Timimbang-Botitian SFM Project

he TBSFM project continues to play a significant role in restoring, protecting and managing the State forest resources in a sustainable manner. This report is a continuation and as a follow up to the previous reports, in order to ensure that our AWP 2009 is fully undertaken and documented accordingly. As shown in Chart 26.1, the total expenditure from 2007 to 2009 is RM 1,930,183.81 or 39 %, of the total PPM budget allocation of RM 5 million, leaving a balance of RM 3,069,816.19. A total of RM 919, 657.14 was spent in 2009, of which RM 603,666.00 or 66 % of the expenditure went to the silviculture operation, whilst the balance amounting to RM 315,991.14 or 34 %, was spent on services, procurement and maintenance, (Refer Chart 26.2).

The overall performance of the TBSFM project in 2009 was found to be very satisfactory, in which the silviculture operation exceeded the target of 1000 ha. The contractor involved was Fresh Mumus Enterprise. Maintenance of the 69 hectares of Restoration Planting area at compartment 52, Timimbang Forest Reserve (TFR) Part B, was also carried out successfully. A suspected encroached area, measuring about 180 hectares, could not be planted this year as investigation into the case was still ongoing, (Refer Map 26.1).

Forest protection and enforcement were effectively implemented throughout the year. No new encroachment was detected inside Botitian and Timimbang FR for the whole year. Areas previously encroached and cultivated with oil palms, estimated to be about 2 - 3 hectares in Botitian FR, were chopped down and destroyed by our own staff. Continuous monitoring and enforcement under the Forest Enactment 1968 and Forest Rules 1969, will be carried out expeditiously.

The construction of the Timimbang Rainforest Lodge (TRL) commenced on 10th September 2009 with a total cost of RM 327, 820.00, while the construction of a retaining wall was started on 20th November 2009 with a total cost of RM 103, 791.00. Both the projects are expected to be completed during the first quarter of 2010. The construction of a checking station at TFR Part B did not materialise this year as the contractor failed to implement according to the stipulated time.



Timimbang Rainforest Lodge (TRL) under construction



Constructing retaining wall by putting up gabions at Timimbang Base Camp to prevent the loose soil from sliding down

A carbon assessment was conducted by FRC staff led by Miss Easter Kamie in TFR Part A and Part B. The main objective is to assess the carbon sequestration and temporal changes in carbon stock in sustainable forest management in Sabah. The carbon assessment project was completed in December 2009. Based on the assessment, it was estimated that TFR Part A and B have the capability to stock carbon as much as 1.2 million tons or with an average carbon stock of about 104 T C/ha.

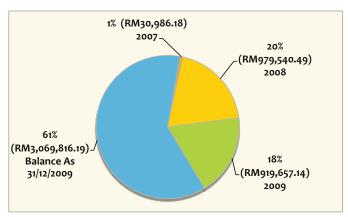


Chart 26.1: Overall Expenditures from 2007 to December 2009

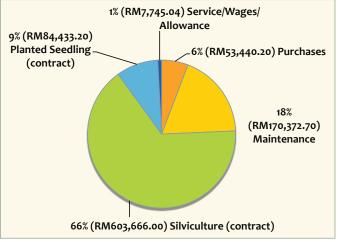


Chart 26.2: Expenditure Summary for 2009

Manpower and Logistics

As of 31st December 2009, the TBSFM project has 17 staff stationed in Timimbang and Botitian, which includes one officer (G41), 4 foresters, 2 drivers and 11 general workers. An additional 6 general workers and 2 forest rangers are needed to meet the manpower needs of this project in order to ensure effective and efficient implementation of the project. A wellmotivated and disciplined workforce is needed to build the TBSFM as the centre of excellence.

To-date, the TBSFM project has 2 Toyota twin-cabs, of which one was bought through the HoB funds. In view of the mounting tasks, such as field patrolling, boundary surveillance, monitoring work and enforcement, the TBSFM project urgently needs an additional of one (1) vehicle. Telecommunication is still very much lacking in this centre and we hope to acquire the Vsat service next year. A radio system is also being considered as a second option; however, its coverage is limited.

A full set of camping equipments, 1 unit of digital camera and 1 unit of binoculars were acquired for the purpose of monitoring wildlife movement and controlling illegal poachers in TBSFM, through HoB fund amounting to RM 5535.00. These equipment are needed for outstation works, where camping in the deep forest is necessary. The housing and office facilities at Botitian station has been improved tremendously with the completion of a gravity water supply. All these were made possible through the contributions from the of HoB initiatives.

Financial and physical achievement in 2009

Maintenance of the physical infrastructures and logistics are very important to ensure a better working environment and reliable logistics in TBSFM. Efficiency of operations depends on facilities being kept in good working condition. The vehicles, generators and other machineries need regular servicing and maintenance. It is necessary that all equipment on site must be specified in a record book of its exact location and whose responsibility to carry out regular maintenance and its safety. As of December 2009, the project has spent RM 170,372.00 on maintenance of buildings, vehicles and other machineries and RM 6,058.6 on services, (Refer Chart 26.2).

Our main activity this year was focused on silviculture operations and maintenance of planted seedlings in TFR Part A and Part B respectively. To date a total of RM 603,666.00 or 66% of total expenditure, was spent on silviculture treatments in compartments 3, 4, 5B, 9A, 9B, 2A and 2B with a total area of 1732 hectares being treated as against the target of 1000 ha for the year 2009, (Refer Chart 26.2, Table 26.1 & Map 26.1). The success was a combined result of the contractor's commitment (Fresh Mumus Enterprise) and dedication of the TBSFM team. Due to their good performance, the contractor was given an additional area of 732 hectares to be treated in

Table 26.1: Summary Of Ha Silviculture Treatment By Fresh Mumus Enterprise FRM 2008 & 2009

| Year | Compartment No | Area Treated (Ha) | Contract Fee (RM) |
|-------|--|-------------------------|--------------------------|
| 2008 | 5,6,7 & 8 | 1000 | 344,393.00 |
| 2009 | 3,4,5(B),9(A) 9(B),2(A) & 2(B) (Additional) | 1000 732 | 348,831.00 254,835.00 |
| Total | | 2732 | 948,059.00 |



Field Rangers carrying out monitoring work and a contract worker seen cutting down all the climbers during silviculture operation



The climbers/creepers are drying up (dead) and on the right; aerial view of compartment 10 after silviculture operation.

2009.

The maintenance of planted trees, which involves clearing, weeding and fertilizing at compartments 52 of TFR (Part B), was carried out on a contractual basis. During the first year (2009), 4 rounds of maintenance; which comprised of clearing and 3 rounds of fertilizer application were carried out. To date, a total of RM 84,433.20 was spent on maintenance of planted trees and another RM 59,593.23 has been allocated for the



Binuang trees planted in Dec 2008 at Compartment 52



Some of the trees planted are doing very well and growing steadily after clearing and manuring

same purpose next year, 2010.

Boundary survey and demarcation for TFR Part A and Part B were completed with a total distance surveyed and demarcated of 50 km in Part A and 28 km in Part B respectively. The survey plans for both areas are yet to be approved,



Boundary demarcation and fixing up of FD plates along the boundary are part of the activities of Forest protection in Timimbang



Boundary demarcation in Botitian FR

pending field verification from our staff. Simultaneously, our field staff had fixed 1000 pieces of FD plates along the boundaries in TFR and BFR. We expect to procure another 2000 pieces of FD plates next year for the same purpose. All these measures are undertaken to ensure the resource security and boundary legality of the forest management unit (FMU). The total cost of the boundary survey and demarcation for TFR (Part A & B) was RM 273,000.00.

Other costs involved, such as allowances and procurement amounting RM 1,686.36 and RM 53,440.20 respectively were spent throughout the year, as shown on Chart 26.2. A total sum of RM 97,720.00 from HoB initiatives was allocated to TBSFM project to improve the working condition at Botitian checking station. Upgrading of the station and providing better water supply through a gravity system at Botitian checking station was successfully carried out. The agro-forestry funds hadcontributed a sum of RM49,669.00 to upgrade the Timimbang office, which was heavily infested by termites.

Fire Management and Control in TBSFM

Uncontrolled forest fires are one of the major threats to our Forest Reserves. Past experiences indicate that most forest fires are caused by arsonists or due to fires that escape from open burning agri-conversion areas. As the TBSFM area is surrounded by agricultural areas with an important highway passing through it, the Management Committee is taking the necessary steps to prevent the occurrence of forest fires, by purchasing the necessary fire-fighting equipment and putting the workforce on alert during very dry weather conditions. The weather station facilities at Botitian help in the monitoring of the changes of the weather pattern in the TBSFM areas. Throughout 2009, there were no forest fires detected in TBSFM.

Forest Protection and Enforcement

Forest protection and enforcement still remain our main priority in TBSFM. Continuous surveillance by aerial survey and ground patrolling to check on poachers and illegal encroachment inside TFR and BFR was carried out. From past experience, aerial surveillance has been proven to be the most effective means of monitoring and detecting any illegal activities within the two project areas. We will continue to conduct aerial surveys from time to time to check and monitor all areas which are found to be sensitive. As a rule of thumb, illegal agriculture and settlements inside forest reserves must be stopped at the very early stage before the problem grows out of hand. In the preliminary report by Hutan (KOCP), poaching and trapping of wild animals was observed to be very rampant inside Timimbang and Botitian Forest Reserves.

Night and day patrolling is one of the basic and most important functions of the TBSFM staff. This involves routine inspection inside and outside the forest reserves and checking the boundaries. These activities are being carried out to ensure that rules and regulations are being observed; that there are no trespassers into the forest reserve; users must have proper permits; and that there is no illegal hunting, logging or clearing of land for agriculture cultivation.

Until to date, 3 cases have been investigated. A case involving illegal encroachment of Timimbang FR (approximates 150 ha) was being investigated. The suspect was offered to be compounded and to replant the area. Another case involves a boundary dispute with another company at TFR Part A. This

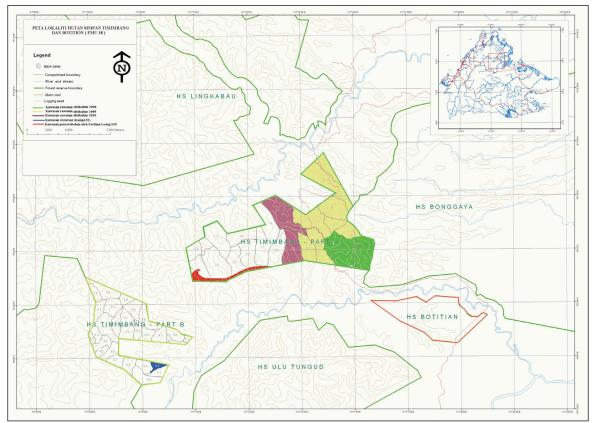
case is still under investigation. The third case investigated under Sec.31, FE 1968, also involves the same company still pending for court trial.

Enroached areas inside forest reserves that were found to be illegally cultivated with oil palm were destroyed either by chopping down using chainsaws or by poisoning the palm trees. It was estimated that about 5 hectares inside Botitian Forest Reserve were illegally cultivated with oil palm. This was only identified after the boundary survey had been completed. We will make sure that this enforcement activity will be carried out aggressively.





Chopping down or poisoning oil palm trees, illegally planted inside forest reserves



Map 26.1: Showing Timimbang and Botitian Forest Reserves. Based on the legend given, the yellow colour stands for areas that have been silviculture treated in 2009 and the maroon colour are those areas to be treated in 2010. The red colour indicates the area encroached by a company