

ENTULU-MELATAI FMU ANNUAL FOREST MONITORING REPORT - Year 2024

Forest Timber Licence No. T/3476

MONITORING, MITIGATION AND MEASUREMENTS FOR FOREST MANAGEMENT PLAN

(Response to MC&I SFM, Indicator 8.1.2)

No.	Monitoring Element	Indicators	Remarks/Report
1.	The yield of forest product	Log production summary	- Total Log Production (January – December 2024) is 28,195 m ³ .
2.	Growth rates	Summary of re-assessment of PSP's since established in year 2019	-A total of 45 families, 48 Genera and 101 species recorded. The most dominant family was Dipterocarpaceae (47.7% of individual trees) and Non-Dipterocarp (52.3%).
3.	Forest regeneration	Species composition and no. of saplings recorded.	-Stocking of saplings in the plots were ranged from 90-138 stems/ha while seedlings stock varied from 1600->9615 stem/ha.
4.	Forest Condition	Diameter distribution and forest quality.	-Information on tree growth, mortality rate and recruitment rate will be obtained when the first re-assessment has been conducted 3-4 years (2023 onwards) after the establishment of PSP plots. -Re-assessment of 10 PSP plots. - Average diameter increment/mean annual increment (MAI) based on 10 plots for all trees re-assessed is 1.56 cm. which is slightly lower than the MAI growth as written in the FMP at 1.59 cm.
5.	Composition of Flora and Fauna	List of Flora and Fauna found in FMU.	<u>Flora</u> - The analysis has covered Coupes 01A with total enumerated areas of 837 ha. (13 blocks only) and Coupe 02A with total enumerated area of 464 ha (7 blocks only) and Coupe 03A with total enumerated area of 1,602 ha (25 blocks). -65 species have covered in Coupe 01A, 51 species in Coupe 02A and 36 species in Coupe 03A. -The most recorded species in Coupe 01A, Coupe 02A and 03A is <i>Meranti Merah</i> (<i>Shorea</i> spp. - MRTM). -With 6 trees/ha recorded in Coupe 01A. 6 trees/ha recorded in Coupe 02A and 10 trees/ha recorded in Coupe 03A. <u>Fauna</u> - A total of 41 species was recorded both active and inactive and conservation areas in 2024.
6.	Changes in Flora and Fauna	Number and abundance of species found in FMU and	<u>Flora</u> - The ratio of Dipterocarp in Coupe 01A is 35.52% and Coupe 02A is 48.94%. - The ratio of Dipterocarp in Coupe 03 A is 52.86%.

		comparison between earlier and recent assessment	<p>- Species found in Coupe 01A is equal to 654 and Coupe 02A is 51. The stand density in Coupe 01A is 4-10 trees/ha, Coupe 02A is 3-11 trees/ha and Coupe 03A is 6-11 trees/ha.</p> <p><u>Fauna</u></p> <p>- Wildlife composition recorded in 2023 is 45 and 2024 is 24 .</p> <p>- The total number of wildlife species as in summary until December, 2024 recorded is 139 species.</p>
7.	Environmental Impacts of Forest Operation.	- Harvesting Impact	-The FMU had completed the assessment in block nos. 8 & 18 of Coupe 01A, block nos. 4, 6 and 17 of Coupe 02A and block nos. 1 & 2 of Coupe 3A.
		- EIA Approval term and condition	- 2 Environmental Compliance Audit (ECA) were conducted in 2024.
8.	Social Impact of Forest Operation	Evidence of FPIC and joint identification of social sites for native.	- No FPIC and joint identification of social sites was conducted.
		Evidence of provision of SCR/Community services.	- CSR/Community service such as festival celebrations, funeral aid, etc, through individual payment.
		Number of forest encroachment by local community	- No encroachment by local community was recorded.
		Number of complaints, disputes and conflicts encountered with directly affected native.	- No complaint, disputes and conflict encountered with directly affected native was recorded.
		Evidence of FPIC and joint identification of special sites for native.	- No special sites for native.
		Number of property damage	- No property damage was recorded.
9.	Occupational Safety and Health	Number of fatal accidents per annum	- No fatal accident was recorded.
		Number of serious accidents per annum	- No serious accident was recorded.
		Number of minor accidents per annum	- 1 minor accident was recorded and report to DOSH.
		Number of negligible accidents per annum	- 1 negligible accident was recorded.
10.	Cost of forest management	Administration/overhead cost per Ha.	- The average cost of administration is RM70.00/m ³ .

11.	Productivity of forest management	Harvested area per annum	<ul style="list-style-type: none"> - YTD, a total of 1,761 ha. had been harvested in Coupe 02A. - 3,129 stands enumerated in Coupe 02A (based on 8 blocks). - 16,291 stands had been harvested in Coupe 02A (based on 25 blocks).
12.	Forest Protection	The number of forest encroachment per annum	- YTD, no encroachment was detected from 2 patrolling conducted.
13.	The efficiency of forest management	The machine productivity by contractor (production/machine hour, production/machine/month)	Average machine productivity by contractor: <ul style="list-style-type: none"> - Modified excavator with wincher – 112 m³/unit/month. - Tractor (skidder) – 137 m³/unit/month. - Logging truck – 274 m³/unit/month.
		Total harvesting cost per m ³ delivered to log yard.	- The average harvesting cost per m ³ delivered to the log pond is RM380/m ³ .
		Cost of Road maintenance per Kilometer.	- The average cost of road maintenance is RM2,500/km.