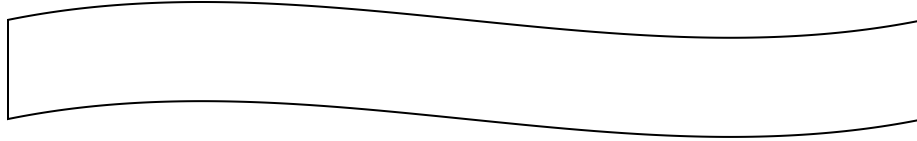
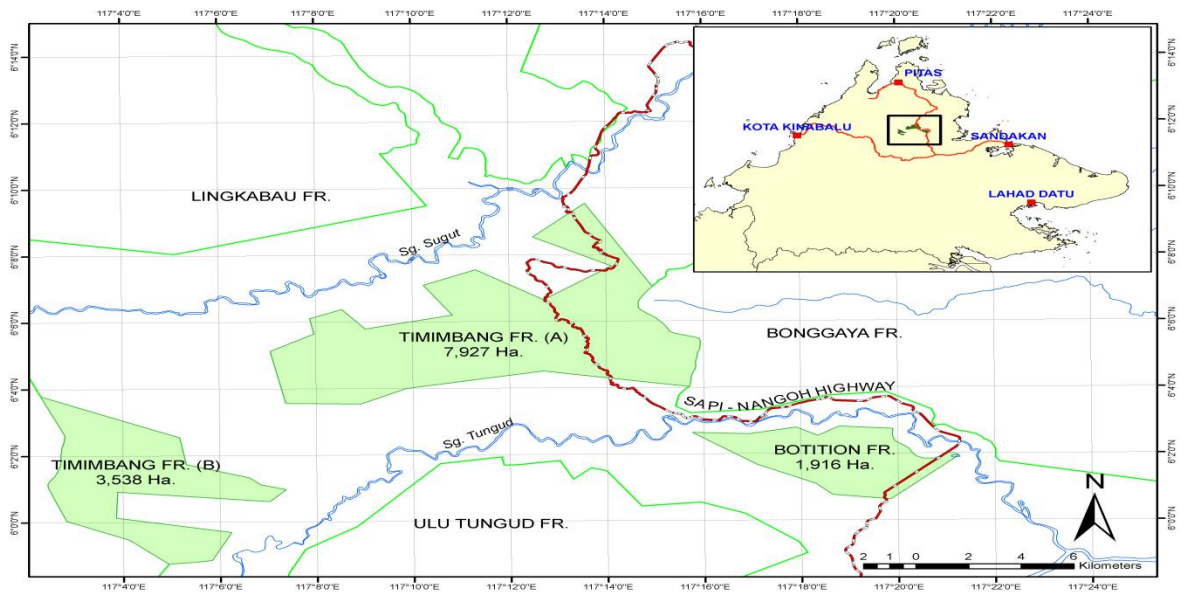


EIA



TIMIMBANG - BOTITIAN SFM PROJECT BELURAN, SABAH



PEJABAT PERHUTANAN DAERAH BELURAN

(TIMIMBANG – BOTITIAN SFM PROJECT)

OKTOBER 2014

(Revised Jun 2020)

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

**TIMIMBANG – BOTITIAN SFM PROJECT
BELURAN, SABAH**

**PREPARED FOR :
PEJABAT PERHUTANAN DAERAH BELURAN
PETI SURAT 9,90107 BELURAN.**

OKTOBER 2014
(Revised Jun 2020)

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Project Description

Timimbang FR was gazetted as a class I forest reserve in 2014 with an area of 11,465 ha. Before it was gazetted as forest reserve, the whole area was under Class II forest reserve and state land. Due to its former land status, the opening timber stock of Timimbang FR was not known as there was no forest inventory carried out since 1970. There are other forest reserves that are located nearby or adjacent to Timimbang FR; namely Bonggaya FR class II, ulu Tongod FR Class II and Botitian FR Class. Botitian FR was first gazetted within part of Bonggaya FR on 01.08.1957 and 15.07.1958 vide gazette notification 430/57 and 342/58 respectively. On 14.03.1984 again vide gazette notification 4/1984 Bonggaya FR was regazetted and classified as class II Forest Reserve (commercial). Later on 24.04.1992 vide gazette notification 2/1992 by substitution under the heading commercial Forest Reserve, part of an area with 1,929 hectares from Bonggaya FR was reclassified as Botitian FR class I. Both Botitian FR and Timimbang FR are located approximately 45 km northwest of Beluran Township and 110 km north of Telupid Township by road. The said areas are accessible from Telupid and Sandakan via the Telupid-Sandakan highway, and the Sapi-Nangoh-Pitas road.

The Timimbang-Botitian Forest Management Unit (FMU) covering 13,465 ha, comprises a cluster of 3 forest reserves located in northeastern portion of Sabah. The management of all these reserves comes directly under the jurisdiction of Beluran Forestry District of the Sabah Forestry Department. The vegetation of the area is broadly classified as logged-over mixed dipterocarp forest. It was logged between the periods 1987 to 2007. Today the forest of Timimbang-Botitian is a mosaic of regenerating forests, relatively intact on the steeper slopes but characterized by pioneer vegetation on the flatter areas where logging was more intense. Nevertheless, the forest still represents an important repository of native biodiversity that is worth protecting. Under a protective management strategy, it can be expected to recover and provide suitable habitat for certain wildlife communities.

Findings

Environmental Impacts

Soil erosion

As 70% of the project area has high soil erosion rates, no activities should be prohibited within this area. Any activities on the remaining area are allowed but appropriate mitigation measures as described.

Water Use

The impacts would not be significant, as *sg tungud* and *sg sugud* are not used by local population for water supply.

Ecology

The biological impact would not be significant. There are restoration activities only such as silviculture treatment, planting and patrolling.

Archaeological Impact

The archaeological impact would not be significant, as there are no archaeological sites within the project site.

Traffic & transportation

As the transportation route does not pass major human settlements, the potential socio-economic impact is expected to be minimal.

Fire hazard

Based on previous records, there was no forest fire incident within the project area, however, precautions should be made to the unattended open burning for agricultural plantation and shifting cultivation activity in the surrounding that could lead to forest fires.

Waste disposal

Although the quantity of wastes generated and disposed of is small, their impacts on land and river system are not significant. Besides, for the domestic waste from the staff quarters was disposed to the nearest garbage container located at the Pekan Botition.

Abandonment

As campsites and any facilities will be made of permanent structures, abandonment impact is expected to be minimal.

Cumulative impact

Cumulative impact from the proposed restoration operation alone may not be significant, but simultaneous operations or a large number of restoration operations within the same area may impact the overall biological resources, air quality, water quality and socio-economic environment.

Recommended Mitigation Measures

Provision of riparian reserve

- Riparian reserve for rivers having width more than 3 m but less than 20 m (tributaries of Sungai Tungud) should be at least 30 meters each bank.
- Riverine reserve for each stream within site (river width less than 3 m) should be at least 10 meters each bank.
- Any other streams found within site should be provided with appropriate riverine reserve, marked, painted and sign-posted accordingly.

Socio-Economics Considerations

- In conjunction with other logging operators in the area, ensure that local population water supply and their daily livelihood is not affected by the restoration operation.
- SFD was committed to provide job opportunities among the villagers nearby the TBSFM project area. SFM was given them to be involved in such activities namely Silviculture Treatment and Restoration and Maintenance of the trees planting area.

Soil Engineering Control Practices

- *Re-vegetation* – where necessary, re-vegetate large exposed areas with leguminous cover plants.
- *Steepness & Length of Slope* – Minimise length and steepness of slopes to reduce the velocity of runoff, thus reducing potential for erosion.

- *Perimeter Drainage* – Main campsite and stumping point should be provided with perimeter drainage.

Modifying Operational Practices

- *Campsite*- each campsite should not more than 0.4 ha, sited away from river/stream and provided with drainage.
- *Stream crossings*- adequate provision should be made for stream crossings such as culvert or bridge; no blocking or diversion of river/stream is allowed. The number of crossings should be minimised.

Flora & Fauna Protection

- *Fauna protection*- provide adequate opportunity for the wildlife to escape and seek refuge in the nearby uncut area by implementing stage logging; and provide wildlife corridor along sg klinganan for large animal population.
- *Flora protection*- identify protected trees for conservation purposes; and protected floral species or trees should be marked on map; and marked, painted with red colour, and sign posted on-site.
- *Notification*- to notify Jabatan Hidupan Liar prior to the re-commencement of restoration operation; and to immediately notify jabatan perhutanan, jabatan hidupan liar or jabatan perikanan in case of meeting /knowing/discovering any protected floral,faunal or aquatic species.
- *Administration*- area or protected/unique floral or faunal species discovery should be marked (on-site and on map) appropriately.

Archaeological Protection

- *Notification*- to notify jabatan muzium and ketua kampung of nearest village on discovery of any significant archeological or historical artefacts and not to log within such area; to notify kementerian pelancongan, kebudayaan dan alam sekitar sabah on the discovery of any significant tourism areas or botanical interests such as waterfalls,lakes,hills,mountains,caves and not to log within such area.
- *Administration*- prohibited archeological area; or area of discovery of archeological/historical significant ,high tourism potentials or botanical interest should be marked appropriately (on-site and map).

Traffic & Transportation

- *Traffic signs*-provide appropriate traffic signs near entrances to project site, at main road junctions and near populated areas to warn other roads users of transportation activity.
- *Transportation control*- where necessary, dust generated by transportation activity near populated areas should be controlled using systematic water spraying.
- *Transportation safety*- scow/barge movement should be controlled, and comply fully with the requirement for operational activitic over water.

Fire Hazard

- *No open burning*- no open burning allowed on-site, either for land clearing or waste/garbage/biomass disposal.

- *Fire warning system*- provide early warning system by providing fire tower and/or “lock out” / patrol and arrange communication /procedures with local jabatan perhidmatan bomba dan penyelamat.

Waste Management

- *Hazard material/waste*- collect used oil and oily wastes from generator and store in proper container for future disposal. The temporary storage facility shall be fenced, covered, bunded, has impervious floor and provided with proper drainage.
- *Garbage*- collect and disposed of garbage near campsite, away from river/stream by means of burying of solid wastes within the project site or direct disposal to river or lower ground is strictly prohibited.
- *Biomass*- biomass from restoration activities should be secured on site, prevent from entering waterways, and disposed of properly, waterways filled or blocked by biomass/ debris should be cleared and resrored to near original condition.
- *Sewage facility*- to provide basic sewage treatment facility on-site.

Abandonment

- *Site clean up*- all structures that cannot be made safe or cannot be assured to remain safe with time should be demolished; all material shall be removed and any land contaminated with oily wastes should be cleaned / remedied ; all stream crossing should be removed and the crossing site restored to near original condition.
- *Site control*-_access to the site should be closely monitored by establishing a well guarded gate, and displaying appropriate warning sings.

Secondary Mitigation Measures

- *Road improvements*- roads linking project site should be maintained regularly in the area.
- *Wildlife improvement*- if required to provide assistance in indentifying /relocating large wildlife and in protecting local population in the area.

Recommended Monitoring Programme

Zoning

- Layout plan and photographs of high erosion risk area and riverine reserve showing paint marking and signs/notices.

Socio-Economic Consideration

- If required copy of latter on contribution to affected population by JKKK or ketua kampung.

Soil Engineering Control Practices

- Layout plan and photographs for the restoration area (including main roads, secondary roads, campsite stream crossing, etc).
- Actual restoration operation schedules indicating locality, period and area in map and description.

Flora & Fauna Management

- Layout and photographs of wildlife corridor.
- Incident of discovery of protected floral or faunal species within project sites (Stating Location, Species, Numbers, And Authorities Consulted/Informed).

Archeological Management

- Layout plan and photographs of archeological protected sites within the project site, if necessary

Traffic & Transportation Control

- Layout plan and photographs of traffic signs (Including Near Project Site; office, housing, etc).

Forest Fire Management

- Layout plan and documented forest fire incident (fire management plan).

Waste Management

- Layout plan and photographs of the oily waste temporary storage area, garbage dumping site, biomass disposal area and sewage facility including storage area, floor system, drainage and signs.

Abandonment Plan

- Layout plan and photographs of the abandoned area (including clean-up site, slope rehabilitation, re-vegetated area, removal of stream crossing, sign/notices), where necessary.

Minimize The Impact of The Landscaped Adjacent To The Project Area

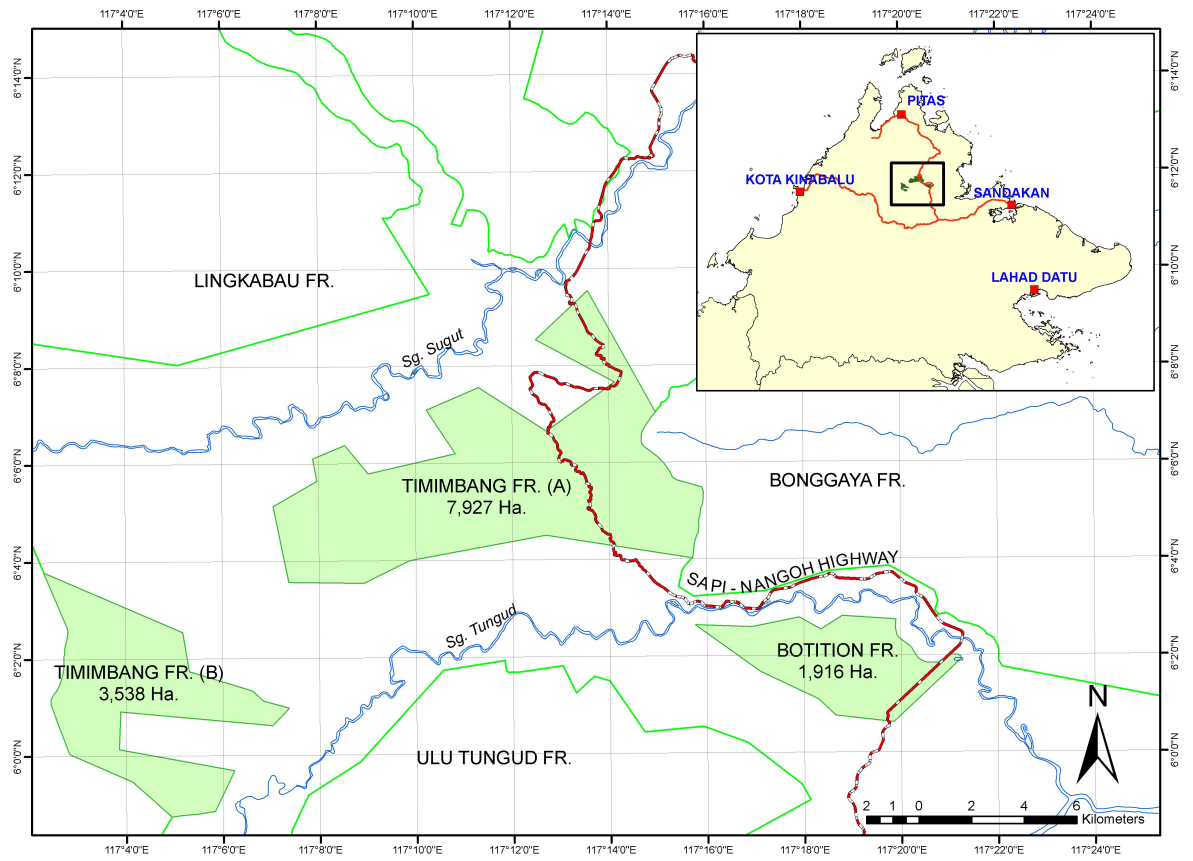
- The Project manager and estate manager should joint responsible to ensure no poaching activities in the common boundary.
- No rubbish or chemical waste dump in project area by the estate workers
- All chemical such as pesticides and herbicides used in the estate must be only in the list allowed by FSC/RSPO.
- Enforcement and patrolling should be conducted on a continuous basis as stated in the FMP or AWP particularly along the designated boundary.
- The related stakeholder and communities engagement also should be taken into account. Activities or programmes such as Stakeholder and Communities Consultation Meetings and other environmental issues talks should be conducted on a continuous basis in order to foster of awareness pertaining on the importance to conserve the forest area together.
- The project management activities are focused on protecting and conservation and there is no significant impact to the landscape surrounding the project area. However, as a precaution action, the management welcome any complain from outside parties pertaining on any

comment or recommendation if there have any environment impact caused by the forest management.

Others

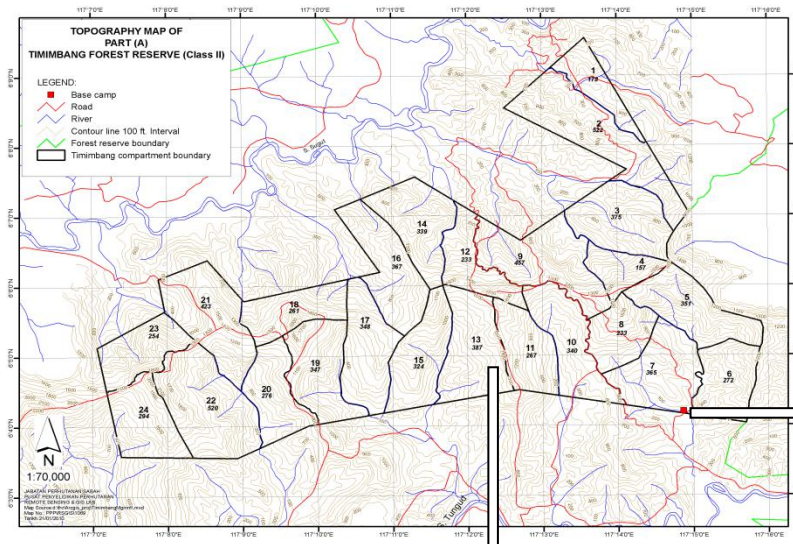
- Incident of discovery of historical sites/materials/burial grounds within the project site.
- Incident of discovery of protected floral or fauna species within project site.
- Contributions to local community on road maintenance, wildlife protection or socio-economics either monetary or other assistance.

LOCATION MAPS



ACTIVITIES AND FACILITIES

i. TIMIMBANG A

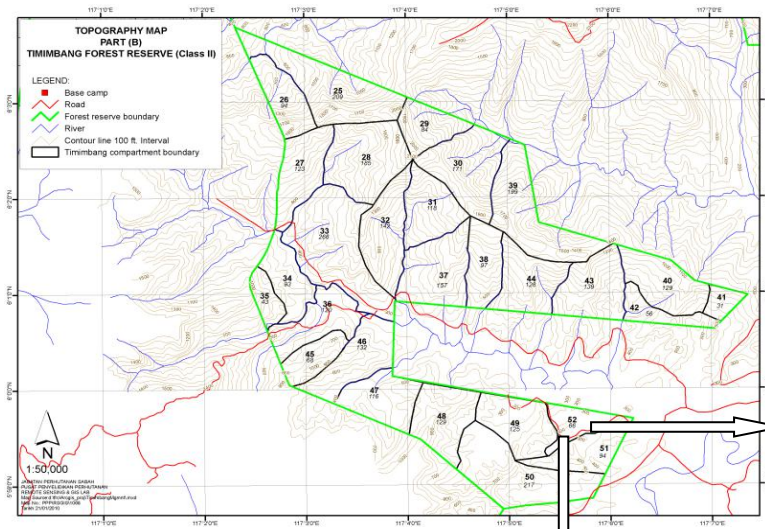


STAFF QUARTERS



REHABILITATION AREA

ii. TIMIMBANG B

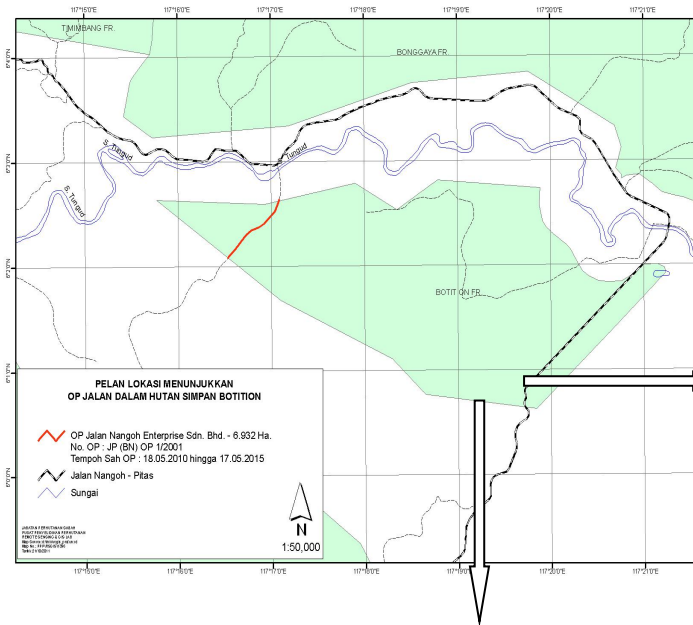


ROAD



REHABILITATION AREA

iii. BOTITIAN FR



CHECKING STATION



MONITORING ACTIVITIES