputusan Analisis Petak kajian Negeri Kedah' and 'Rumusan 'Laporan Inventori Hutan Kebangsaan Ke-5' in the website.	KSFD has updated summary of the results of monitoring for (b) and (c) based on 'Keputusan Analisis Petak kajian Negeri Kedah' and 'Rumusan 'Laporan Inventori Hutan Kebangsaan Ke-5' in the website. Status: The implementation and effectiveness of the corrective action will be verified during next audit

Corrective Actions Taken and Final Status on NCRs and OFIs Raised During Previous Audit

Indicator	Specification Major/Minor/ OFI	Detail Non-conformances	Corrective Action Taken	Verification by Assessor
<p>Indicator 4.2.3</p> <p>NCR #: MRS 01 2015</p>	<p>Minor</p> <p>Area/Location: Compartment 36D, Ulu Muda PRF (KS 01-18-2014)</p>	<p><u>Appropriate safety and operational equipment in good working condition, including operational procedures, shall be made available to forest workers in the work place.</u></p> <p>4- Iodine, safety pin and non-sterile 4x4" gauge pads were not available in the First Aid Kit box at log yard, Compartment 36D, Ulu Muda PRF (KS 01-18-2014)</p> <p>2- Auditor also found at the same license site where oral medicine was mixed with other medical kit for external used such as Panadol</p>	<p>Kedah FMU has directed contractor to refill medical kit in the first aid box.</p> <p>Refreshment training to the contractor's workers has been planned to be conducted.</p>	<p>Site review at Compartment 71C Ulu Muda PRF, Compartment 41A Ulu Muda PRF and Compartment 36B Ulu Muda PRF, auditor has found oral medicine was separated with other medical kit for external used. First Aid Box were also made available at log yard.</p> <p>Status: Closed</p>
<p>Indicator 4.4.2</p> <p>NCR #: ZE 01 2015</p>	<p>Minor</p> <p>Area/Location:</p>	<p><u>Forest planning and management practices shall consider and incorporate the results of such evaluations</u></p> <p>1. The incorporation of the findings of social impact evaluations in forest planning and management practices was not sighted during the audit of the forestry districts of Kedah Utara, Tengah and Selatan.</p> <p>2. Forest managers in all three districts had evaluated social impact of forest operations directly affecting communities through the use of Borang E and Borang MTCC/UPM (A and B). Village representatives of villages situated adjacent to areas approved for harvesting were asked to fill in the said form, before, during and after harvesting operations in the area. However with the exception of Kedah Utara, the data collected was not</p>	<p>The FMU has decided to standardize format of social impact assessment form for all districts.</p> <p>All districts have analyzed the collected data including the positive and negative impacts. The impacts have been highlighted in the social assessment form.</p>	<p>Forest managers had carried out social impact assessments before, during and after logging operations by using the Borang E or Borang MTCC/UPM (A and B) as verified at Compartment 71C Ulu Muda PRF, Compartment 41A Ulu Muda PRF, Compartment 36B Ulu Muda PRF and Post felling area (Post-F) at Compartment 82 Ulu Muda PRF.</p> <p>The positive and negative impacts were also highlighted in the form. The findings of social impact evaluations were incorporated in the forest planning stage (before logging operation started) by the forestry districts</p>

		analysed and the positive and negative impacts were not highlighted.		of Kedah Utara, Tengah and Selatan. Status: Closed
Indicator 6.5.3 NCR #: MRS 02 2015	Major (upgraded from Minor) Area/Location: PRF Ulu Muda, Compartment 36D, - KS-01-18-2014 and Compartment 94D (Block 1), - KT-01-07-2015	<u>Availability and implementation of guidelines for forest road layout and construction, including log landings and drainage requirement.</u> Guidelines for Forest Roads 2010) Amendments 2013, Jadual 9 Spesifikasi Jalan Tuju ; <i>Perenggan 2.6.9.1- parit tepian jalan; 2.6.11.3 - perangkap endapan</i> <i>Jadual 10 Spesifikasi Lorong Penarik</i> The following non-compliances were recorded during inspection of Ulu Muda PRF, Compartment 36D, under license no KS-01-18-2014 and Compartment 94D (Block 1), under license no KT-01-07-2015: 1. In Compartment 36D, skid trail LP 35/2, which radiated from temporary log landing M6 on access road No. 2, was found to have gradient in excess of the permissible maximum (i.e., 25 ⁰ vs. 22 ⁰ slope). 2. Along the skid trail LP 35/2, over blading was recorded where more than the stipulated 1.0 m thickness was exceeded. 3. Sumps in both compartments, 36D and 94D, inspected did not comply with standard roading guidelines (<i>Garis Panduan Jalan Hutan, 2010 (Pindaan 2013)</i>) as required in their construction; namely, there were no clear drainage leading runoff into the sump and sump walls were not strengthened by stick or timber.	The FMU has directed contractor to stop all harvesting activities, close the skid trail from any activities and conduct replanting of dipterocarps seedlings in the affected area Road maintenance will be conducted during hot weather to prevent road damage. The FMU has issued stop work notice and compound to the contractor.	During site inspection at Compartment 71C Ulu Muda PRF, Compartment 41A Ulu Muda PRF, Compartment 36B Ulu Muda PRF and Post felling area (Post-F) at Compartment 82 Ulu Muda PRF, the contractors have complied with roading guidelines (<i>Garis Panduan Jalan Hutan, 2010 (Pindaan 2013)</i>) where side drainage, side burns, and sumps were maintained at the access road. Gradient and blading for skid trail were not exceeding the maximum limit. Status: Closed