Sustainable Forest Management in Sabah

Background

Sustainable forest management was successfully implemented in Deramakot Forest Reserve (DFR). Therefore, the State Government announced its commitment in 1997 with the following strategies:

- All measures within its means will be taken to ensure healthy forests are passed on to future generations;
- Forests will be managed on an integrated basis, supporting a full range of uses and values including timber production, habitat for wildlife, and wilderness areas;
- A multitude of economic benefits will be generated from various forest products and services; ecotourism and recreation will be supported within a framework of sound ecological and social principles and practices;
- Advanced training, skills and education will be provided to those employed in forest-related activities, and stable, fulfilling employment opportunities will add to their quality of life;
- Through consultation, mutual respect, sharing of information and clear and harmonious relationships among all stakeholders of forests, trust and agreement will be brought about and the effectiveness of forest conservation, management and industrial development will be improved; and
- Continuous research programmes will be carried out to improve sustainable forest management techniques.

Given the appropriate policy framework, and the success of the DFR, the State Government extended the DFR model through private sector's participation with the issuance of long-term sustainable forest licence known as Sustainable Forest Management Licence Agreement (SFMLA) for each of the forest management units (FMU) comprising about 100,000 hectares of production forest reserves. This was implemented in September 1997, when the State Government entered into an agreement with ten private companies to adopt the FMUs. These agreements give the SFMLA holders the right to manage their respective SFMLA area for a period of 100 years. This is to ensure that the future development of the state’s forests will be optimized economically, socially and environmentally. In 1998, three more agreements were signed. However, three SFMLAs were later cancelled for non-performance. Two of three of the SFMLA areas cancelled will be managed by the Sabah Forestry Department.

Prior to 1997, three long-term Licence Agreements were signed. These agreements serve the same function as the SFMLA. In 2004, another SFMLA was signed. These SFMLA areas involve 22 FMUs covering about 2.3 million hectares of the state’s production forest reserves. Other forest reserves especially Class I Protection Forest Reserves, that fall within or have a common boundary with the SFMLA area(s), are managed as a contiguous block of conservation forests by the respective SFMLA holders in collaboration with the Sabah Forestry Department.

Roles of the SFMLA Holders

Each SFMLA holder is required to undertake the following:

- manage the area in accordance with the terms and conditions of the Licence Agreement
- provide a Performance Bond of at least RM5 million
- prepare a Forest Management Plan
- have 30% of shares owned by Bumiputras of Sabah origin
- employ eco-friendly harvesting methods like Reduced Impact Logging (RIL) and Skyline Yarding System
- have operations of enrichment planting, forest rehabilitation and silvicultural treatments
Achievements

Forest Management Planning System Improved

The forest management planning system for our forests at the Forest Management Unit (FMU) level is based on a legal and policy framework that has sustainability, public and community involvement, and adaptive management as the key elements. The forest management planning requirements of the Sustainable Forest Management Licence Agreement (SFMLA) area and the provisions of the environmental impact assessment (EIA) are incorporated into the Forest Management Plan (FMP). A consultant (hired by the SFMLA holder), in consultation with stakeholders and interested and affected parties in the planning of forest operations, prepares the FMP. These planning processes provide formal opportunities for public input at key stages in the development of the plan. An FMP contains long-term management directions, as well as detailed operations that remain in effect for a 10-year period.

An FMP is not approved until the Director of Forestry is satisfied that the plan provides for the sustainability of the forest and all identified concerns have been addressed. The Director of Forestry approved two FMPs in 2004. These FMPs were prepared by Sapulut Forest Development Sdn Bhd (FMU 14) and the SFD (Deramakot Forest Reserve FMP2 – FMU 19). In addition, the SFD approved two Plantation Development Plans, that is, those submitted by Timberwell Berhad and Sapulut Forest Development Sdn Bhd respectively.

At the compartment level, Annual Work Plans (AWP) are prepared where field operations (e.g. harvesting, rehabilitation, silvicultural tending) and resource accounting (e.g. changes in the growing stock and quality of forest stands) are planned, implemented, reported and recorded. These reports and records will be analyzed at the end of the planning period to monitor whether or not the planning targets prescribed in the FMP and Annual Work Plan (AWP) have been complied with and to provide information for the next planning period.

Sustainable Timber Harvesting Adopted

For forests to continue to perform their vital environmental functions and to realize their enormous economic potential, they must be properly managed. The forest management practices that have been found successful in Deramakot Forest Reserve were widely adopted in the State as the first step in moving from exploitative logging to wise forest use. Measures taken include operating under an FMP that prescribes logging practices of international standard by using reduced impact logging (RIL) techniques.

Timber harvesting is exclusively carried out based on the prescriptions in the approved Comprehensive Harvesting Plan (CHP). They include climber cutting before logging, marking of trees for directional felling, a planned network of skid trails laid out based on the location of trees to be felled and the terrain. In production areas with steep slopes, the use of tractors is replaced with a skyline yarding system to reduce machine movement on the ground and to avoid unnecessary construction of skid trails so as to reduce logging damage to a minimum. Helicopter logging was introduced in June 2004 at Kalabakan Forest Reserve.

Environmental Management Continued to Improve

Environmental management is a very important component in SFM. Not only does good environmental management aid in achieving compliance with the Conservation of Environment (Prescribed Activities) Order 1999, but it can also be used to actually improve the SFMLA/LTL holders’ commitment to adequately address environmental impacts. All logging activities carried out within the SFMLA/Long-Term Licence holders’ areas are based on the approved EIA issued
by the Environmental Protection Department (EPD). In 2005, Sapulut Forest Development Sdn Bhd and Timberwell Berhad had their EIA approved by the EPD for their industrial tree plantation (ITP) areas. Sapulut Forest development Sdn Bhd is also in the process of preparing a special EIA for their entire SFMLA area.

The SFD monitors and supervises the SFMLA/LTL holders’ activities to ensure continuing compliance, and that they have implemented all the necessary procedures to achieve compliance as specified in the EIA report.

Expansion of Forest Conservation Areas within the Production Forests

Apart from RIL, forest biodiversity has also been the focus of conservation initiatives in the State for the last decade. Besides the Protection Forest Reserves, VJR and Wildlife Reserves, which are under the direct responsibility of the SFD, the SFMLA/LTL holders have also set aside a minimum of 15% of their SFMLA area for conservation of sites with significant ecological, cultural and biodiversity values besides environmental protection. It is difficult to give an exact figure at this stage for the area within the production forest reserves that have been conserved or earmarked for conservation, but it is estimated that it does not exceed 20% of the total production area. This means an additional of up to half a million hectares of the production forest reserves have been set aside for biodiversity conservation.

Timber Stand Improvement and Forest Restoration

The silvicultural treatments in logged-over forests are in the form of selective liberation of potential crop trees (PCT) thus, avoiding the blanket elimination of secondary species and non-commercial trees. Treatments involve the selective liberation of selected PCTs mainly by the removal of overhead shade and the cutting of vines and climbing bamboo. Based on the target prescribed in the FMP of the respective SFMLA/LTL holders, it is estimated that on average about 16,000 ha of the production forests are treated annually. However, the year 2004 saw only 10,600.65 ha being silviculturally treated. KTS Plantation Sdn Bhd (FMU 19) had the most area silviculturally treated (4,291.78 ha), followed by Idris Hydraulic Berhad (2,171.46 ha – FMU 8 and 13), TSH Resources Berhad (2,110.0 ha), Timberwell Berhad (1,130.56 ha) and SFI (300.0 ha). The SFD, on the other hand, carried out silvicultural treatment (1,100 ha) in Deramakot Forest Reserve during the year.

Where destructive harvesting practices in the past have resulted in poorly stocked forests, forest restoration or enrichment planting has been carried out to supplement natural regeneration. In this case, KTS Plantation Sdn Bhd managed to restore 202 ha in their area. Such practices were also carried out in SFI (212.35 ha) and Idris Hydraulic Berhad (79.36 ha – FMU 13).

Forest Certification

The implementation of SFM in Deramakot Forest Reserve is progressing well and in accordance with the requirements of the Forest Stewardship Council. Although forest certification is not a mandatory requirement, there was a growing interest in timber certification by the SFMLA holders in 2004. This is due to the high demand for certified timber and the SFMLA holders’ commitment to meet established environmental standards for timber harvesting. Certification holds much promise for raising the level of forest management, although there are critical issues that must be resolved before it can be fully operationalised.

Certificate of Compliance

At the end of 2004, all SFMLA/LTL holders were assessed for their SFM performance. Based on the SFD assessment results, KTS Plantation Sdn Bhd, TSH Resources Berhad and Bornion Timber Sdn Bhd had complied with most of the clauses as specified in the SFMLA and implemented most of the activities, which were prescribed in their respective AWP. The SFD awarded them Compliance Certificate for their achievement.