

# THE SABAH FORESTRY DEPARTMENT EXPERIENCE FROM DERAMAKOT FOREST RESERVE: FIVE YEARS OF PRACTICAL EXPERIENCE IN CERTIFIED SUSTAINABLE FOREST MANAGEMENT

*By*

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## **ABSTRACT**

*Deramakot Forest Reserve, remains the sole forest reserve area that has been certified under both the Forest Stewardship Council (FSC) and the Malaysian Criteria and Indicators Standards, in Sabah.*

*This paper expounds on the experiences gathered and lessons learnt from managing the reserve. The future management options for Deramakot are also discussed with corporatisation being favoured to instill greater efficiency.*

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## 1. Introduction

***“ Tahniah, Teruskan Projek Ini ”***

***(The Right Honourable Prime Minister, Dato’ Seri Dr Mahathir Bin Mohamad, Visit To Deramakot Forest Reserve On 16.08.1997)***

***“ Quality is remembered long after the price is forgotten ”***  
***( Gucci slogan )***

Deramakot Forest Reserve is the flagship of the Sabah Forestry Department and serves as the icon of what can be achieved with political support and institutional commitment.

In the final analysis, it is also about quality management under “ real” world conditions. This paper shall attempt to demonstrate the successes and failures of managing a commercial forest reserve with the respectability of being labelled as “well managed”.

### 1.2 Background

Part of the Permanent Forest Estate of commercial status, the Deramakot Forest Reserve covers 55, 083 hectares of mixed Dipterocarp forest in the east of central Sabah. With the adjacent Segaliud-Lokan Forest Reserve in the northeast, it forms the Forest Management Unit (FMU) Number 19.

The earliest known logging began in the southern part, along the Kinabatangan River in the 1950s’. The area was licensed for logging from 1955 to 1989. The minimum diameter for harvesting was 60cm and the felling cycle, 60 years. Loggers ignored the rule when it was more convenient, attractive and profitable. Variable cutting intensities of past management practices have resulted in an extremely heterogeneous condition of the residual forests. Only 20% of the area is considered well stocked with harvesting trees and more than 30% is covered by very poor forest with virtually no mature growing stock left.

#### 1.2.1 ***Infrastructure***

To facilitate management and field operations, the Deramakot Sustainable Forest Management (SFM) Project area is equipped with the following infrastructure :

- \* 40km of all weather road;
- \* Office;
- \* First Aid Room;
- \* Conference Room;
- \* Workshop;
- \* 2 Guesthouses;
- \* 10 detached houses ( living quarters); and
- \* 1 outpost for boundary control.

### 1.2.2 **Project Area**

Deramakot Forest Reserve was chosen in 1989 as the project site for **two reasons:**

- i. it was the only logged natural forest which was neither licensed nor threatened by shifting cultivators, thus avoiding problems from these directions for the project and,
- ii. the policy of the German Ministry of Economic Cooperation and Development (BMZ) prohibiting projects in pristine forests which involve timber harvesting.

## 2. **The Malaysian-German Sustainable Forest Management Project (MGSFMP)**

For the period 1989 – 2000, the Sabah Forestry Department ( SFD ), in collaboration with the German technical agency, GTZ, implemented the MGSFMP, which was made up of 4 phases.

These are:

- \* 1989 – 1992 : a strong research emphasis with a component for management planning.
- \* 1992 – 1994 : management planning, training and consolidation.
- \* 1995 – 1998 : institution building, human resource and development, consolidation/implementation and extension
- \* 1999 – 2000 : consolidation, planning and human resource development.

A medium-term (10 years) Forest Management Plan ( FMP) for Deramakot Forest Reserve (DFR), covering the period, 1.1.1995 – 31.12.2004, was developed over a period of 5 years ( 1990 – 1994) through the project and was ready for implementation in 1995.

This FMP is the blueprint for operational work in Deramakot up to today.

### 2.1 **The Gists Of The Forest Management Plan**

Deramakot Forest Reserve is to be managed in accordance with sustainable forest management (SFM) principles and a multiple-use approach to natural forest management (NFM).

Amongst other things, the plan specifies **that:**

- \* not more than 20,000 m<sup>3</sup> are to be harvested each year ( the annual allowable cut or AAC);
- \* 1000 hectares are to be silviculturally treated each year;
  
- \* 200 hectares of rehabilitation planting per annum is to be carried out on degraded sites;
- \* harvesting shall follow RIL ( reduced impact logging ) guidelines;
- \* research and development will be conducted; and
- \* training and human resource development shall be part of the plan implementation ( Deramakot FMP – 1995).

The FMP is available from the Forestry Department (FD) for those interested in procuring a copy.

## 2.2 The Organizational Set Up Of Deramakot Forest Reserve.

The management of Deramakot is staffed as illustrated in **Table 1**. Basically, it is a classical governmental hierarchal organization with the corresponding rules, regulations and procedures.

**Table 1: Staffing**

<b>CATEGORY</b>	<b>NO. OF PERSONNEL</b>
District Forest Officer	1
Assistant District Forest Officer	1
Forest Ranger	4
Forester (Forest Guards)	2
Driver	6
Labourer	41
Mechanic	1
Boatman	2
<b>TOTAL :</b>	<b>58</b>

Deramakot is manned by 58 field personnel deployed over six major management activities, which are:

- I. Harvesting
  - o Opening ( compartment harvest plan preparation )
  - o Monitoring (harvesting)
- ii. Road Construction and Maintenance
- iii. Silviculture
  - o Tending (climber cutting and liberation thinning)
- iv. Rehabilitation (planting)

- v. Administration
- vi. Protection
  - o Boundary control
  - o Fire Prevention and Control

### 2.3 How The FMP Is Implemented ?

Plan implementation for the 3 major activities ( harvesting, silviculture tending and rehabilitation planting) is contracted out through the award of service contracts, with supervision by SFD.

Planning, infrastructure development, protection and other work are executed by SFD itself.

### 2.4 Budget For Forest Management Plan

This is procured through the development vote under the various Malaysia Plans starting in 1991, with approximately RM30 million allocated for each plan period of 5 years or approximately RM6 million per annum. For the Eight Malaysia Plan, the allocation is RM25 million.

#### 2.4.1 Where Does The Money Go To Each Year ?

Please refer to **Table 2**, which illustrates the planned allocation for 2002.

**Table 2: Allocation Of Budget For Deramakot Forest Reserve, 2002**

<b>COST COMPONENT</b>	<b>AMOUNT</b>	<b>* PERCENTAGE OF TOTAL (%)</b>
Harvesting Contract	RM1,664,400.00	33.0%
Silviculture Contract	RM350,000.00	7.0%
Re-habilitation Contract	RM250,000.00	5.0%
Other Services (maintenance, hostel etc.)	RM48,800.00	1.0%
2 <sup>nd</sup> inventory	RM200,000.00	4.0%
Protection	RM55,000.00	1.0%
Road maintenance and construction	RM100,000.00	2.0%
Fuel & Lubricants	RM103,970.00	2.0%
Vehicles & Machineries	RM140,000.00	3.0%
Building	RM20,000.00	0.4%
Administration	RM42,000.00	0.8%
Salaries & Allowances	RM1,800,000.00	35.0%
Others	RM257,512.00	7.0%
<b>TOTAL :</b>	<b>RM5,114,000.00</b>	

\* subject to rounding errors.

The single most costly item remains the salaries and wages paid to FD staff managing Deramakot forest reserve.

#### 2.4.2 **What Are The Service Contract Rates ?**

*These are :*

- o Harvesting – RM110.96/m<sup>3</sup> (ex-Sapapayau log-yard. 100km from working compartment).
- o Silviculture – RM350.00/hectare.
- o Rehabilitation planting:
  - planting at RM820.00/ha.
  - Supply of 25,000 seedlings at RM1.60/seedling.
  - Raising 50,000 seedlings at RM0.90/seedling and maintenance at RM170.00/hectare.

The contracts are awarded for a 4-year period, renewable on a yearly basis, subject to good performance.

#### 2.5 **The Certification Of Deramakot Forest Reserve, The Quality Of Management Standard Obtained**

“Certified” as defined by the Collin’s pocket dictionary of the English language means: ***guaranteed, attested to by a certificate or officially declared insane***”

In the context of Deramakot, it has not yet been certified as ***mad*** but “well managed” in accordance with the Forest Stewardship Council ( FSC) principles.

In 1997, SFD engaged SGS to audit the management of Deramakot under the QUALIFOR standard and the Malaysian Criteria and Indicators standard. The certification was successfully obtained covering a period of 5 years ( July 1997 to July 2002).

At the time of writing, SFD has re-engaged SGS to conduct the re-certification process and the result of the assessment is expected to be known by the end of this year.

This paper will elaborate further on the subject of certification in subsequent sections. However, for those interested in knowing the cost of the certification, SFD paid SGS RM105,000.00 for the 5 - year period, which included the surveillance component, carried out at approximately 6 – monthly intervals. More on certification, later on.

### 3. **What Has Been Achieved In Deramakot Over the Last 5 Years (1997 – 2002)?**

***“ Not by thoughts alone. Good intentions put into action “  
( ITTO Slogan)***

This section elaborates in some detail, the work done in Deramakot Forest Reserve, over the last 5 years. The intention is not to cram in a “ What I Did During The Holidays Mum” manner, but on the contrary, to highlight the operational achievements, that will not be lost in briefness.

#### 3.1 **Forest Management Plan (FMP) and Annual Work Plan (AWP)**

The DFR model owes its success to proper planning, concept development and in the implementation of the FMP. The objective is to manage the forest in a way that mimics natural processes for production of low volume, high quality and high priced timber. The main purpose of drawing up the FMP is to define the 10-year planning objectives, which serve as guiding principles to plan ahead and operationalise the AWP. The main task of the Sabah Forestry Department (SFD) is to prepare the AWP, which covers harvesting, silviculture, rehabilitation and other forest management activities. The responsibilities to supervise and monitor all operations undertaken by the contractors, lay with SFD. Both SFD and the appointed contractors are jointly responsible in carrying out these operations, to ensure compliance.

Implementation of the annual plan requires skills and competencies as well as entrepreneurship. SFD staff training is tailored to specific work requirements and likewise, with the contractors’s supervisors, technicians and forest workers.

#### 3.2 **Harvesting**

Sustainability of timber harvesting means harvesting not more than the annual growth. It is a measure of the economic viability, and a criterion to ensure self-sufficiency and profitable returns. The annual allowable cut (AAC) of 20,000 m<sup>3</sup> was based on the individual tree growth simulation model, ***DIPSIM or Dipterocarp Forest Growth Simulation Model.*** However, after 5 years in operation, a Mid-Term Review, conducted in 1999, recommended, on the basis of sustainability, to lower the production volume to 15,000m<sup>3</sup>. Another reason was, the AAC target was never met.

The FMP allows a harvest of 30m<sup>3</sup>/ha but what has been achieved thus far, is only 21m<sup>3</sup>/ha. This is attributed to:

- o hollow trees constituting 30 percent of all trees marked for harvesting. Tree is not felled for safety reasons. In some cases only 4-5 m of the tree is hollow and the rest is solid.
  
- o trees marked for harvesting are not harvested due to their distance from the skid trail and the tractor’s winching limitation ( 30m

winching distance). It is also uneconomic to harvest when trees marked for felling are sparsely distributed.

- o volume estimation is based on CF 1/81, the FD handbook on estimating standing tree volume during licence clearance inspection, which tends to over estimate volumes by 30%.
- o precipitation in Deramakot is high (2,400mm – 2,500mm), hampering the performance of harvesting operations.
- o earlier there were delays in the extension of the harvest contract (renewal on yearly basis). This problem has been addressed and contracts are now approved for 4 years.
- o logging residue in the form of stumps, top ends, etc. that can be salvaged.

**Table 3** compares the AAC and actual volume harvested. With the exception of 2002, where the AAC target may be met or exceeded, the yield has always been lower than what has been planned.

**Table 3: Actual Production Versus The Annual Allowable Cut (AAC)**

YEAR	COMPARTMENTS	AAC (M3) FMP	*** Actual Volume Harvested (M3)
1995	73,60	20,000	188.61
1996	73,60,49,55	20,000	15,463.40
1997	73,60,49,55,68	20,000	13,794.16
1998	73,43	20,000	12,235.95
1999	43,63	20,000	914.80
*2000	43,29,44,63	15,000	12,928.43
2001	44,34,37	15,000	10,741.83
2002	25,37	15,000	** 10,987.04
<b>TOTAL</b>		<b>145,000</b>	<b>77,254.22</b>

\* mid-term review

\*\* until June 2002

\*\*\* actual volume includes rejected logs and logs used for bridge construction

In **Table 4**, it is glaring that, on average, the actual harvested volume is almost always lower than the planned volume. For example, taking the first (12) compartments as listed, actual volume harvested is only 77,254.22 m3 as against a planned volume of 118,948 m3, or a deficit of 35 percent approximately.

**Table 4: Planned and Actual Harvestable Volume By Compartment**

COMPARTMENT NO.	GROSS AREA (ha)	NET AREA (ha)	CHP PLANNED VOLUME (M3)	ACTUAL VOLUME (M3)	YIELD PER HECTARE (M3)
60	661	581	25,500	13,695.96	23.57
73	380	380	7,322	7,792.86	20.51
49	592	412	12,342	6,615.92	16.06
68	251	185	5,621	3,086.21	16.68
55	315	315	7,710	4,698.42	14.92
43	384	384	8,516	6,080.78	15.84
29	440	283	8,796	5,125.24	18.11
44	429	217	6,055	4,175.78	19.24
34	431	223	10,507	5,747.01	25.77
37	410	211	8,533	6,652.24	31.53
25	732	248	10,878	9,053.66	36.51
63	329	180	7,168	4,530.14	25.17
33	701	248	7,234	*	
<b>TOTAL</b>	<b>6,055</b>	<b>3,867</b>	<b>126,182</b>	<b>** 77,254.22</b>	<b>***21.34</b>

\* harvesting just started  
\*\* based on the 1<sup>st</sup> (12) compartments  
\*\*\* average yield over 12 compartments

However for 2002, it is forecasted that the actual volume to be harvested will reach or even exceed the planned production at a level of 15,000 m<sup>3</sup> to 16,000m<sup>3</sup>, setting a record for Deramakot's management.

### 3.3 Expenditure and Revenue

***“ It is not great wealth that makes a nation ... sometimes what counts cannot be counted ..... and what can be counted doesn't count .....”  
( Albert Einstein)***

**Table 5** depicts that DFR was not making any profit at the beginning. However, looking at **Table 6**, DFR shows a positive income only if direct costs are taken into account. Being the pioneer model for SFM in the region, everything had to start from scratch (training, research, infrastructure development, etc.), and this is where the expenditure is mostly used up. The pioneering cost of Deramakot therefore makes it difficult to be assessed as a “stand alone” business enterprise. Furthermore, cross subsidies blur the cost accountability and one can never get the true costs, especially where SFD's own personnel are involved in doing a particular job.

**Table 5: Annual Expenditure and Revenue**

<b>YEAR</b>	<b>EXPENDITURE (RM)</b>	<b>REVENUE (RM)</b>
1991	Data not available	-
1992	Date not available	-
1993	2,150,385.57	-
1994	3,988,835.77	-
1995	4,623,000.00	50,924.70
1996	5,300,000.00	3,468,392.40
1997	5,200,000.00	3,385,354.58
1998	6,600,000.00	4,841,866.97
1999	5,029,970.00	918,459.20
2000	8,393,828.32	5,820,059.73
2001	5,768,100.00	3,610,665.03
*2002	5,115,000.00	**4,078,329.12
<b>TOTAL</b>	<b>52,169,119.68</b>	<b>26,174,051.73</b>

**FOOTNOTE:**

\* revenue forecasted to reach RM6 million in 2002 creating a surplus for the first time.

\*\* as of June 2002

### 3.4 Harvesting: Cost and Revenue

The cost of administration, road construction and maintenance, protection and vehicles is taken into account in **Table 6**. Proceeds from sales of logs by auction can still bear the costs of harvesting. Most of the expenditure was absorbed by the other management activities such as, rehabilitation, silviculture, training and infrastructure.

**Table 6: Harvesting costs and benefits**

YEAR	PRODUCTION (M3)	HARVESTING FEE CONTRACTOR (RM)	SFD COST (RM)	TOTAL COST (RM)	TIMBER SALES (RM)	VOLUME SOLD (M3)	AVERAGE PRICE (RM/M3)
1995	188.61	23,576.25	1,386,900.00	1,410,476.25	50,924.70	188.61	270
1996	15,463.40	1,659,632.50	1,590,000.00	3,249,632.50	3,468,392.40	12,998.31	267
1997	13,794.16	1,558,740.00	1,560,000.00	3,118,740.00	3,385,354.58	13,794.16	245
1998	12,235.95	1,357,701.00	1,980,000.00	3,337,701.00	4,841,866.97	12,236.04	396
1999	914.80	101,506.20	1,508,991.00	1,610,497.20	918,459.20	914.80	1004
2000	12,928.43	1,434,538.50	2,518,148.50	3,952,687.00	5,820,059.73	12,424.32	468
2001	10,741.83	1,180,359.10	1,730,430.00	2,910,789.10	3,610,665.03	10,660.74	339
*2002	10,987.04	1,138,040.10	1,534,500.00	2,672,540.10	4,078,329.12	10,244.00	398
<b>TOTAL</b>	<b>77,254.22</b>	<b>8,454,093.65</b>	<b>13,808,969.50</b>	<b>22,263,063.15</b>	<b>26,174,051.73</b>	<b>73,460.98</b>	<b>**356</b>

\* as of June 2002

\*\* average over (8) years

### 3.5 Production by Harvesting Methods

**Table 7** summarizes the volume of timber produced by production method.

**Table 7: Harvested Volume by Tractor, Skyline and the Combine System**

YEAR	TRACTOR (M3)	SKYLINE (M3)	COMBINE SYSTEM (M3)	TOTAL (M3)
1995	-	188.61	-	188.61
1996 -1997	28,386.56	871	-	29,257.56
1998	12,204.56	31.39	-	12,235.95
1999	914.80	-	-	914.80
2000	8,144.85	569.15	4214.43	12,928.43
2001	10,345.12	157.07	239.64	10,741.83
2002	10,987.04	-	-	10,987.04
<b>TOTAL</b>	<b>70,982.93</b>	<b>1,817.22</b>	<b>4,454.07</b>	<b>77,254.22</b>

Extraction methods chosen for a compartment depends solely on the topography and as prescribed in the Comprehensive Harvest Plan (CHP). Ground skidding is confined to slopes with gradients of 15° and below, and skyline from 16° – 25°. The combined system involves using tractors to feed the skyline corridor where feeder roads are not economically viable to be constructed ( too many bridges, terrain, etc).

### 3.6 Cost of Preparing a Comprehensive Harvesting Plan (CHP) In Accordance With RIL Guidelines

Such costs have only just recently been properly assessed. Based on the experience for compartments 25 and 37, this worked out to about **RM84.00/hectare with:**

- a crew of (6) skilled workers attaining 5ha per day;
- costs of vehicles and survey equipments excluded.

This of course, will vary depending on the remoteness and accessibility of the compartments and the work quality and performance of the personnel concerned.

### 3.7 Silviculture

This is essential ***because:***

- o the overall stocking of desirable commercial tree species is relatively low;
- o infestation of climbing bamboos is high; and
- o it promotes growth and assists in natural vegetation.

The achievement is relatively high as shown in **Table 8**.

**Table 8: Costs of Silviculture Treatment and Achievement**

YEAR	COMPARTMENT NO	AREA TREATED (ha)	CONTRACT FEE (RM)	SFD SUPERVISION COST (RM)	ACTUAL COST (RM)
1996	60	138.80	5,126.00	110,459.00	155,585.00
1997	60	294.40	96,268.00	124,174.00	220,442.00
1998	60	721.00	52,350.00	138,775.00	391,125.00
1999	49	721.80	252,630.00	92,880.00	345,510.00
2000	43,55,73	1033.53	361,735.50	102,130.00	463,865.50
2001	58,44	1013.64	354,774.00	95,040.00	449,814.00
2002	29,34	1000.00		*	
<b>TOTAL</b>		<b>4,923.17</b>	<b>1,362,883.50</b>	<b>663,458.00</b>	<b>2,026,341.50</b>

\* 800 ha or 80% of the target achieved as of June 2002.

### 3.8 Rehabilitation Planting and Achievement

Please refer to **Table 9**. From 1996 – 2001, some 1,146 hectares were planted or 95.50% of the target at 200 ha per annum.

**Table 9: Rehabilitation Planting & Maintenance – The Cost and Achievement**

YEAR	AREA PLANTED (ha)	COST (RM)
1996	189	222,150.00
1997	154	248,468.00
1998	143	258,444.00
1999	232	558,266.00
2000	228	691,653.80
2001	200	733,547.60
2002	*	258,000.00
<b>TOTAL</b>	<b>1,146</b>	<b>2,970,529.40</b>

\* No planting in 2002 but only maintenance of planted trees. 85% of target (660.69 ha) achieved as of June 2002.

A crucial decision was made in late 2001 to stop the rehabilitation planting and instead, concentrate on maintaining planted seedlings on the following grounds:

- o escalating costs which are beyond the financial capacity of Deramakot, with the high cost and the growing component of maintenance;
- o many areas considered “degraded” or understocked actually have available mother trees and sufficient regeneration;
- o improper planting in the beginning following the “blanket” concept, whereby even wet areas and swamps were planted with inappropriate species, resulting in high mortality; and
- o it may be more cost effective to do silvicultural treatment rather than rehabilitation planting in the long run.

However, those seedlings that have been properly planted, site-species matching planned before hand, and regularly maintained, are doing quite well.

### 3.9 Protection

The boundary of Deramakot, particularly those bordering alienated lands, is being demarcated under the Eight Malaysian Plan, at a cost of RM196,000.00, commencing in 2002. This work is now completed. Properly demarcated boundaries will facilitate enforcement work.

Illegal felling has occurred over the years, with the most serious ones, involving tractors. By and large this has subsided (**Table 10**), and if it occurs, will most probably be confined to small time riverine felling, a form of *cultural harvesting*, peculiar to the riverine communities along the Kinabatangan River.

**Table 10: Illegal Felling, 1995 – 2002**

<b>YEAR</b>	<b>VOLUME (M3)</b>
1995-1999	4,353
2000	3027
2001	214
* 2002	0
<b>TOTAL</b>	<b>7,594m3</b>

\* none detected so far.

### 3.10 SGS Surveillance

Somebody has to “keep an eye” on us to ensure we are on the straight and narrow as promised in the FMP. This close scrutiny ensures compliance on our part and provides an independent third party assessment to maintain Deramakot’s credibility.

So far, 6 major and 27 minor Corrective Action Requests (CARs) have been meted out. Please see **Table 11**.

**Table 11: CARs issued by SGS from 1997 to 2001**

<b>Components</b>	<b>Correction Action Request</b>		<b>Observation</b>
	<b>Major</b>	<b>Minor</b>	
FMP		2	
Harvesting	2	9	3
Silviculture			
Permanent Sample Plot		2	
Rehabilitation			1
Wildlife		3	
Social		1	
Training		4	
Water Monitoring		2	
Fire Monitoring		2	
Feeder Roads	1	2	
Illegal Felling	3		
<b>TOTAL</b>	<b>6</b>	<b>27</b>	<b>4</b>

As would have been expected, timber extraction presents the greatest challenge.

### 3.11 Research, Development and Scientific Studies

At least (7) scientific papers covering various fields ( ecology, entomology, hydrology, silviculture, harvesting etc.) have been written based on research conducted in Deramakot and many more are expected to be published in time to come.

Under the Eight Malaysia Plan, a harvesting research component is being implemented, whereby, various parameters ( diameter limits, slope limitations, CHP preparation etc.) will be looked into with a budget allocation of RM4.40 million from the Federal Government.

## 4. Discussions

***“ Only after the last tree has been cut down,  
Only after the last river has been poisoned,  
Only after the last fish has been caught,  
Only then will you find that money cannot be eaten ”***

***- An old Cree Indian Saying -***

***“ You never actually own a Patek Philippe, You merely look after it for the next generation”***

***- Patek Philippe, Geneve -***

We are not asking you to make a choice between eating fish or owning a gold watch. Better still, have both. After some 13 years ( 1989 – 2002), of intensive management in Deramakot, with (5) years under certification, what are the basic lessons that we have learnt, to make things better and to make things happen ? Let us now ponder over the matters and issues derived from this, over one decade of trial and error.

### 4.1 Does Certification Pay ?

The most important certification is ***political endorsement***. The Deramakot project had the honour of a visit by the Right Honourable Prime Minister himself in 1997, who endorsed the project concept and directed that it be continued.

Without political commitment from state leaders, the concept of Deramakot could not have been expanded to other areas of Sabah, manifested in the long term Sustainable Forest Management License Agreement ( SFMLA ) policy launched in September 1997. Although the SFMLA arrangement is still in its infancy and dogged by slow implementation, amongst other things, it is a step in the right direction, far better than an “ad hoc” timber licensing system, that can cause severe damage to the forest resources, as what previously prevailed.

***Therefore, get politically certified first. It is the most important certificate, you will need***

Despite the general feeling that certification under whatever scheme, adds to unnecessary costs, we consider the “ Qualifor” Certificate to be worth

much more than what we have paid for it. At RM105,000.00 over a period of 5 years, and assuming a harvest volume of 15,000m<sup>3</sup>/annum ( 75,000m<sup>3</sup> over 5 years), this is only **RM1.40/m<sup>3</sup>**. As a contrast, FD spends not less than RM1.8 million per year on wages/salaries in Deramakot or RM9 million in 5 years at **RM120.00/M<sup>3</sup>**. This is a multiple of 86 times. Are we getting our money's worth from our personnel, 86 times more beneficial that what is paid to SGS ?

With a sense of perspective, we therefore consider the cost of certification as fair.

The Qualifor program has brought the following **benefits**:

- o **Prestige** - it has been proven independently that in Sabah, natural forests can actually be well managed,
- o **It opens doors** – market access particularly to sensitive markets, is easier.
- o **Focus** – the “CARS” keep SFD’s management on its toes and therefore focused to the tasks and responsibilities, “promised” in the FMP, AWP etc.
- o **Shield of credibility** – it ensures non-interference and SFD is left to do what it thinks is best.

#### 4.2 **But What About the Promised Green Premium for Certified Timber?**

Please refer to **Table 12**. Based on the last auction of logs in June 2002, it would appear that there is a premium over domestic sales of logs for a similar quality.

However, there is no premium compared to export prices of logs or log prices in Peninsular Malaysia, with the exception of one species, Selangan Batu. Ironically, the market that offers real premium, is Vietnam, one of the poorest countries in the world. European buyers have not been present since 2000. It would appear the prices obtained in 1999 were highly speculative and non sustainable.

For the moment, therefore, the efforts of Deramakot have not yet translated into real dollars and cents, and if any, only for selected species of small quantities. **The “eco-dividend” is therefore, still elusive.**

**Table 12: DERAMAKOT LOG PRICE AS COMPARED TO OTHER PRICES**

SPECIES	DERAMAKOT LOG PRICE JUNE 2002 (1)		SANDAKAN EX MILL (1) JUNE 2002 RM/M3	SABAH LOG EXPORT (1) TAWAU JUNE 2002 RM/M3 FOB	ITTO PRICE (16-30 JUNE) 2002 (2)	
	EX. STUMPING RM/M3	EX SANDAKAN EQUIVALENT RM/M3			PEN. M'SIA- DOMESTIC RM(US)/M3	SARAWAK (EXPORT) RM(US)/M3
MERANTI SQ	335 L	369 ex mill	319-390	419-451	627-665(165-175)	570-589(150-155)
RS/OS	396 L	430 ex mill	370-380	380-445	NA	NA
KERUING SQ	464 E	600 ex port	305-400	321-477	NA	589-608(155-160)
KAPUR SQ	400 L	434 ex mill	380-390	346-452	627-646(170-175)	532-551(140-145)
SELANGAN BATU	645 L	679 exmill	388-402	493-551	646-665(170-175)	551-570(145-150)
OT	313 L	347 ex mill	208-291	285-304	NA	NA

Note: Sandakan equivalent is =Ex stumping price + RM34/m3 as transportation cost up to the mill in Seguntur and add RM60/m3 for export.

L=Local sale

E=Export

Source:(1) Sabah Forestry Department (2)ITTO Market News service

If certification is to be accepted more widely and pursued by licencees, good forest management must be translated into financial gains.

As Alastair Sarre ( ITTO 2002), put it:

***“ ..... But there is another group of stakeholders who cannot be left off so lightly; those of us in the richer countries who are calling for tropical forest conservation. Arguably, we are the most difficult stakeholders of all; we want to participate in decisions on the fate of tropical forests but bring little to the negotiating table apart from strongly held opinions. What we want is a service, tropical forest conservation. Our role as a stakeholder will be more influential when we pay our fair share for that service !! ”***

#### **4.3 Was the Deramakot Project Initiated to Pursue Certification ?**

When the project first started, the purpose was to attain good forest management and to have the project area as a model for other areas to be managed. The project did not “take off ” at the outset, with certification as the goal.

It was to demonstrate good forest management and husbandry with certification, a logical conclusion, to attain credibility and impartiality, in the end. With or without certification, what has been carried out in Deramakot, would have taken place in any case.

#### **4.4 Can a Classical Government Bureaucracy Run a Forest Enterprise Efficiently ?**

Deramakot suffers from many non-technical and non-forestry problems such as:

- high turnover of staff;
- red-tapes: in procuring goods and services;
- disciplinary problems amongst staff including: truancy, low productivity, poor work ethics, “ 8.00 AM – 4.30 PM” work syndrome etc;
- lack of managerial skills in running an enterprise;
- the lack of entrepreneurial vigor; and
- rules and regulations bound management “ala” civil service.

Please see **Table 13** which illustrates the usage of time in Deramakot for field personnel for the year 2000.

**Table 13: Manpower Productivity and Costs (Year 2000)**

CATEGORY	NO.DAYS	SALARY (RM)	NO. OF DAYS	ALLOWANCES (RM)	TOTAL (RM)	PERCENTAGE
<b>Wages (actual working days)</b>	8093	240,625	6400	211,066	451,691	65
<b>Leave</b>	359	10,909	319	446	11,355	2
<b>Weekend Off/Holiday</b>	2548	69,792	1477	42,813	112,605	16
<b>Sick Leave</b>	19	651	3.5	332	984	negligible
<b>Bad Weather</b>	118	3,319	116	1,222	4,541	1
<b>Payday S'kan</b>	2524	54,828	558	5,863	60,691	9
<b>Training &amp; Education</b>	742	23,032	653	26,353	49,38	7
<b>TOTAL</b>	<b>14403</b>	<b>403,157</b>	<b>9528</b>	<b>288,098</b>	<b>691,255</b>	<b>100</b>

**Footnote:**

- \* about 28% of time used unproductively assuming the other "65%" of the time is truly productively used. ( *If not, this will be more.* )

This is only one example of the rigidity of a bureaucratic system and the wastes that are inherent, which the project has to pay for, adding to the cost of managing the reserve.

So long as Deramakot is run by a classical government department, it is unlikely that costs could be reduced significantly, even if drastic action was taken to sack non-performers, which in itself, is a time-consuming process, which may exhaust the "disciplinor" long before the one to be "disciplined".

To be fair, if there was a " productivity based " enumeration scheme in Deramakot ( e.g. RMx/m3 for FD staff or some other incentive scheme), efficiency may very well increase.

**4.5 The Cost of Procuring Accurate Information**

In section 3.8, it was mentioned that one reason why rehabilitation planting was suspended is because of planting being unnecessarily carried out on, so called "degraded forests" ( based on aerial photos stratification) when in fact, ground truthing showed sufficient regeneration.

However, the actual situation on the ground would only have been known if proper diagnostic sampling had been carried out prior to treatments. But this will only add to more costs and delay implementation. This is exacerbated if field decisions are left to unskilled and inexperienced personnel.

On the subject of actual yield versus estimates (**Table 4**), a more accurate assessment of the standing tree volume in the CHP preparation would have been obtained, by recording height estimates as well as diameter readings, and revising the volume tables, determined by CF Circular 1/81. But this will delay the CHP preparation further and add to more costs.

Therefore, some form of balance needs to be arrived at as it seems, cost is directly proportional to accuracy. In the re-inventory of Deramakot to be launched this year, inventory will be done by compartment, taking both regeneration quality and commercial volume availability into account, in one assessment. This will reduce costs and provide more accurate multi-use information.

#### 4.6 **Is Foreign Participation Good For You ?**

***“ ..... Heavy reliance on international expertise for most conceptual and operational support weakens the potential contribution of the project to institutional learning and building”***

**- James K. Gasana – ( ITTO – Tropical Forest Update 12/2/2002) -**

We have not suffered from the collaboration programme with GTZ but on the contrary, have benefitted tremendously particularly in the fields of: forest management planning, resource accounting, capacity building and human resource development.

If we were to rate the greatest benefit from the collaborative programme, it is the “building blocks” of trained personnel that we now have in the Department, who are capable of doing management planning and implementation with high technical competence. It is granted, discipline is that much harder to teach but on the balance of probabilities, Sabah has gained much.

However, it is strictly our own turf when it comes to policies, institution building and administration, without which, we will lose the self-esteem to chart our own destiny. ***Learn from far and wide by all means, but do things yourself.***

#### 4.7 **Future Management Options For Deramakot Forest Reserve**

***“ ..... And Indeed, there will be time to wonder, “ Do I Dare ? And Do I Dare ? ..... Do I Dare, Disturb The Universe ....”***

**- (T.S. ELIOT – “ The Love Song Of J.A. Prufrock”) -**

It is highly unlikely that Deramakot could reach a semblance of a self-accounting and become a self-paying enterprise, so long as it is run as a government bureaucracy. Government administration is usually too rigid and too inflexible and slow to react to changes. At most, Deramakot can only pay for itself, but no more than that.

But, complete privatization may not necessary be the better option because:

- o there may not be players at present, with the financial capacity and managerial capability to maintain the forest management standards of Deramakot;
- o the information gained over many years of experience will be “lost” to the private sector, and not shared for society to benefit from;

or ***would you sell your mother for profit, so to speak ?***

Perhaps, a much better option would be to corporatise the Deramakot wing of the Sabah Forestry Department, along similar lines as when Syarikat Telekom Berhad or Tenaga Nasional was first corporatised.

In this manner, the government continues to retain ownership but allows the flexibility of the private sector in the management of the reserve and it can assign the best of the best to manage the reserve as a true business enterprise. At the same time, information can still be shared for the public good. This is a thought for the future.

## 5. **Conclusions**

***“..... Trojan ..... Dijamin oleh Lever Brothers”.***

***- ( Detergent Advertisement) -***

For 5 years, Deramakot has proven its resilience as a “ well managed forest” despite all manners of trials and tribulations. Many lessons, have been learnt and many more will be learnt.

The Sabah Forestry Department shall strive to ensure that Deramakot continues as the flagship forest reserve of Sabah, and quality management is maintained.

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