

1. INTRODUCTION

This is the Second AWP for FMU 10 after the revision of the Conservation Area Management Plan (CAMP) that was approved in 2013. It describes the Twelve (12) strategies together with their implementation schedule in 2014 planned by relevant members of the Management Planning Core Team (MPCT) for FMU10. It also specifies the deployment of the required manpower, budgets and Equipments for all implementers both from the Sabah Forestry Department (SFD) and the other relevant Departmental Partners. This AWP therefore is the guiding document for the field implementers in carrying out their respective duties and responsibilities in conserving and assessing the success or impact of the conservation efforts as prescribed by the approved Revised CAMP for FMU10 in 2014.

2. FMU 10 (TAMBUNAN)

The FMU 10 is bordered by Three (3) state administrative district and a sub-district as well as Three (3) forestry districts, namely, Tambunan on the west, Keningau on the south, Ranau on the north and Sook on the east. The total area of FMU 10 (Tambunan) is 75,801 ha. It comprises of the Trusmadi Forest Reserve (TMFR) with a total area of 74,736 ha and Sg. Kiluyu Forest Reserve (SKFR) measuring 1,065 ha. Out of the total area of 75,801 ha, the Keningau Forestry District administered 47,772 ha of the area, while the remaining 28,029 ha are within the Tambunan Forestry District's jurisdiction.

2.1 Management Zones

A total of Seven (7) Management Zones had been identified for FMU 10 to cater for the different usage and management prescriptions for the conservations of the Four (4) identified targets (**Table 1**). Six (6) of these zones are in the FMU 10 area, and one (1) management zone is outside of the FMU 10 area. The Management Zones identified in FMU 10 are as follows:

Table 1: Management Zones in FMU 10

Zone 1:	Conservation Area covering all intact Upland Mixed Dipterocarp Forest (UMDF) and Lower Montane Forest (LMF) vegetations with an approximate area of 42,000 ha.
Zone 2:	Aquatic Protection Area that include all water bodies (rivers and streams) and their buffer zones. This zone may cover an approximate area of 4,000 ha.
Zone 3:	Forest Rehabilitation Area covering an approximate area of 22,000 ha of largely burnt and encroached areas.

Zone 4:	Controlled Hunting Area that extends over some 6,000 ha in the Ulu Monsok and Ulu Rompon area (denoted as H compartments in the map) (some areas may be included as rehabilitation areas)
Zone 5:	Eco tourism Area covering the climbing trails that extends not more than 4.9 km of climbing distance to the peak of Mount Trus Madi. It may cover an estimated area of 1,000 ha.
Zone 6:	Adventure Tourism Area operated by Borneo Jungle Area under an Occupational Permit (OP) covering an area of less than 10.63 ha.
Zone 7:	Community Woodlots Area on a state land area on the north west outside FMU 10 that may extend not more than 4,000 ha to be gazetted under the Land Ordinance 1968.

2.2 Objectives

The FMU 10 is delineated as a Forest Conservation Area to allow for the achievement of certain goals in conserving the Four (4) conservation targets (**Table 2**). Commercial timber harvesting or large scale collections of any terrestrial and aquatic flora and fauna from this FMU are strictly prohibited. In accordance to the conservation targets goals set above and the management zones prescribed for FMU 10, the following objectives are set for 2014:

- I) Non - destructive usage such as scientific biodiversity expedition, conservation awareness and small scale controlled/licenced flora and fauna collections in the Management Zone 1.
- II) Prohibition of any fishing, riverine or aquatic collections, except for scientific biodiversity expedition or conservation awareness purposes in Management Zone 2.
- III) Rehabilitation of encroached and fire degraded areas with native species in Management Zone 3.
- IV) Construction and upgrading of necessary infrastructures such as roads, buildings, car park, checkpoint, resting facilities and nursery in Management Zones 1, 3, 4, 5 and 6 that will allow for conservation, controlled hunting, ecotourism including mountain climbing and surveillance activities to be conducted or enhanced.
- V) Physical demarcation of the remaining forest boundaries at Part C of TMFR and the whole of SKFR as well as the maintenance of these boundaries to ensure proper surveillance and prosecutions of offenders as prescribed under the Forest Enactment

1968 as well as the Wildlife Conservation Enactment 1997 could be conducted in FMU 10.

- VI) Allowing for limited non-conservation usage, namely:
- Ecotourism, adventure tourism and mountain climbing in Management zones 5 and 6.
 - Surveying and the setting up of controlled hunting area in Management Zone 4.
 - Surveying and the setting up of community woodlots area in Management Zone 7.

Table 2: Conservation Targets and Goals for FMU10

Conservation Targets	Conservation Goals
Upland Mixed Dipterocarp Forest (UMDF)	Restoration of fire degraded and encroached areas with native species To ensure zero fire, encroachments, poaching, and illegal timber extraction occurrence in the habitat
Summit Scrub (SS)	To ensure minimal Impact from active Eco-Tourism activities at the Summit from the Three (3) Climbing Routes, namely, Wayaan Kaingaran (Tambunan), Wayaan Mastan (Apin-Apin) and Wayaan Mannan (Sinua).
Hornbills	Determination of the group's distribution and identification of the dominant species by 2018
Rajah Brooke's Birdwing (<i>Troides brookiana brookiana</i> Wallace)	Determination of the species' distribution and habitat by 2018

3. OPERATIONAL STRUCTURE AND BUDGET

3.1 Operational Responsibilities

Deputy Director (Management), Rahim Sulaiman, is given the task to coordinate and facilitate the execution of this AWP, in accordance to his task as the Chief Implementer / Chairman for the MPCT for CAMP FMU 10.

The main field implementers of the CAMP in 2014 are the District Forestry Officers (DFO) of Tambunan and Keningau. Apart from their respective assigned staff, they are also assisted by the other departmental implementers, namely, the Sabah Wildlife Department (SWD) Keningau office, the Sabah Parks (SP), the relevant research officers from FRC and professional foresters from the Sandakan forestry headquarters and the FMU10 Operational Office. **Figure 1** describes the Organisational Structure in implementing the Revised CAMP and the AWP. **Table 3** summarises the various responsibilities assigned to implement the strategies in 2014.

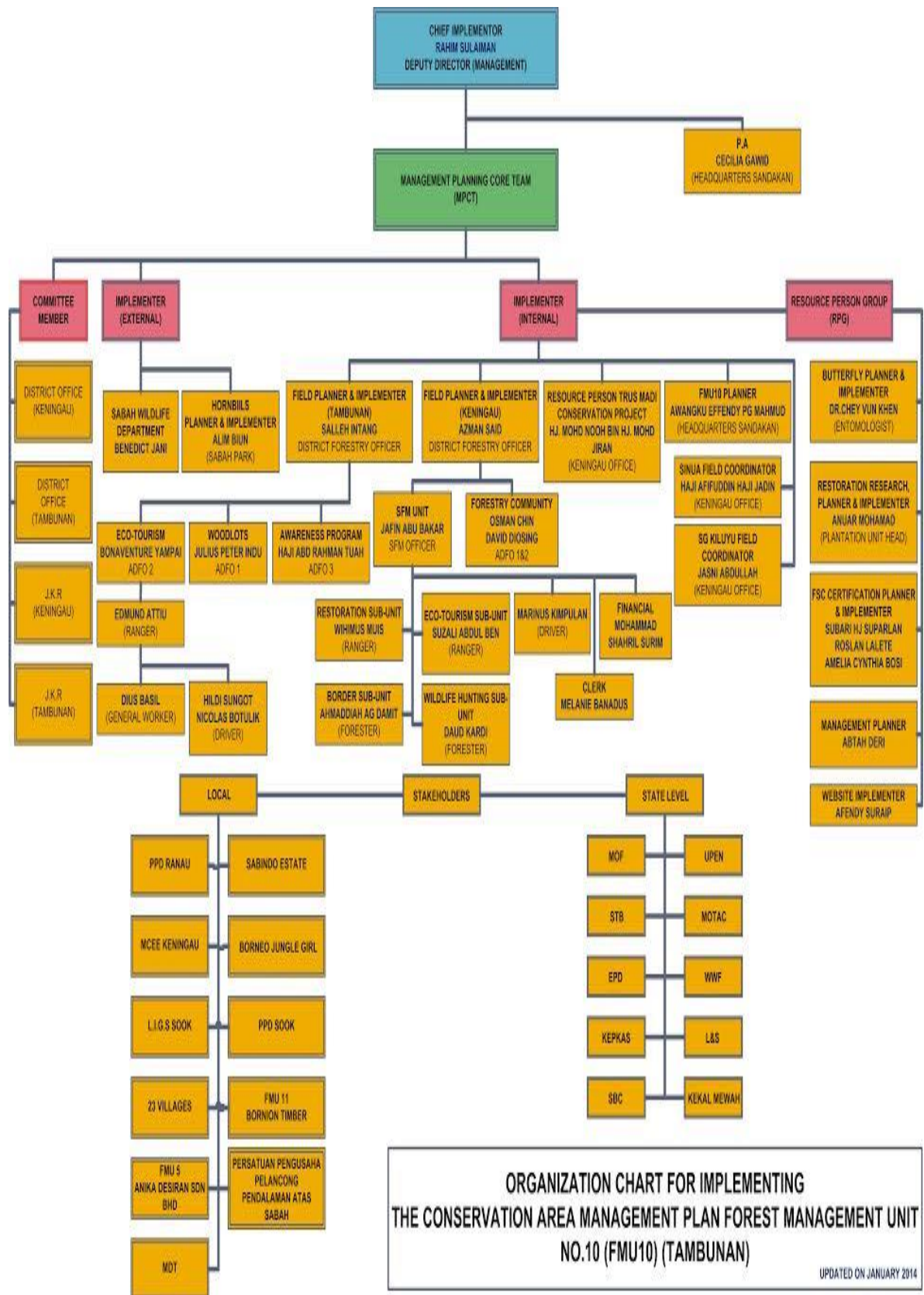


Figure 1: Organisational Structure for Implementing the Revised CAMP FMU10

Table 3: Responsibilities in Implementing the Revised Conservation Strategies for FMU 10

No	CONSERVATION STRATEGIES	IMPLEMENTERS
1	Boundaries Demarcation And Maintenance	K(FRM) Of Headquarters Assisted By DFO Keningau And Tambunan
2	Conduct Surveillance Activities	DFO Keningau And Tambunan Assisted By ADFO Tambunan Bonaventure Yampai, Haji Abdul Rahman Tuah, Jasni Abdullah, SFMO Jafin A Bakar And SFC Haji Afifuddin Jadin
3	Forest Restoration	DD (MGT) And DFO Keningau Assisted By SFMO Jafin Abu Bakar and FMU10 PO Awangku Effendy Pg Mahmud.
4	Formulate Suitable Visitation Mechanism And Flora/Fauna Collection Procedures	Committee Headed By DD (MGT) Assisted By SFC Haji Afifuddin Jadin as the Secretariat
5	Upgrading And Maintenance Of Relevant Infrastructure	DFO Keningau And Tambunan Assisted By Bonaventure Yampai From DFO Office Tambunan, Jafin abu Bakar, FMU10 PO Awangku Effendy Pg Mahmud, Jasni Abdullah And SFC Haji Afifuddin Jadin
6	Implement Relevant Community Forestry Activities	DFO Keningau And Tambunan Assisted By FMU10 PO Awangku Effendy Pg Mahmud, Jasni Abdullah, Jafin Abu Bakar And SFC Haji Afifuddin Jadin
7	Develop And Implement Controlled Hunting Plan In Ulu Rompon And Ulu Pangas	DFO Keningau assisted by Sabah Wildlife Department (Keningau) and SFMO Jafin A Bakar and Jasni Abdullah
8	Establish Community Woodlots In Stalend Area Near Kg. Kaingaran In Tambunan Adjoining FMU 10 Area	DFO Tambunan Assisted By Haji Mohd Nooh Jiran (Resource Person of Trusmadi Conservation Project) And ADFO Tambunan Julius P Indu
9	Understanding Of The Target Species Through: A) Inventory Of Hornbills By 2018 B) Inventory Of Rajah Brooke And Their Host Plants By 2018	Alim Biun Of Sabah Parks And Dr Chey Vun Khen of FRC Sepilok
10	Implement Relevant Conservation Awareness Programmes Including Website Maintenance	DFO Keningau And Tambunan Assisted By Haji Abdul Rahman Tuah Of DFO Office Tambunan ,FMU10 PO Agku Effendy Pg Mahmud And Afendy Suraip Of FRC Sepilok
11	Scientific/Biodiversity Study	Team leads by FRC Sepilok under the assistance of En Anuar Mohd
12	Collaborate With Adjacent Landowners At Relevant Boundaries Of FMU 10	DFO Keningau And Tambunan Assisted By SFC Haji Afifuddin Jadin and Jasni Abdullah

3.1.1 Existing Manpower under SFD

The total available manpower under SFD is Thirty (30) personnel. However, only Twenty One (21) personnel are considered working fulltime in implementing the CAMP. The other Nine (9) personnel are part time active implementers of the CAMP. **Table 4** summaries the manpower involved in implementing the CAMP under SFD.

Table 4: Summary of Current SFD Manpower for CAMP Operation in 2014

No	Designation	Personal	Grade	Status	Total
1	Deputy Director (Management) (DD) MGT	Rahim Sulaiman	Q54	P	1
2	Senior Research Officer (SRO)	Dr. Chey Vun Khen Anuar Mohd	Q54 Q52	P	2
3	Assistant Conservator of Forests (ACF)	Hj Mohd Nooh Mohd Jiran* (Resource Person Trusmadi Conservation Project) Azman Said* (DFO Keningau) Salleh Intang* (DFO Tambunan) Jafin A Bakar* (SFMO) AgKu Apandi Pg Mahmud (FMU10 PO)* Hj Afifuddin Jadin (SFC)* Abtah Deri (FRM Officer)	G41	P	7
4	ADFO I(Tambunan) Pen.Pem.Hutan	Julius P Indu Agku Ridwan Pg Abdul Razak	G32 G32	P p	1 1
5	ADFOII Tambunan (ADFO III)	Bonaventure Yampai * Hj Abdul Rahman Awang Tuah* Jasni Abdullah*	G27 G27 G27	P P P	1 1 1
6	Renjer Hutan (RH)	Wihimos Muis (Kngu)* Suzali Abd Ben(Kngu)*	G17 G17	P	2
7	Pengawas Hutan Kanan (PHK)	Daud Kardi(Kngu)*	G 11	P	1
8	Pengawas Hutan	Edmund Attiu(Tambunan)* Ahmahdiah Awg Damit (Kngu)*	G 11	P P	2
9	Research Assistant	Nasrah Yusof	Q17	P	1
10	Perakaunan Perkeranian	Sharil Surim* Cik Melani Banadus	W17 R1	P T	1 1
11	Driver	Marinus Kimpalan (Kngu)* Hildi Sungot (Tambunan)* Nicholas Batulik (Tambunan)*	R3	P P P	3
12	PRA	Dius Basil (Tambunan)* Wasinin Wasi (Keningau)* Fred Abdullah (Keningau)* Lawrence Jumil(Tambunan)	R1	T	4
Note: P – Permanent T- Temporary					
* - Working Full time on CAMP FMU 10 (21 personnel)				Total	30

3.1.2 Manpower outside SFD

A total of Ten (10) personnel are available from the various government agencies (**Table 5**). The agencies involved are the Sabah Wildlife Department (SWD), Sabah Parks (SP), Computer Services Department (JPKN), Public Works Department (PWD) and the District Office Keningau and Tambunan. Except for the SWD, most of these staffs however are not working fulltime in implementing the CAMP. Their involvements are only in the relevant strategies which require their respective expertise.

Table 5: Summary of Manpower for CAMP Operation provided by other MPCT Partners

Agency	No of Personal	Total
Sabah Wildlife Department	3	3
Sabah Parks	4	4
District Office		
• Tambunan	1	1
• Keningau	2	2
TOTAL		10

3.1.3 Existing vehicles under SFD

Table 6 describes the existing Fourteen (14) Motorised vehicles for the CAMP implementation, comprising of Twelve (12) Motor Vehicles and Two (2) Motorcycles.

Table 6: Vehicles Available for use for CAMP FMU 10 in 2014

Item	Vehicles	Unit	Registration Number	Utilisation Age (yr)	Assigned To
1	Toyota Fortuner	3	<ul style="list-style-type: none"> • SAA 2008R • SAA5139N • SAA5140N 	8 9 9	DD (MGT) DFO Keningau DFO Tambunan
2	Toyota Double Cab	9	<ul style="list-style-type: none"> • SAB3930A • SAB3927A • SAB3934A • SAB3937A • SAB3924A • SB3974B • SB3965B • SB6308B • SB6309B 	5 5 5 5 5 3 3 2 2	DFO Tambunan Office DFO Keningau Office DFO Tambunan Office DFO Tambunan Office DFO Tambunan Office FMU10 Operational Office FMU10 Operational Office DFO Keningau Office DFO Keningau Office
3	Motorcycle	2	<ul style="list-style-type: none"> • SAB8661G • SAB8659G 	2 2	DFO Keningau Office DFO Keningau Office
	Total	14			

3.1.4 Maintenance Costs of Vehicles

Table 7: Estimated cost for maintenance of Fortuner vehicles

No	Item	Frequencies/yr	Quantity Per vehicle	Unit of vehicle	Unit Cost (RM)	Total Cost (RM)
1	Diesel	300 working days	15 litres/day	3	2.50	33,750
2	General services	30,000 km/yr	5 services/yr	3	600/service	9,000
3	Tyres	2 tyre change/year	8 tyres/year	3	630/tyre	15,120
4	Miscellaneous parts and maintenance	as required	-	3	5,000.00	15,000
					TOTAL	72,870

Table 7.1: Estimated cost for maintenance of Double Cab vehicles

No	Item	Frequencies/yr	Quantity Per vehicle	Unit of vehicle	Unit Cost (RM)	Total Cost (RM)
1	Diesel	300 working days	30 litres/day	9	2.50	202,500
2	General services	50,000 km/yr	7 services/yr	9	600/service	37,800
3	Tyres	3 tyre change/year	12 tyres/year	9	630/tyre	68,040
4	Miscellaneous parts and maintenance	as required	-	9	10,000.00	90,000
					TOTAL	398,340

The estimated cost for vehicles maintenance is expected to be **RM 471, 210** as indicated in **Table 7** and **Table 7.1** respectively.

3.2 Budgets for 2014

Table 8 describes the budgets and their sources as well as the amount approved for CAMP FMU 10 in 2014. At the time of writing, not all of the warrants for the various Budgets have yet to be received. The first Three (3) budgets have no time limitation in their spending and could be brought forward for usage in the following year. The next Two (2) budgets however need to be spent within the 2014 period. All implementers are advised to manage the budget prudently, in view of the limited usage allowed under the various budgets. Payment of allowances to the other departmental partners in implementing their relevant strategies in 2014 will be done using the K75 budget.

Table 8: Budget Available for CAMP FMU 10 in 2014

Item	Budget Approved	Balance Amount Jan 2014(RM)	Source of Fund
1	Implementing CAMP Strategies for FMU 10, TMFR (ICFMU10) 2008 K75	858,518.82	Forest Rehabilitation Fund
2	Restoration of TMFR, Keningau Forestry District (RTMFR1) 2008	90,056	Forest Rehabilitation Fund
3	Restoration of TMFR, Keningau Forestry District (RTMFR2) 2012	220,000	Forest Rehabilitation Fund
4	Upgrading Facilities for FMU10 (UFFMU10)	237,161	Federal:MOTAC
5	Rehabilitation of Burnt Areas in FMU10 (RBAFMU10)	2,000,000	State
	TOTAL	3,405,735.82	

3.3 Forest Certification

All implementers had been briefed and informed of their respective assignments in filling up the Gaps as identified by the SCS Baseline Assessment (**Volume 4: Part 1 of the Revised CAMP for FMU10**). All of the Twenty Seven (27) gaps has been identified and will need to be closed, if at all, before the end of April 2014. SFD has been given a deadline ranging from 2013 to 2018 to close all these Twenty Seven (27) gaps under the earlier baseline Assessment by SCS.

A secretariat has been established for coordinating the relevant activities and reporting of the activities under this Forest Conservation Initiatives for FMU10. Discussion on the active issues will be included in the Monthly MPCT meeting. The Secretariat is headed by **Haji Mohd Nooh Mohd Jiran** and assisted by **Haji Afifuddin Jadin. Subari Suparlan** of SFM's office has been appointed as the **Resource Person** to help the MPCT of FMU10 in this agenda. Coordination at the headquarters level will be assisted by **Amelia E. Bosi**.

The Environmental Protection Department (EPD) had agreed for SFD to carry out its own EIA in 2013. FRC was subsequently given the task to implement the EIA. The final draft of the EIA was finalised in November 2013 and submitted to the Director of Forestry for endorsement for Final approval by the EPD. At the time of writing of this AWP, SFD has yet to receive an approval by EPD on the Draft EIA. The full assessment for Certification by SCS (Pre and Main) will now tentatively be set in June 2014. Barring any major incidences out of the ordinary, the MPCT is confident that FMU 10 will most probably be certified before the end of 2014. The cost for certification will be funded using the D11 Forest Restoration Budget.

4. STRATEGIES IMPLEMENTATION IN 2014

All of the Twelve (12) strategies and the Twenty Three (23) strategic actions under the Revised CAMP for FMU10 will continued to be implemented in 2014. The summary of the Strategies and strategic actions for implementation in 2014 and their respective expenditures are described in **Appendix 2**. The Monitoring of the Conservation Targets are described in **Appendix 3**. The details of each strategy are as follows:

4.1 Strategy 1: Boundary Demarcation and Maintenance

4.1.1 Trusmadi Forest Reserve

The Forest Resource Management (FRM) Division of Headquarters is assigned to carry out this task. The initial assessment made in 2009 of the outer boundary of the Trus Madi Forest Reserve by the Division revealed a total length of **136,400 meters** (m) to be surveyed for demarcation on the ground. For practical reason, the total length of the boundaries was divided into three (3) parts namely Part A in Tambunan Forestry District (**54,800 m**), parts B (**51,500 m**) and finally Part C (**35,500 m**), both of which is under the Keningau Forestry District.

As of December 2009, both Part A (Kg. Tiwag to Kg. Ulu Monsok) and Part B (Kg. Ulu Monsok to Kg. Batu Lunguyan) were successfully surveyed and demarcated on the ground. The total perimeter boundary surveyed was 106,300 m with the total cost of RM 379,491. The usual SFD Plates were also installed at a 20 m interval along these demarcated boundaries. This activity was funded under the 9th Malaysia Plan Project of the FRM Division. Due to the unavailability of fund, survey and demarcation work for Part C (Kg. Batu Lunguyan to Kg. Sinsuron) was not done in 2010 and 2011. Similarly, due to funding constraints in 2010 and 2011, only some portions of the boundaries, namely Part A were maintained and erected with SFD Plates.

A Contract for the survey of Part C of the Trus Madi Forest Reserve was finally executed between SFD and **Jurukur Swasta**, Kota Kinabalu, via Contract NO: **JP/SN/PPA-FMU10/PSHS/01/2012** on the **5th of March 2012**. The cost of the work was **RM 169,335** to be borne under **K 75 Budget**. The said survey was supposed to be completed over 48 weeks. However, due to some unavoidable governmental circumstances, the survey was put on hold

until further notice, through the Director's Circular **JPHTN/PP 100-4/1/KLT.55/105** dated **10th August 2012**. Some **17,803 m** (50.3 Percent) was however completed before the suspension of the activity. The RSP for the surveyed area was approved by the Lands and Survey Department and was registered under the approved code **RSP 2012139043** on the **4th June 2012**. Payment of RM 40,000 had been effected for the surveyed part.

4.1.2 Sg Kiluyu Forest Reserve

In May 2012, a tender was called to appoint a registered and reliable surveyor company to survey and demarcate the boundaries of Sg. Kiluyu Forest Reserve, which has been included as part of FMU10. A Contract was duly executed between SFD and **Jurukur Swasta** of Kota Kinabalu for the survey of **19,900 m** of Sg Kiluyu Boundaries on the **6th August 2012**, via Contract NO. **JP/SP/PPA-FMU10/PSHS/02/2012**. The work was scheduled to be completed within 48 weeks. However up to the end of 2013, work has yet to begin. The cost of this survey is **RM94, 923** was supposed to be borned under the **HoB projects** in 2013.

4.1.3 Prograss in 2013

The contract for the remaining Part C work, covering a total distance of **17,697 meters** or 49.8 percent, had expired on the **22nd April 2013**. It has yet to be renewed by the said contractor. Despite the lifting of the suspension of the work by the Director on **26th June 2013**, work has yet to begin until the end of 2013. Both K (FRM) and DFO (Keningau), on the meanwhile were still awaiting for the submission of the completed parameter survey covering the 17,803 meters surveyed from the contractor. SFD suspected that the contractor is facing problem in recruiting workers to resume its activities. Until the end of 2013, the contractor had failed to update K (FRM) on the subject matter. No progress for Sg. Kiluyu was done by the contractor due to the problem of the issuance of its RSP from the Land and Surveys Department.

4.1.4 Activities in 2014

Survey for **Part C** will be continued in 2014. With proper consultative process with the locals who object the survey of the area, it is believed that this work can be completed in middle of 2014. In the event that, the consultative process does not work, the next alternative would be a mediating process through the assistance of the relevant authorities such as police, the YB's etc. The other planned activity to be completed before the end of the quarter 2014 is to get the private surveyor to submit the softcopy of the parameter survey work for **Part B** to the District

Surveyor with copy to SFD. Similarly, the **FRM** will do a follow up on the survey of the Sg Kiluyu Forest Reserve, with regards to the **RSP** issuance with the Land and Survey Department.

4.2 Strategy 2: Conduct Surveillance Activities

This strategy is entrusted to ADFO Bonaventure Yampai and Haji Abdul Rahman Tuah for the Tambunan area, SFMO Jafin A. Bakar for the Apin – Apin area and SFC Haji Afiffudin Jadin for the Sinua area. Field staffs from Tambunan and Keningau would be doing the ground patrolling.

Both ground patrolling and aerial surveillance were done since 2009. Six (6) vehicles (4 Wheel Drive) were fully utilised by the field and the CAMP FMU10 Operational Office for the ground patrolling activities on a weekly basis. Helicopter from Sabah Air Sdn Bhd was rented for the aerial surveillance. A total of eleven (11) aerial surveillances were done from 2009 until 2012. As of the end of 2012, two (2) cases of encroachment and two (2) cases of poaching were apprehended and put under control by the Keningau Forestry District. Infrastructures were demolished at the encroached area, while the poaching cases were duly prosecuted with the help of the SWD, Keningau

4.2.1 Prograss in 2013

Both ground patrol and aerial surveillance which had proven to be effective in policing FMU10 were utilised in 2013. Due to the increasing work load of the relevant officers, the air surveillance was only done once in 2013. A reporting form (Borang Pemantauan FMU10) was used to record and log all ground patrols and aerial surveillances in 2013. Payments of allowances and helicopters' flight were paid under the D11 and K75 budgets respectively. The yearly budget (S16) was also utilised for allowance payments.

For management purposes, the FMU 10 is divided into four (4) Mukims under both the Tambunan and Keningau Forestry Districts. The Mukims are Kirokot, Toboh and Lintuhun in Tambunan and Mukim Apin –Apin (Unit SFM Keningau). There are three (3) main access Roads to the Trus Madi Forest Reserve via the Tambunan- Kaingaran route (Tambunan), Kepayan – Apin – Apin route (Keningau) and Keningau –Sinua route (Sook, Keningau). There is no access road yet to Sg Kiluyu Forest Reserve. A 24 hours manned gated entrance and

checking stations are constructed at both the Kaingaran and Apin-Apin roads. Therefore, strict checking and entrance enforcement was done for both stations.

The Sinua entrance has not been accorded a gated entrance and checking station due to the lack of staff and funding. However, this station is still safe from unwanted trespassers as the Villagers of Kg Sinua acted as the “custodians” on behalf of SFD. This was done through a well organised collaboration with the kampung folks under the Sinua Ecotourism Management Committee. Constant and active communications between the Sinua representatives (Laimin Dadau and Denis Ikon) and the Sinua Field Officer (SFC) Haji Affuddin Jadin is maintained. Apart from being surveillance ranger for SFD, their other main tasks would be as Tourist Guides and Porters for the climbing activities through the Sinua route. The demolishing of illegal oil palm plantation was done in July 2013, near Sinua. A total of 200 plants were destroyed over a four (4) acres area.

4.2.1 Activities in 2014

Both ground patrol and aerial surveillance will continue to be adopted in policing in FMU10 in 2014. “Borang Pemantauan” FMU10 will continue to be used to record and log all ground patrols and aerial surveillances activities in 2014. Aerial surveillance is planned to be done four (4) times in 2014.

4.3 Strategy 3: Forest Restoration

The objective of this strategy is to restore some 22,000 ha of burnt and degraded areas with indigenous species only. This area covers about 29 % of the FMU 10 total area. Three (3) sources of funding will be used in 2014. DD (MGT) Rahim Sulaiman is the main implementer under the RBAFMU10 budget. The DFO Keningau is the implementer for the RTMFR1 and RTMFR2 funding. SFMO Jafin A. Bakar and Awangku Affendy are the field supervisors for both activities.

The Ministry of Finance (MOF) Sabah approved the appointment of two (2) planting contractors for the restoration works in early 2009. The two (2) Companies chosen were Green Environmental Consult and Avitrade Plantation Sdn Bhd. The details of their contracts and the locations of the planting compartments are described in **Table 9**.

Table 9: Planting Contracts Approved by MOF Sabah for FMU 10

Name of Company	Contact No and Total Cost	Area Approved by MOF and Funding Source	Validity of Contract	Compartments Allocated for Contract Work
Avitrade Plantation Sdn Bhd	JP/TM-KGU/01/09 RM2,460,000	700 ha RFSTATE	13/08/2009 – 12/08/2010	R15, R17, R18, R23, R24A, R24B .R25A and R25B
Green Environmental Consult	JP/TM-KGU/02/09 RM592,000.00	160 ha RFTPH	19/09/2009 – 18/09/2011	R16 and R19
Avitrade Plantation Sdn Bhd	JP/TTN/TP(MGT) - D11/01/2011 RM1,938,000	300 ha (Planting) + 700 ha (maintenance) RFSTATE	19/09/2011 – 18/09/2013	R13A, R13B, R19B and R20 (Planting) R15, R17, R18, R23, R24A, R24B,R25A and R25B (Maintenance)
TOTAL	RM 4,990,000	Area Planted: 1,160 ha		

A total area of 1,000 ha had been planted by Avitrade Plantation Sdn Bhd by the end of 2011. The planted areas are located in Compartment R13A, R13B, R15, R17, R18, R19B, R20, R23, R24 and R25 (**Fig 2 and 3**). This contract is valid until 18 September 2013. On the other hand Green Environmental Consult concentrated its 160 ha planting in compartment R16 & R19A until the end of 2011 (**Fig 4**).

Since 2009, a total area of 1,160 ha had been reforested in FMU10 (**Table 10**). A total of ten (10) indigenous species were planted. The species are Bangkal, Binuang Kapur, Kembang Semangkok, Keruing, Laran, Selangan Batu, Seraya Putih, Seraya Bukit and Seraya Spp. A total of 310, 568 trees were planted in the 12 compartments.

Table 10: Annual Plantings in Trus Madi Forest Reserve (2009-2011)

Compartment Number	Area (Ha)	Number of planted trees	Species Planted (Local names)	Year Planted
Block A (CPT 16 &19)	51.90	14,000	Seraya Putih, Kembang Semangkok, Laran, Binuang, Kapur, Selangan Batu	2009
24A	130	37,180	Keruing, Bangkal, Seraya spp, Kapur, Selangan Batu, Laran, Binuang	2009
24B	70	20,020	Keruing, Bangkal, Seraya spp, Kapur, Selangan Batu, Laran, Binuang	2009
23	50	14,300	Keruing, Bangkal, Seraya Bukit, Kapur, Selangan Batu, Laran, Binuang	2009
25A	150	42,900	Keruing, Bangkal, Seraya Bukit, Kapur, Selangan Batu, Laran, Binuang	2009

Block B (CPT 16 &19)	51.90	14,000	Seraya Putih, Kembang Semangkok, Laran, Binuang, Kapur, Selangan Batu	2010
Block C (CPT 16 &19)	56.19	14,000	Seraya Putih, Kembang Semangkok, Laran, Binuang,	2010
25B	50	14,300	Laran, Binuang, Bangkal	2010
18	65	18,590	Bangkal, Seraya spp, Kapur, Selangan Batu, Laran, Binuang	2010
17	70	20,020	Bangkal, Seraya spp, Kapur, Selangan Batu, Laran, Binuang	2010
15	115	32,890	Bangkal, Seraya spp, Kapur, Selangan Batu, Laran, Binuang	2010
19B	50	13,156	Seraya spp, Kapur, Selangan Batu,	2011
13A	50	14,300	Seraya spp, Kapur, Selangan Batu,	2011
13B	100	28,600	Seraya spp, Kapur, Selangan Batu,	2011
20	100	26,312	Seraya spp, Kapur, Selangan Batu,	2011
	1,160	310,568	(10 Indigenous Species)	

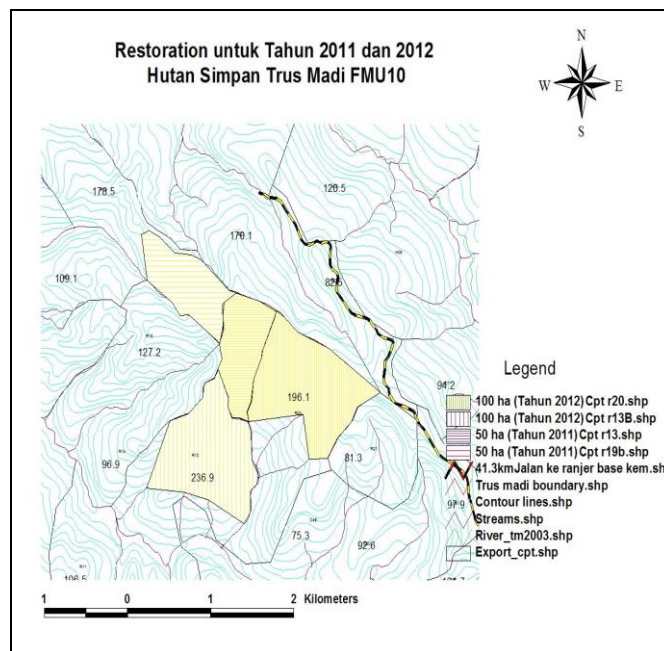


Figure 2: Location of the planted area in 2011 and 2012 by Avitrade Plantation Sdn Bhd

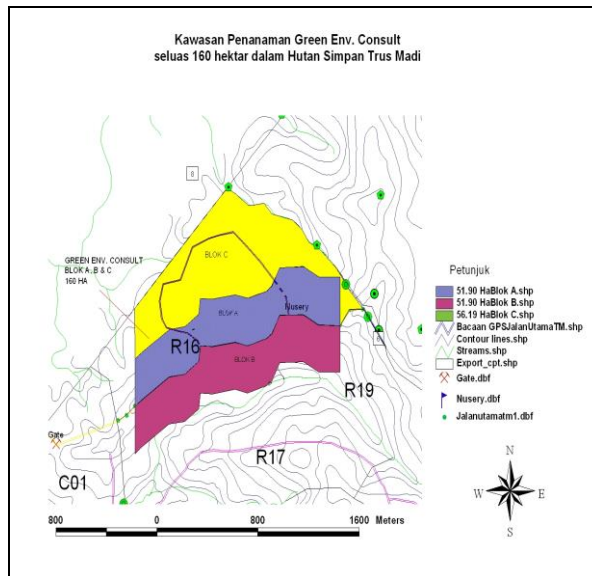


Figure 3: Location of the planted Area Contracted to Green Environmental Consult in 2010 and 2011 that were maintained in 2012

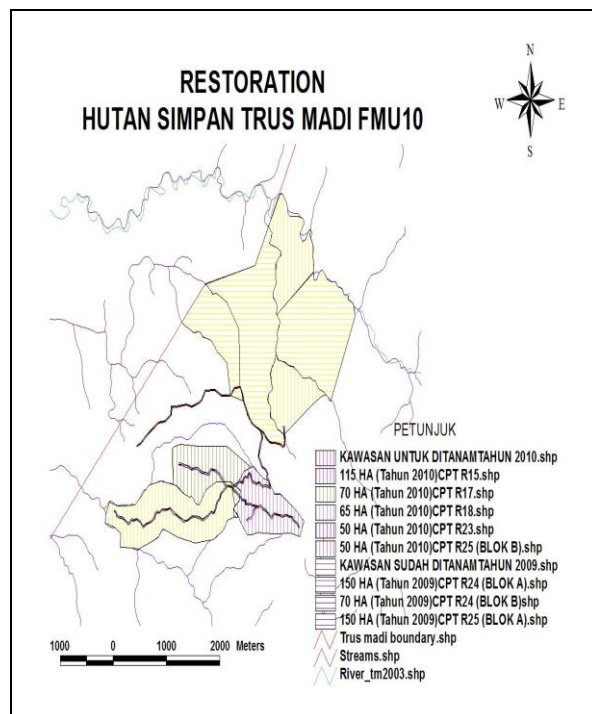


Figure 4: Location of the areas planted in 2009 and 2010 that were Maintained in 2011 and 2012 by Avitrade Plantation Sdn Bhd

4.3.2 Progress in 2013

The actual budget allocated in 2013 for this activity was **RM1, 950,000** in 2013. The total cost for the three (3) maintenance activities planned in 2013 was estimated to cost RM 763, 200. However, due to unavoidable circumstances, particularly on the sustainability of funding, and the need to carry out road maintenances and other necessary works, only One (1) maintenance work of 300 ha was done at the cost of **RM270, 000**. Similarly, due to funding sustainability, no new plantings were done in 2013.

4.3.3 Activities in 2014

A total of **RM 2,310,056** is available for this activity in 2013, from three (3) sources of budget. The maintenance of earlier plantings done in since 2009 would be continued in 2014. The total cost for the three (3) maintenance activities for the 1,160 ha, as well as new plantings envisaged at 100 ha and other related activities including payments of allowances and necessary maintenance is estimated at **RM 2, 310, 056** (Table 11, 12 and 13). The location of the New Planting of 100 ha is shown in Fig 5. All of these works will be expected to be contracted out by the middle of March 2014.

Table 11: Estimated Expenditure for the Maintenance of 160 ha in 2014 (PPM Budget)

No	Activity	RTM Fund Estimated cost (RM)
1	Supply <u>seedlings@RM5.00</u> x14,400	72,000
2	Maintenance @ RM180/ha x 160ha x 4	115,200
3	Road maintenance in compartment R16 & R19	122,856
TOTAL		310,056

Table 12: Estimated Expenditure for New Plantings (100 ha) in 2014

No	Activity	Estimated cost (RM)
1	Site preparation @RM900/ha x 100 ha	90,000
2	Planting@RM500 x 100 ha	50,000
3	Supply <u>seedlings@RM5.00</u> x300 x 100ha	150,000
4	Maintenance @ RM180/ha x 100 x 3	54,000
5	Fertilizer@RM120x3x100	36,000
6	Nursery Establishment	30,000
7	Marked Boundary@M1.50/meter	40,000
TOTAL		450,000

Table 13: Estimated Other Expenditure including maintenance of 1,000 ha old plantings in 2014

No	Activity	RTM Fund Estimated cost (RM)
1	Maintenance @ RM180/ha x 700 x 3	378,000
2	Maintenance @ RM180/ha x 300 x 3	162,000
3	Construction and maintenance of planting road (27.3km)	110,000
	Construction new road planting road (7.5km)	140,000
4	Maintenance and IT	65,000
5	Purchasing Field Equipment	70,000
6	Maintenance and services vehicle	120,000
7	Maintenance and services motorcycle	5,000
8	POL	40,000
	Allowances	200,000
7	Contingency	260,000
	TOTAL	1,550,000

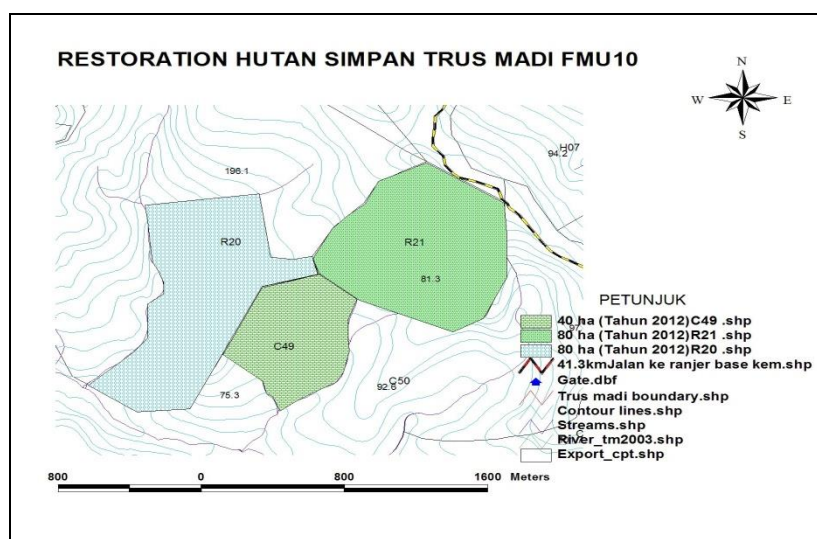


Figure 5: Locations of the Proposed 200 ha Plantings in 2014

4.3.1 Update on Yield Plots Establishment

Permanent Sample Plots were established randomly in the restoration areas in October, 2010 to assess the survival rates and performance of the planted seedlings within the restoration areas. Three permanent plots were set-up based on accessibility on three different compartments chosen at random, namely, **Plot 1 in Compartment 24**, **Plot 2 in Compartment 18** and **Plot 3 in Compartment R15**. All these three (3) compartments were

planted in August 2009. Each permanent plot was further divided into three (3) sub-plots to represent three different slope-ranges for each permanent plot. The sub-plots were labeled as upper slope, middle slope and bottom slope. Altogether, a total of nine (9) sub-plots were set-up in three (3) different permanent plots. Each sub-plot consisted of 15 points of planted seedlings at a distance of 3.5 m along cleared planting rows and 10 m between planting rows. Therefore, each newly established permanent plot contained 450 planted points or seedlings. The three (3) permanent plots, altogether, contained a total of 1,350 seedlings, covering an area of 4.725 ha. **Table 14** shows the species and the percentage distribution of the 1,350 seedlings enumerated within the three (3) Permanent Plots.

Table 14: Species and Number of Seedlings enumerated within the Three (3) Permanent Plots

Species	Number of Planted Seedlings (N)	Distribution Percentage (%)
Urutmata daun licin	398	29.5
Kapor	271	20.1
Seraya sp.	212	15.7
Bangkal	167	12.4
Seraya tembaga	111	8.2
Binuang	102	7.6
Seraya minyak	17	1.3
Banjutan	16	1.2
Keruing	8	0.6
Seraya bukit	6	0.4
Seraya kuning	6	0.4
Pisang-pisang	6	0.4
Selangan batu hitam	5	0.4
Seraya punai	4	0.3
Melapi	4	0.3
Laran	4	0.3
Selangan batu	4	0.3
Seraya daun mas	3	0.2
Pengiran kesat	3	0.2
Ara	2	0.1
TOTAL	1,350	100

The major species planted in the assessed area with more than 100 individuals were Uratmata Daun Licin (29.5%), Kapur (20.1%), Seraya sp (15.7%), Bangkal (12.4%), Seraya Tembaga (8.2%) and Binuang (7.6%). If all the Seraya species were to be lumped together, the total number of seraya seedlings would be 356 individuals or 26.4% of total seedlings, the second major species planted, after Uratmata Daun Licin. Re-planting was conducted before these Plots were established and the first assessments were done in October, 2010 (**14 months after planting**). The subsequent assessments were done on May, 2011 (**21 months**), July, 2012 (**35 months**) and the latest on August, 2013 (**48 months**).

Due to the uneven numbers of individuals of species, as depicted in Table 12, the assessment team had decided to enumerate only those species with initial plantings of more than 100 seedlings for the survival counts. The species were Uratmata Daun Licin, Kapur, Seraya, Bangkal, Seraya Tembaga and Binuang. The analysis revealed that after four (4) years of planting, Kapur recorded the highest survival rate at 59 %, followed by Seraya Tembaga at 48 %, Uratmata Daun Licin at 41 %, Bangkal at 29 %, Seraya at 15 % and Binuang at 7 %. The assessments further revealed some drastic decline of survival rates of the major planted seedlings, with the average survival rate of about 36% at the age of four (4) years old. In terms of survival rates in the various slope classes, the lower slopes exhibited the highest mortality rate at an average of about 71.6%. The upper and middle slope on the other hand recorded a mortality rate at about 40% at year 4 of planting.

Based on field observation, mortality was attributed to various factors. The major factor was stiff competitions from vigorous growth of weeds, mainly the Salingkawang. Within three (3) months without maintenance, weeds particularly the Salingkawang would have totally covered the slow growing planted seedlings. The site condition where planting was mostly done were located on steep slope (typical of this restoration site), where surface soil was easily eroded exposing bare rocky surface which inhibited the favorable condition for seedlings growth. Soil formation at the lower slope seems fragile and land-slide occurs during rainy season, further affected the mortality rate of the planted seedlings.

4.4 Strategy 4: Formulate Suitable Visitation, Flora and Fauna Collections Procedure

The Non - destructive activities currently allowed in FMU10 since 2009 are adventure tourism, Insect collection and Mountain climbing. One (1) Occupational Permit (OP) is issued to Borneo Jungle Girl (BJG) to operate its adventure Tourism activities located at KM 18 from the Apin – Apin Forestry Checkpoint. A fauna collection License is currently issued to Chewi Entomological Services to collect Insects from FMU10. Mountain climbing is managed under Keningau Forestry Office prior the closure of the Kaingaran route in August 2011. All eco-tourism related activities including mountain climbing as well as any collections activities are based on the Guidelines approved by the Director of Forestry in November 2012. As much as possible, the MPCT had also agreed to use local Dialects, mainly **Dusun** and **Murut** to represent the terms used for ecotourism purposes in FMU10.

The main objective of this strategy is to recommend to the Director all appropriate Guidelines and procedures as well as amendments for fauna and flora collections as well as orderly visitation to Mt Trusmadi through the three (3) climbing routes available, namely, the **Wayaan** (a **Dusun** Term for Trail) **Kaingaran** in Tambunan, **Wayaan Mastan** in Apin – Apin Keningau and **Wayaan Mannan** in Sinua, Sook. The MPCT decided to uphold the two (2) previous Committee Structures and Term of References (TOR) under the previous CAMP. However, they are now merged into a single Committee under DD (MGT) Rahim Sulaiman (**Table 15**). The Pusat Biodiversiti Sabah is represented by Dr. Abdul Fatah Amir in the committee. Meetings will be conducted on a quarterly basis. However should there be any matters of urgency to be handled the committee will convened to make recommendations to the Director of Forestry for his decisions.

The Terms of Reference of the Committee are as follows:

- Revise Climbing Permits Issuance including development of guidelines for visitors and climbing certificate and make recommendation for implementation to the Director of Forestry for approval.
- To review the existing procedures and conditions of flora and fauna collection in FMU 10 and recommend appropriate changes for the approval of the Director of Forestry for implementation
- To review existing procedures and conditions of scientific research permits in FMU 10 and recommend appropriate recommendations to the Director of Forestry for decisions to the relevant authority in Putrajaya and Kota Kinabalu.

- Registration of all local guides and porters with a view of assigning climbing schedule and make recommendation for implementation for the approval of the Director of Forestry.

Table 15: Composition of the Visitations and Collection Committee for FMU10

No	Personal	Responsibility
1	DD (MGT) Rahim Sulaiman	Chairman
2	SFC Haji Afifuddin Jadin	Secretary
3	DFO Keningau Azman Said	Member
4	DFO Tambunan Salleh Intang	Member
5	ADO Tambunan Robert Stidi	Member
6	ADO Keningau Mohd Guntur Arif	Member
7	SWDO Benedict Jani	Member
8	RP Anuar Mohd	Member
9	RP Dr. Chey Vun Khen	Member
10	Dr Abdul Fatah Amir (Pusat Biodiversiti Sabah)	Member

- To receive and appraise any proposal by agencies inside and outside Sabah for collaborative work on conservation in FMU10 and recommend appropriate follow up to the project proponent through the Director of Forestry.
- Review of registration procedure at check point and implement the appropriate changes.
- Revision of the pre and post climbing baggage checks and make recommendation for appropriate changes in the procedure for implementation.
- Holding regular stakeholders consultation with Mount Trus Madi tourist operators, Guides and Porters and implement any appropriate suggestions or changes.
- To evaluate the feasibility of giving a Concession Agreement to Locals or Local Companies to operate the management of the Climbing Activities and Rest house in Kaingaran and make recommendations to the Director of Forestry
- . To hold quarterly meeting of the committee.

4.4.1 Progress in 2013

Apart from the usual climbing visitations to Mt Trusmadi, a number of notable events took place in late 2013 in FMU10. In October 2013, a group of 52 soldiers from Batalion 15 Briged Sabah had climbed the Mt. Trusmadi via Kaingaran Tambunan as a part of their staffs' high altitude training with the approval from the Director (Ref: **JPHTN/PP 700-1/3/9/KLT.13(2) dated 10.10.2013**). FMU10 was also chosen as the main site for the Annual Borneo Safari International off Road activities, organised by the Sabah Four Wheeled Drive Association. A total of 174 participants and some 65 four wheeled vehicles took part in the week long event (27th October – 2nd November 2014). The Apin-Apin part of FMU10 was used as the main route for various categories of competencies for 4WD adventures.

Since October 2011 to January 2013, the Sinua Route recorded a total of **325** visitors (**Table 16**). The total of visitors indicated an ever increasing numbers of visitations annually. To facilitate visitations, and to promote the economic well beings of the local populations of Sinua, SFD had arranged for a collaboration with a small enterprise, led by an experienced local guide from Sinua, Denis Ikon. The collaborations had allowed for the opportunities for the local communities to be actively involved in the ecotourism component of Mt. Trusmadi, through the employments as traditional dancers, traditional musicians and guides as well as porters. The Climbing Guidelines to Mt. Trusmadi which was approved earlier by the Director of Forestry in **November 2012** was fully adhered to and implemented in 2013.

In November 2013, at the request of the MPCT for FMU10, a Special Honorary Ranger Course was held in Keningau. A total of 42 participants were selected to attend this course. Amongst the participants, thirteen (13) villagers were from Kampung Sinua. The full lists of participants are as described in **Appendix 1**. The major objective of the course was to train the selected locals and equip them with basic forestry management and administrations knowledge to the level of a Forest Ranger of SFD. This crash course would also be a stepping stone for their appointments as Honorary Forest Ranger in 2014 onwards, should the need arises.

Table 16: Visitors to Trus Madi via the Sinua Route (2010 – 2013)

Month	Local Visitors				Foreign Visitors				Total Visitors			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Jan	0	0	0	19	0	0	0	0	0	0	0	19
Feb	0	0	0	1	0	0	0	10	0	0	0	11
March	0	0	11	8	0	0	3	2	0	0	14	10
April	0	0	0	2	0	0	0	6	0	0	0	8
May	0	0	0	7	0	0	0	4	0	0	0	11
June	0	0	13	0	0	0	2	5	0	0	15	5
July	0	0	7	0	0	0	6	0	0	0	13	0
Aug	0	0	13	13	0	0	3	4	0	0	16	17
Sep	0	0	4	1	0	0	8	3	0	0	12	4
Oct	0	9	1	0	0	1	1	1	0	10	2	1
Nov	0	36	11	20	0	1	2	0	0	37	13	20
Dec	0	45	10	12	0	2	11	7	0	47	21	19
TOTAL	0	90	70	83	0	4	36	39	0	94	106	125

4.4.1 Activities in 2014

The secretariat is handled by Sinua Field Coordinator (SFC) Haji Afiffudin Jadin. Quarterly meetings would be done in 2014 or as when the need arises. Based on the past records of increasing visitations to Mt. Trusmadi, through Wayaan Mannan, Sinua will surely open up more ecotourism employment opportunities to the local people surrounding FMU10. The opening up of the completed facilities at Wayaan Kaingaran, envisaged by the end of March 2014, would provide employment opportunities for the Tambunan locals. To enhance the role of the local communities in ecotourism management of the FMU10, SFD has and will continue to train the relevant local communities to operate proper homestays and to be Tourist guides as well as porter services. The MPCT has discussed the possibilities of the District Offices of both

Tambunan and Keningau to provide Localised Tourist Guides courses to the locals. Hopefully, funds would be made available to both agencies for these courses to be held in 2014.

4.5 Strategy 5: Upgrading and Maintenance of Relevant Infrastructures

Providing good accessibility and on ground presence in the Trusmadi Forest Reserve was the major focus under this strategy when the initial CAMP for FMU10 was approved in 2009. Implementation of this strategy was shouldered jointly by ADFO Tambunan, Bonaventure Yampai, SFMO Jafin A. Bakar and SFC, Haji Afifuddin Jadin.

Since early 2013, the main access road from Sook to Kg. Sinua was upgraded to an all weather sealed road by the Jabatan Kerja Raya (JKR) Sabah and is currently around 90 % completed. This has greatly facilitated the mobility and accesibility of the communities as well as tourists into and outside Sinua. The remaining 2 km access road to Wokok Sinua, the starting point, for climbing Mt. Trusmadi through Wayaan Mannan, is adequately maintained by Jabatan Pengairan dan Saliran, being the custodian over the road.

Access road to the Wayaan Kaingaran has also recently been improved through the sealing of the Tambunan – Kaingaran road. This will further add some 4 KM of sealed road, in addition to the 4 KM of Kaingaran – Mesej road that was competed in 2012. The only remaining unsealed road by 2014, are the Kuang Batu 8 Road that is under the long term contract Maintenece (under the Ministry of Finance Sabah) by Syarikat Kekal Mewah Sdn Bhd. This particular stretch of road is the only remaining “bad sector” of the whole networks of road leading to the Tambunan Forestry Check Point and the cimbing Starting Point. Fortunately, the Tambunan District Council, the custodian of the Kuang Batu 8 strecth, has agreed to work together with the MPCT for FMU10 to seek additional funding for this road. A budget proposal had been submitted duly to UPEN Sabah in the middle of 2013. Infact the MPCT had also been asked to provide the details length and locations of both the H S Martyn and the Ali Hassan roads to JKR Sabah. Sabah Tourism had played a big role in highlighting the roads conditions in FMU10 for the subsequent action by JKR Sabah. Hopefully, funding would be made available to maintain or upgrade both roads in the future as indicated by JKR Sabah.

4.5.1 Progress in 2013

A number of activities were done in Tambunan, Keningau as well as Sinua were implemented in 2013. In Tambunan, the upgrading work for a 3 km boardwalk and a 20 pax Rest House at Wayaan Kaingaran continued until the end of the year. Under the initial contract, constructions of the facilities were supposed to be completed by 8th February 2013. However due to weather conditions, workers recruitments problems as well as late payments by KeKPAS, Extension of Time (EOT) was given twice (2) to Usaha Hakkat Sdn Bhd to complete both components. The first extension was until **20th July 2013** and the second EOT by **20th November 2013**. Physical Progress achieved was 88%. In order to have the project completed in time, the contractor was advised to apply for omission of about **693.7 m** of the boardwalk. This particular stretch has an undulating and challenging terrain that would need another three (3) months of work to be completed. As a result about **RM 350,000** out of the total cost **RM 3,347,702.51** of the project is expected to be deducted from this decision. The overall performance of financial progress of this project is 82%. A total sum of RM 2,760,478.10 had been paid out to the contractor since 2011. In 2013, the amount paid out for work done by the contractor was **RM 1,387,600.13**. The major causes of delays were unfavourable weather and recurring bad road condition, especially the gravelled 3 KM stretch of road under Kekal Mewah Sdn Bhd.

The HS Martyn forest road in Tambunan, stretching some **13 Kilometer (KM)** from the end of Kekal Mewah Road (Jalan Kuang Batu 8) to the Kitingan Point (Climbing point) was maintained. The Ali Hassan Road that has a total stretch of **48 km** was also maintained in Keningau. However, due to funding constraints, only the first stretch of six (**6**) **km** of the road was graveled. The remaining **42 km** stretch was only graded without any additional gravelling done. For both roads, a cost of **RM 184, 000** was provided by the MPCT. At Wokok (a **Dusun** word for Dam) Sinua, a wooden camping shade (Pelantar Mannan) and 2 units of toilet were constructed. Both Checkpoints and staff quarters at Tambunan and Keningau were also maintained costing **RM 90,000**. Constructions of a Multipurpose Hall and Kitchen at Mirad Irad Base were done by the staff of Tambunan at a cost of around **RM10, 000**. Construction of a Car Park area and a genset House at costing **RM 50,000** each were also constructed at Apin – Apin, Keningau.

4.5.2 Activities in 2014

Unfortunately, despite the submission for major fundings in 2013 to UPEN, in late January 2014, the MPCT was finally told that there is not much funding available for the maintenance and upgrading of the main infrastructures such as access roads and others in 2014. The remaining uncompleted boardwalk work of 12% at Wayaan Kainganran will be tendered in **April 2014**. MOTAC, through an internal discussion in late **January 2014**, had agreed for a sum of **RM 237,161.08** for this work.

As the maintenance budget is limited, it is envisaged that the greater part of the year would be spent in monitoring as well as planning for the remaining uncompleted upgrading work in Wayaan Kainganran and to improve basic facilities at Apin – Apin and Sinua, using the recently approved Budget of **RM 1 Million** that will be available in **2015**. Specific components under this budget have yet to be ascertained during the time of writing of this AWP. Further consultations will need to be done with **UPEN** and **KePKAS** to determine the components allowed to be developed. The Focus in 2014 will be at the Block planting roads for the new and the old restoration areas. A budget of **RM 260, 000** has been set aside for this purpose.

4.6 Strategy 6: Implement Relevant Social Forestry Activities

Baseline information on encroachers and their activities in FMU10 was partly done in 2009 headed by SFMO Jafin Bakar, using limited Social Baseline Survey (SBS) approach. The focus then was on gathering preliminary data for the encroachers in the Apin – Apin Keningau area only. Since then, a comprehensive SBS involving a larger area did not progressed much due to the heavy work schedules of the relevant staff of the SFM Division in executing the SBS in other parts of the state as well as SFMO Jafin Bakar who was initially the implementer of this strategy. It was then entrusted to FMU10 Planning Officer (FMU10PO) Awangku Effendy Pg Mahmud in 2012. His main task was to gather data of encroachers doing agricultural activities in FMU10 using a comprehensive SBS methodology employed by SFD together with the FRM Division, entrusted to Ricky Alisky Martin and assisted by Raman Lamat. A comprehensive SBS on the villages located within a radius of 2 km from FMU10 was finally conducted under the leadership of Raman Lamat of the SFM Division from **April until May 2012**. This activity was coordinated by Awangku Effendy Pg Mahmud with the participation of the field staff from Keningau, Tambunan and Sook Forestry Office. More than **400 respondents** from **21 villages** were interviewed on a one to one basis. Respondents from two (2) kampungs, namely Kanawahon and Kaimadang however did not participate in the interview.

4.6.1 Progress in 2013

The analysed Report of the SBS done in 2012 was tabled during the MPCT Meeting held in Keningau on **January 2013** by Awangku Effendy and the FRM Team. The meeting endorsed the major findings of the report that there was no kampungs ever established in FMU10. The report also found that encroachments activities were mostly done by locals villagers from various Kampung adjacent and outside of FMU10. The meeting also endorsed the need for another **Specific SBS** to be done in view of the lack of enumeration of the estimated encroached areas used for farming purposes as well as determination of the time line of their establishments in the 2012 SBS. The meeting was also informed of the decision of the Sabah State Cabinet in dealing with encroachers of this nature. Awangku Effendy was asked to get the specific Circular that set the timeline of prior and after 1998 as the cut-off point of allowing encroachers to continue tilling the encroached areas and the provision of the payment of a higher occupation Permit rate. The Meeting also noted that a total of **400 respondents** were interviewed in the 2012 SBS activity.

Subsequent specific SBS was done in accordance to the decision of the meeting. It was done in two (2) phases (**Table 15**). The first phase, done from March until June 2013 was led by RH Suzali Abdul Ben with the assistance of three (3) field staffs from the Keningau Office and two (2) staffs from the Tambunan Office. Altogether a total of seven (7) Kampung were enumerated by the team, namely Kg. Linsudan, Kg. Merasak, Kg. Marapok, Kg. Mailo, Kg. Tohan Baru, Kg. Merapong and Kg. Kilambang. A total of 205 respondents were interviewed. The ground survey incurred an expenditure of **RM30, 000** in allowances payments. The second phase, done from September – October 2013, was headed by Jasni Abdullah. He was assisted by four (4) field staffs from Keningau, two (2) from Sook, one (1) each from the Tenom and Tambunan Forestry Offices. Under this phase, only two (2) Kampung were successfully enumerated, involving a total of **84 respondents**, from Kg. Kepayan Baru and Kg. Luanti Baru (**Table 17**). The cultivators from Kg. Kaimadang however refused to respond during the specific SBS activities, despite an earlier agreement for the enumerations. A cost of **RM 25, 000** in allowances payment was incurred.

**Table 17: Kampung Enumerated in FMU10 under the Specific SBS
(March - June 2013 and Sept – Oct 2013)**

Kampung Enumerated		No. of Respondents for Areas Cultivated in FMU10 Prior to Timeline 1998		No. of Respondents For Areas Cultivated in FMU10 After Timeline 1998		Total	
No	Name	Respondents	Estimated Area Cultivated (Ha)	Respondents	Estimated Area Cultivated (Ha)	Respondents In FMU10	Estimated Cultivated Area (Ha)
		FIRST	PHASE	March to	JUNE	2013	
1	Kundasang Baru / Kilambang	25	162.15	-	-	25	162.15
2	Linsudan	15	68.69	28	98.71	43	167.40
3	Mailo	29	155.60	1	1.19	30	156.80
4	Merapok	39	126.02	2	5.33	41	131.35
5	Marasak / Panui	36	225.18	3	17.32	39	242.50
6	Merapong	5	59.61	1	4.79	4	64.40
7	Tohan Baru	11	65.83	10	54.89	21	120.72
Total		160	863.10	45	182.22	205	1,045.32
		SECOND	PHASE	SEPT	To OCT	2013	
1	Kepayan Baru	50	1,572.68	5	22.32	55	1,595
2	Luanti Baru	28	52.10	1	10.8	29	62.90
3	Kaimadang	Na	na	na	na	na	na
Total		78	1,624.78	6	33.12	84	1,657.90
GRANDTOTAL		238	2,487.88	51	215.34	289	2,703.22

4.1 Activities in 2014

Based on the analysis in **Table 17**, an estimated area of **2,703.22 ha** of FMU10 were encroached by some **289 villagers** from **Nine (9) kampongs** excluding that from Kg Kaimadang. Due to the need to ascertain and to consult other SFD Planners and field Implementers especially those having similar encroachments problems with regards to the rates of several activities and parameters as specified in **Table 18**, no specific Write - up especially on costings of the various operations could be provided yet in this AWP. Awangku Effendy has been instructed to collate all relevant costings from various possible SFD's sources to develop a realistic costings and operation plan for FMU10 before **May 2014**. Recommendations would then be forwarded to Director of Forestry for the final decisions.

Another specific SBS will be extended for Kg. Kaimadang in 2014 to determine the extent of encroachments. Recommendations to destroy all cultivated areas will be forwarded to the Director of Forestry, in the event of the failure of the villagers from Kg Kaimadang to cooperate (**Table 19**).

Table 18: List of Recommendations and Actions to be done for FMU10

Cultivations In FMU10 Prior to 1998 Timeline	Cultivations in FMU10 After 1998 Timeline
<ul style="list-style-type: none"> i. Determinations of the costs of Field Documentations (Survey Plan of Actual Area Cultivated and Assessment of Rates for OP to be Charged to Respondents Villagers) ii. Determinations of rate of OP permits to be Charged iii. Consultations with Relevant Respondents in Community Forestry Dialogues as Specified under the GFTN Forest Certifications' Gap 	<ul style="list-style-type: none"> i. Issuance of Notice to Eliminate All Illegal Structures including Cultivated Areas By DFO Keningau to All Identified (51 respondents) so far, Excluding those from Kg Kaimadang ii. Determination of Costs Involved and Reforestation Plan Formulation for the 215.34 ha area iii. Operation "MUSNAH" on the 215.34 ha iv. Reforestation Plan Implementation on the 215.34 ha encroached Area

Table 19: Strategic Actions for the Implementations of the Relevant Social Forestry Activities in 2014

NO	Strategic Actions	Estimated Cost (RM)	1	2	3	4	5	6	7	8	9	10	11	12
1.	Submit Full Written Report and Recommendations to Director of Forestry				X									
2.	Community consultations (Tambunan and Keningau) as specified under forest certifications GFTN's Gaps	1,500.00		X						X				
3.	SBS work for Kg. Kaimadang (if Cooperation is Given by villagers) Otherwise Full destructions of any cultivated crops will be recommended to Director Of Forestry	30,000					X	X						
	Total Estimated cost:	31,500.00												

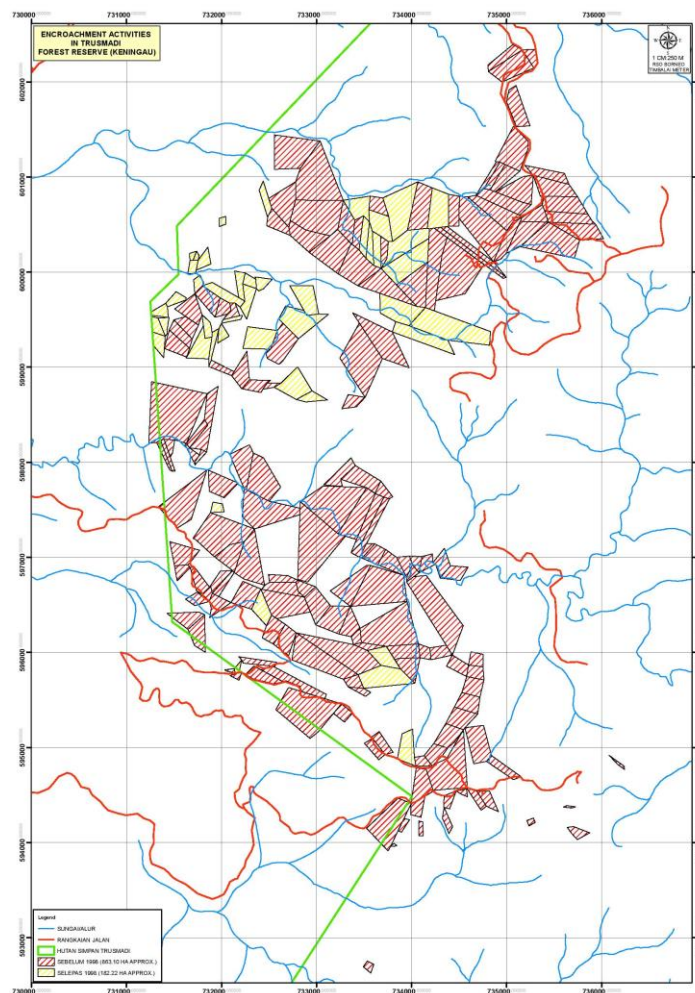


Figure 6: Locations of the Encroachment activities in Accordance to the 1998 Timeline In FMU10

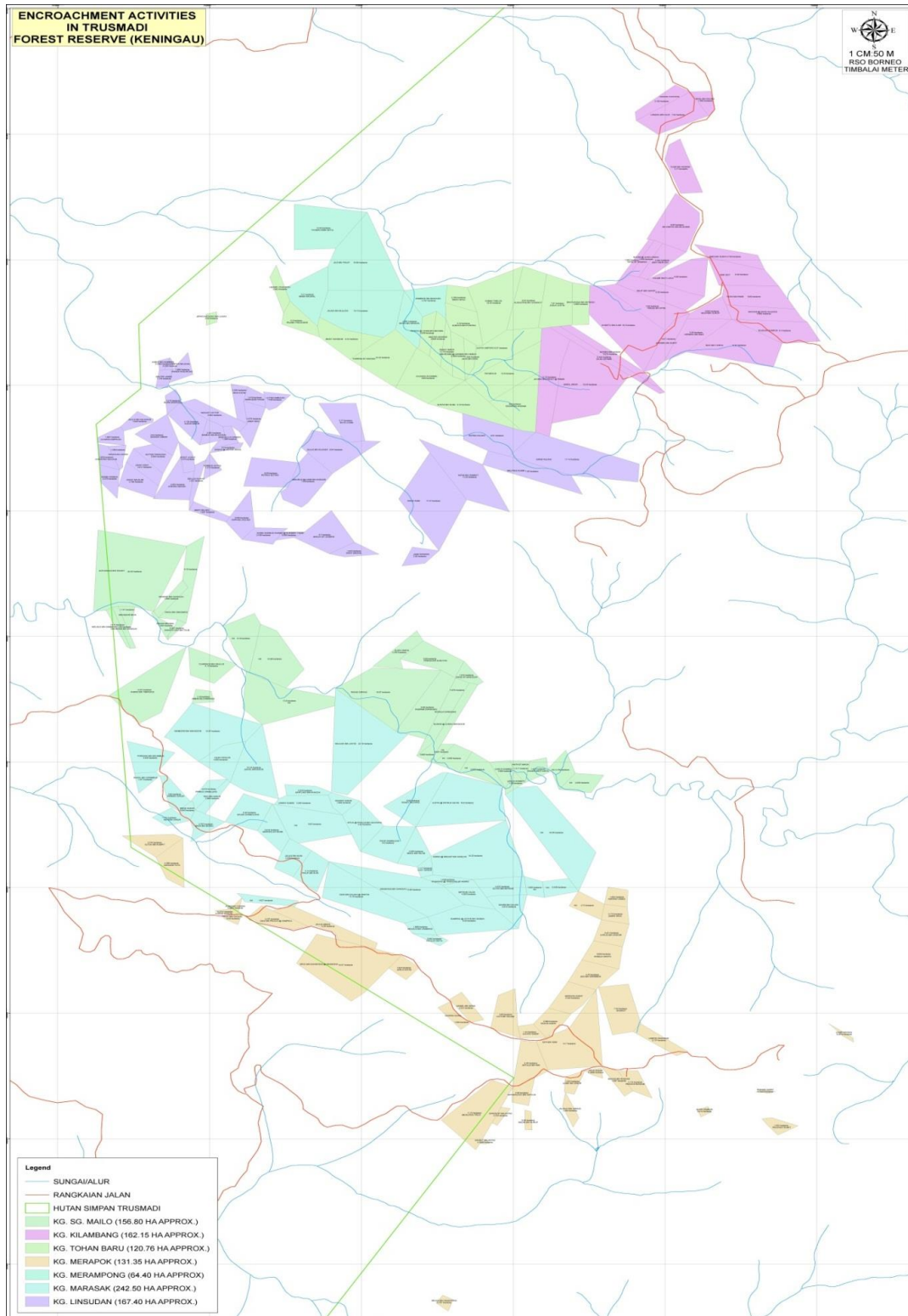


Figure 7: Locations of Cultivated areas in FMU10 in accordance to the Respondents' kampungs

4.7 Strategy 7: Develop and Implement Controlled Hunting Plan in Ulu Rompon and Ulu Pangas

This strategy was headed by the Keningau SWD, headed by Benedict Jani. The site for this activity is located at KM 18 Jalan Ali Hasan, Ulu Pangas, Keningau. Since 2009 a number of activities were carried out to decide on the next course of actions under the Controlled Hunting Strategy in FMU 10 Trus Madi Forest Reserve. The facilities constructed in 2009 were a two room guard post, 12 Pax hunters lodge and a 10 vehicle car park. The facility was also equipped with electricity and gravity water supply. Apart from that some signboards were also erected. In 2010, general regulations signage and sketch map of the location of the hunting trails was erected.

Identification of areas for the development of hunting trail was carried out on 15-21/7/2010. Eventually five (5) trails, each extending 2 KM in length, within the control hunting area were successfully developed. The trails were named as Pelanduk Trail, Landak Trail, Keluang Trail, Kijang Trail and Payau Trail. These activities were implemented with the collaboration between Keningau Wildlife Office staff and staff from other Wildlife Stations.

4.7.1 Progress in 2013

A total of six (6) Wildlife inventories were done in the area since 2009 (**Table 20**). The objective was to determine the population and density of wildlife species especially of game animal (species) as listed in Schedule 3 of the Wildlife Conservation Enactment 1997. Random surveys through transect lines along the hunting trails was done to determine the presence of the wildlifes in the area. Sightings, dungs, Claw marks, carccas, wallows, sound and foot prints were used as indicators of their presence. SWD staff from the other districts including headquarters, West Coast, Lok Kawi Wildlife Park, Lahad Datu, Sandakan and Tawau was recruited for this general inventory on wildlife. **Table 21a and 21b** summarised the findings of the surveys done in 2013. Altogether, a total of Nine (9) Mammals, One (1) reptilian and 34 species of birds were recorded from the said survey.

4.7.2 Activities in 2014

Activities to be done in 2014 under this strategy involve the maintenance of the hunting trails, wildlife surveys and conducting wildlife courses. These activities are envisaged to incur an expenditure of RM 40,000. It will be borned under K75.

Table 20: Wildlife Inventories Done in FMU10 since 2009

NO	DATE OF INVENTORY	RESULTS OF INVENTORY
1	15-21/07/2010	10 species of mammals and 25 species of birds
2	16-19/03/2011	10 species of mammals and 54 species of birds
3	25-28/04/2011	11 species of mammals and 47 species of birds.
4	10-15/10/2011	10 mammal species and 20 bird species
5	10-15/09/2012	14 species of mammals and 41 species of birds
6	8 – 13 July 2013	9 Species of mammals, 34 bird and 1 reptile #

#: Table 17a – 17b describes the detailed results

Table 21a: Mammals and Reptile Identified in Fauna Inventory in 2013

ITEM	COMMON NAME	SCIENTIFIC NAME
01	Sambar Deer	<i>Cervus unicolor</i>
02	Common Barking Deer	<i>Muntiacus muntjac</i>
03	Bornion Mountain Ground Squirrel	<i>Dremomys aceretti</i>
04	Munsang spp?	-
05	Pangolin	<i>Manis javanica</i>
06	Pig-Tailed Macaque	<i>Macaca nemestrina</i>
07	Plain Pigmy Squirrel	<i>Exilisciurus whiteheadi</i>
08	Bearded Pig	<i>Sus barbatus</i>
09	Bornion Gibbon	<i>Hylobates muelleri</i>
10	Blue Long Glanded (reptile)	<i>Maticora bivirgata flaviceps</i>

Table 21b: Birds identified in Inventory in 2013

Item	COMMON NAME	SCIENTIFIC NAME
01.	Great Argus	<i>Argusianus argus</i>
02.	Rhinoceros Hornbill	<i>Buceros rhinoceros</i>
03.	Golden-Naped Barbet	<i>Megalaima pulcherrima</i>
04.	Chestnut-Crested Babbler	<i>Yuhina everetti</i>
05.	Mountain Barbet	<i>Megalaima monticola</i>
06.	Yellow-Crowned Barbet	<i>Megalaima henricii</i>
07.	Lesser Green Leafbird	<i>Chloropsis cyanopogon</i>
08.	Ochraceous Bul Bul	<i>Criniger ochraceus</i>
09.	Pied Fantail	<i>Rhipidura javanica</i>
10.	Grey-And-Brown Laughingthrush	<i>Garrulax pillatus</i>
11.	Ashy Drongo	<i>Dicrurus leucophaeus</i>
12.	Spotted Fantail	<i>Rhipidura perlata</i>
13.	White-Rumped Shama	<i>Copsychus malabaricus</i>
14.	Rufous Piculet	<i>Sasia abnormis</i>
15.	Little Spider Hunter	<i>Arachnothera longirostra</i>
16.	Siberian Blue Robin	<i>Erithacus cyane</i>
17.	Black Crested Bul Bul	<i>Pycnonotus melanicterus</i>
18.	Gold-Whiskered Barbet	<i>Megalaima chrysopogon</i>
19.	Blue-Eared Barbet	<i>Megalaima australis</i>
20.	Emerald Dove	<i>Chalcophaps indica</i>
21.	Black-Naped Monarch	<i>Hypothymis azurea</i>
22.	Creasted Serpent Eagle	<i>Spilornis cheela</i>
23.	Helmeted Hornbill	<i>Rhinoplax vigil</i>
24.	Woodpeckers Sp?	-
25.	Pied Hornbill	<i>Anthrococeros coronatus</i>
26.	Scacly Breasted Partridge	<i>Arborophila charltoni</i>
27.	Scacly Breasted Partridge	<i>Arborophila charltoni</i>
28.	Black-Necked Tailorbird	<i>Orthotomus atrogularis</i>
29.	Scarlet Minivet	<i>Pericrocotus flammeus</i>
30.	White-Crowned Hornbill	<i>Berenicornis comatus</i>
31.	Black -Headed Bul Bul	<i>pycnonotus atriceps</i>
32.	Grey and Buff Woodpecker	<i>Hemicircus concretus</i>
33.	Greater GreenLeafbird	<i>Chloropsis sonnerati</i>
34.	Banded Woodpecker	<i>Picus puniceus</i>

4.8 Strategy 8: Establish Community Woodlots in Stateland Area in Tambunan Adjoining FMU 10

The objective of this strategy is to provide necessary wood resources for the Tambunan local communities in a stateland area outside FMU 10 near kampong Kaingaran. This objective is also expected to abate or reduce the threats of communities engaging in illegal timber extraction in FMU 10 by providing alternative timber resources for their domestic usages and managed them sustainably by the communities themselves. The task to proceed and to

implement this strategy was entrusted to DFO Tambunan assisted by ADFO Julius Peter Indu. Resource Person Hj Mohd Nooh Jiran would also be assisting in this strategy.

A quick survey of the villages situated along the fringes of FMU10 in the early days of the planning stage indicated that the houses in those villages are primarily built using chainsaw-cut timber. As for now, those villagers got their timber from their own lots of forest but these privately owned forests are being converted to agriculture land. It is envisaged that in a not too distant future, wood will be in a very short supply around the Tambunan area, thus putting FMU10 increasingly threatened from illegal wood harvesting.

To abate that threat, it was decided that a community woodlot outside the Trus Madi Forest Reserve should be established. After some deliberation, the area formally issued with logging TOL to Ipang Ganggal, Anthony Dubis, Regina Rundi and Jimmy Jipulis, Intra Bayangan and Alam Semesta which is situated at the headwaters of Namadan and Kaingaran rivers and has a combined area of approximately 3,700 ha was selected. The reasons for selecting this area are, firstly because it could act as a buffer zone for FMU10 and secondly because the soils of the area falls within the Trus Madi soil series, which is best left forested due of its fragile characteristics and therefore not suitable for agriculture development.

The woodlot will be administered and managed by a committee which will be headed by the DFO Tambunan. Members of the committee would include the District Officer of Tambunan, the District Chief of Tambunan and relevant Heads of Department in Tambunan. Through such mechanism, each relevant Department will have a role to play in supporting the management of the Woodlots Strategy. Forestry Department through FMU10 will be entrusted in forest inventory, data analysis and preparations of Comprehensive Harvesting Plan and in seedlings supply.

A sub-committee, to be headed by the Native Chief, will also be formed. He will be assisted by all the village headmen and the Village Development and Security Committee (JKKK) chairpersons from participating villages. Its function will be as a communal work coordinating body. During the days of Forest Guard Peter Lupang Tingkalus way back in 1935, he and a local charismatic Native Chief by the name OKK Tahiban, gather together all bamboo extraction permit holder on an appointed date to carry out communal work to plant bamboo in an area designated to be a bamboo reserve. In this sub-committee, the Native Chief will walk

in the shoes of OKK Tahiban to keep tab of all permit holders and to gather and mobilise them to participate in communal work at the woodlot.

A briefing related to the concept and implementation of the community woodlot, the beneficiaries and mechanisms was done at length by Rahim Sulaiman, DD (MGT) in a special meeting with the District Officer and PPHT personals of Tambunan District in the middle of 2009. The Woodlot matter was also highlighted during the Stakeholder workshop in Hotel Perkasa Keningau and was endorsed by all except by delegates form Kaingaran, Ponoroburan and Nandal. Overall the responses were positive especially from The District Officer of Tambunan as Chairman of the committee. However, SFD was advised to apply for the area to the Assistant Collector of Land Revenue (ACLR) Office not only for the purpose of the Creation of the Woodlot but also for gazette purpose. The advice given was supposed to be following the standard procedure for any normal land application. Mapping and documentation was duly done by the DFO Tambunan as per advised.

In 2010, not much progress was achieved. The Land Application was submitted to PPHT Tambunan and given the reference PT NO. 20-10140023 but unfortunately, the land application was not tabled at any of the LUC meeting in 2010. It was later understood that a working paper was needed. A working paper was submitted to PPHT as requested but still the application was not tabled at the LUC meeting despite all the reminders.

Despite various reminders by DFO Tambunan, hearing of the application was not acceded by the Land Utilisation Committee until the end of 2011. The main reason cited this time around was that the Land and Survey Department was directed by the government to expedite the processing of outstanding land applications from the public yet to be tabled in the Committee Meeting.

Finally the SFD Land Application was brought up and tabled in the Land Utilisation Committee Meeting on 12 Mac 2012 with comments from the District Surveyor from Keningau as follows:

- The area applied by Sabah Forestry Department also fall within the water catchment area of Sag Kaingaran being applied by Jabatan Pengairan Sabah under Land Application No.PT 2009140029.

- The area applied was also overlapping with a land application under T.O.L.95142010 P 141226953.

The Committee was not able to come up with any recommendation yet with regards to SFD's application. Instead, the SFD was advised to present its case with detail justification in the next Committee Meeting. ADFO Julius Peter Indu duly did the presentation to the Committee Meeting in June 2012. The said meeting of June 2012 again advised SFD to submit a detailed working paper for presentation in the next meeting envisaged to be held in March 2013.

4.8.1 Activities in 2013

It was noted that not much has been achieved related to the strategy in the previous five years apart from general surveillance of the area from the air and on the ground. The identified and applied area is still subject to the availability of the area on the ground and also depends on the outcome of the Committee Meeting to be held once every quarter of each year. Although the proposed establishment of a community woodlot was endorsed by all stakeholders, including community leaders, its implementation has yet to begin due to unforeseen or grossly underestimated obstacles and hindrance. The biggest hurdle, it seems is the Land Utilisation Committee (LUC).

Unfortunately again this matter, was not tabled in the March 2013 LUC meeting. When ADFO Julius inquired, the Chairman said that because this matter was very much politicised during the election, he instructed LOS Tambunan to refer the matter to the Director of Land and Survey for his prior consent for the committee to process the application. At that juncture the LOS acknowledged that her office had actually received the working paper prepared by SFD Tambunan and that it will be submitted to the Director of Land and Survey together with the land application. The working paper was actually submitted by the DFO Tambunan to the ACLR as prerequisite condition for the processing of Community Woodlot land application.

Towards the end of 2013 the DFO of Tambunan had called up the LOS a number of times to inquire about the progress but was told that the Director of Land and Survey had not given any responds yet. The DFO of Tambunan then wrote a letter to ACLR Tambunan on 15th Nov. 2012 requesting that the application be tabled in the coming LUC meeting despite Land and Survey Director's silence. And although the ACLR still had not yet responded formally to such

request, the LOS had verbally promised to bring the matter up in the coming LUC meeting scheduled to be held in March 2014.

4.8.2 Activities for 2014

The biggest hurdles for implementing this strategy are the opposition politicians and apparently new LUC members. A few of the new and vocal LUC members who are new to CAMP FMU10 and Community Woodlot were the ones who insisted the most for a detailed working paper. For the opposition, who themselves knew very little about CAMP FMU10 and Community Woodlot and desperate for popularity and votes, made up land grab stories to mislead the people. So, for 2014, focus will be (**Table 22**):

- (1) to hold roundtable dialogue with the local inhabitants staying around the proposed woodlot, the opposition politicians, government backbenchers and LUC members
- (2) The formation of the Community Woodlot committee. The Community woodlot Committee will consist of the representatives from participating villages. The committee will be headed by Tambunan District Officer and assisted by Tambunan District Forest Officer of Tambunan District Chief or Ketua Daerah.

Table 22: Activities for 2014 for the Community Woodlots strategy

	Activities	2014												RM	
		1	2	3	4	5	6	7	8	9	10	11	12		
1	Courtesy call to DO Tambunan to brief the current issue of and development of Community Woodlot		x												
2	Dialogue with related villagers.														5,000
3	Update field information of community woodlot area through aerial surveillance		x												5,000
4	Presentation to LUC														
5	Formation of District Community Woodlot Core Team			x	x										
6	Formation of field Community Woodlot Planning Team			x	x										5,000
7	Preparation of Community Woodlot management plan					x	x	x	x	x					50,000
8	Field Community Woodlot committee meeting					x		x		x					15,000
9	Submission on Community Woodlot management plan to MPCT											x	x		5,000
10	Preparation of Community Woodlot SOPs by Core Community Woodlot management planning Team											x	x		5,000
11	Submission of final Community Woodlot management plan to Director of Forest and other relevant authorities											x	x		0
		Total												90,000	

Note: It is to be reminded that all the activities would depend to the out come of the 1st LUC meeting likely to be held on Mac 2014. As a collective action, Programme related with awareness activities and programme of Woodlot Community would be done together

4.9 Strategy 9: Understanding of the Target Species Through:

4.9.1 Inventory of Hornbills By 2018

Inventory of the Hornbills will be done annually from 2013 until 2018. The actual area and frequencies of the inventory would be decided by Alim Biun of Sabah Parks. An annual expenditure of RM 15,000 is estimated to be required by the team. A full report of the surveys done in 2013 will be presented at the next MPPCT Meeting.

4.9.2 Survey of Rajah Brooke's Birdwing

The objective of the survey is to ascertain distributions and to assess conservation viabilities of Rajah Brooke's Birdwing in FMU 10. No activities were done in 2013 due to the work loads of FRC.

4.9.2.1 Activities in 2014

This strategy is implemented by **SRO Dr. Chey Vun Khen**. The following are the activities:

- A Survey at Borneo Jungle Girl (BJG) / Expedition.
- Periodic Monitoring to be done twice a year
- Analysis and Report writing

The estimated cost for the survey is RM 32,600 (**Table 24**).

Table 23: Implementation Schedule for R. Brooke survey in 2014

Item	Activity	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Field Survey			X									
2	Periodic Monitoring						X			X			
3	Data Analysis												X

Table 24: Estimated Expenditure for R. Brooke survey in 2014

Item	Activities	ICFMU10 Budget Costs (RM)	SFD T & T Vote Costs (RM)	TOTAL
1	Research Tools	20,000		20,000
2	Allowances (100x7x3x6)		12,600	12,600
	TOTAL	20,000	12,600	32,600

4.10 **Strategy 10: Implement Relevant Conservation Awareness Programmes and Website Maintenance**

The conservation awareness Programmes strategy is headed by Haji Abdul Rahman Tuah. The objective was to provide information and to educate the general public of Tambunan and Keningau on the importance of conserving forested areas and general biodiversity. The task of managing the FMU10 Conservation Area (FMU10CA) website was given to Afendy Suraip of FRC.

4.10.1 Conservation awareness program

In view of the encouraging response from schools around Keningau, Tambunan and Sook, two (2) awareness programmes were done in 2013 (**Table 25**). Talks on Forest restoration, Forest Fire protection and Flora and Fauna Biodiversity were given during the programme. Token of appreciations, in the form of RM 30 gifts hampers, were given to students who participated in the Conservation Quiz organised at the end session of the programme. The programme culminated with the plantings of ten (10) trees of *Syzygium Campanulatum* (Obah Merah) of the Myrtaceae family at the school compound.

Table 25: Lists of Activities for Awareness Programme in 2013 and 2014

No	Name Of School	Students Participants	Schedule	District
1	SMK Nambayan	1,236	11 April,2013	Tambunan
2	SMK Gunsanad II	1, 603	19 June,2013	Keningau
3	SMK Keningau II	1,200	13 February 2014	Keningau
4	SMK Bingkor	1,500	June 2014	Keningau
No	<u>Name of Kampung</u>			
1	Kampung Monsurulong			Tambunan
2	Kampung Kuala Monsok			Tambunan
3	Kampung Kaingaran			Tambunan
4	Kampung Ulu Monsok			Tambunan
5	Kampung Sinungkalangan			Tambunan

The focus of this strategy for 2014 would be similar. The annual Districts' Festivals would also continue to be the additional avenue for the implementation of this strategy as well. In addition to the sawareness programmes in the schools, the DFO Tambunan will also be holding Social Forestry Dialogue with the five (5) kampungs listed under **Table 25** in 2014. It is estimated that an expenditure of RM 10, 000 is required for this strategy in 2014.

4.10.2 Update on the Website Maintenance for FMU10

The FMU10 (Tambunan) website is an important tool to disseminate information to various interested audiences. Since 2011, the website's infrastructure and information catered have become obsolete since the data were not frequently updated due to various difficulties. The major problem was mainly because of the complicated procedures to update the site into newer look and updated information. Beginning on the first quarter of 2012, work in construction of new Trusmadi website was initiated headed by Afendy Suraip of FRC. The major objective was to overcome the previous problems by migrating the website's basic HTML website structure to the Content Management System (CMS) platform. This exercise was done to abolish the complicated procedure on updating new data into the website. This on-going work also includes the improvisation and major overhaul of all information in the old website to cater for broader audience in the future. Under the CMS-architecture website, which is an open source content management system, anyone could easily, provided they are given the authority by the MPCT, to update and make the necessary changes on the website in the future. This responsibility is entrusted to Mr Afendy Suraip who also the web designer of the FMU 10 Website, he is assisted by Hj.Afifuddin and Hj.Mohd Nooh Jiran to update and provide additional informative input into the new website.

The new Trusmadi website is scheduled to be completed on the first quarter of the year of 2014. The projected costs (**Table 26**) put further emphasizing on the final development of the website, which includes the initial maintenance progress and the future aspects of website development (ie. hardware procurement and internet connectivity).The envisaged cost involved in this task is RM 10,800.

Table 26: Projected Website Development and Maintenance Cost in 2014

PROJECT TASKS	LABOUR HOURS	LABOUR COST (RM)	MATERIAL COST (RM)	TRAVEL COST (RM)	OTHER COST (RM)	TOTAL PER TASK
Develop and Design	0.0	RM0.00	RM0.00	RM0.00	RM0.00	RM0.00
Procure Software	0.0	RM0.00	RM0.00	RM0.00	RM0.00	RM0.00
Procure Hardware	0.0	RM0.00	RM6,000.00	RM0.00	RM0.00	RM6,000.00
Perform Unit/Integration Test	0.0	RM0.00	RM0.00	RM0.00	RM0.00	RM0.00
Perform Publishing and Maintenance	0.0	RM0.00	RM3,000.00	RM0.00	RM1,800.00	RM4,800.00
Subtotal	0.0	RM0.00	RM9,000.00	RM0.00	RM1,800.00	RM10,800.00

Table 1: Total Projected Website Development and Maintenance Cost

4.11 Strategy 11: Scientific/Biodiversity Study

The main aim of this strategy is to conduct a scientific expedition to explore and study the biodiversity that thrive in this Trusmadi Forest Reserves landscape. This was managed by Resource Person, Anuar Mohd of FRC, Sepilok. In the past, some expeditions and various studies have been conducted in the area especially at the summit and along rivers by various institutions and individuals. Under this strategy, the unexplored areas within the Trus Madi Forest Reserve, namely the Mirad – Irad Base Camp area and the Sinua Base Camp area were selected. During the expeditions, the participations of outside institutions and individuals were invited to compliments the existing expertise available within the SFD. Two (2) expeditions, one (1) workshop and a Roundtable Discussion have been held since the inception of the CAMP FMU10 in 2009. These are as follows:

a) Kaingaran Trusmadi Biodiversity Expedition in 2009

This 1st Kaingaran Trusmadi Biodiversity Expedition was held on the 4th - 12th August, 2009. The base camp of the expedition was sited at the north-western part of FMU 10 beside the Mirad-Irad River at an altitude of about 900 m asl. The objective of the expedition was to survey the biodiversity richness in the adjacent area and its vicinity leading to Mount Trusmadi. Some 70 researchers/scientists and supporting staffs from the FRC, the School of International Tropical Forestry (SITF) of Universiti Malaysia Sabah (UMS), Universiti Teknologi Mara (UITM) and a private company took part in the expedition. The findings of this expedition was presented and deliberated in the Trusmadi Workshop held the following year in 2010.

b) Trusmadi Workshop in 2010

This workshop was held on the 23-24th, March 2010 at Perkasa Hotel, Keningau. It was officiated by Datuk Sam Mannan, the Director of Sabah Forestry Department. The workshop was held to disseminate research findings based on the expedition done in 2009. The Workshop also served as a platform for information sharing and discussion among the MPCT members, experts and the relevant stakeholders, both inside and outside of the SFD.

A total of 15 papers were presented and 3 information papers were disseminated and shared among the 150 workshop participants. An exhibition showcasing all the activities undertaken and facilities available within the Trus Madi FR was also held at the Lobby of the hotel. Field excursion to climb Mt Trus Madi and visiting the

restoration sites the following day for interested participants of the workshop. A total of about RM3, 000 was utilized using the budget of the UBH of FRC during the workshop. However, most of the costs in holding the Workshop were absorbed under the CAMP FMU 10 Fund, estimated at RM100, 000. A Proceeding of this workshop was also published in 2011. A total sum of about RM 30,000 was utilized from the budget of UBH of FRC for this publication.

c) Trusmadi Sinua Expedition in 2011

This second Expedition was a continuous effort by the MPCT and FRC to better understand and uncovers the Trusmadi vast biodiversity and forests. It was held on Oct 24th – Nov 2nd, 2011. A Total of about 50 individuals consisting of researchers and supporting staffs took part in the expedition. An estimated sum of RM80, 000 was utilised from the CAMP FMU 10 fund for this activities. The findings of this expedition and reports of other programme and activities conducted at Trusmadi FR was presented at a Roundtable Discussion Forum the following year in 2012.

d) Trus Madi – Sinua Roundtable Discussion in 2012

This Trusmadi - Sinua Roundtable Discussion was held to disseminate the findings of the Trusmadi Sinua Expedition and also to report the various other projects/activities implemented at Trusmadi FR. The compilation of this proceeding is still in progress at the time of writing this report and has just been approved for publication by the Director of Forestry. It will be ready by March 2014.

4.11.1 Progress in 2013

The planned expedition for Kiluyu FR in 2013 was not done, due to other pressing commitments and instructions from HQ for other works particularly the HOB's activities for FRC staffs to undertake. Nevertheless, a small group of FRC's staff, particularly the botany and insect groups have managed to enter and conduct preliminary flora and insect surveys within the Kiluyu FR in mid - 2013 during the execution of the Trusmadi FR's EIA assessment. Some flora specimens were collected from the area. If some form of report could be made available, surely it would be beneficial and contributing towards Trusmadi and Kiluyu FR management. Towards this end, the Trusmadi Database is still being developed.

4.11.2 Activities for 2014

A flora survey is planned by FRC's Botany Section at Kiluyu FR in **May 2014**. Other researchers of FRC will be invited to participate to conduct their own specific studies, eg Insects diversity. For the Database, data entry will continue to be undertaken based on new identified samples collected from the area. The expected cost is about RM15, 000.

4.12 Strategy 12: Collaborate With Adjacent Landowners at Relevant Boundaries of FMU10

Due to the heavy workload of SFMO Jafin Abu Bakar, this strategy which was accorded a lower priority, limited attention was focused in its implementation. This strategy is now assigned to SFC Haji Afifuddin Jadin. The progress done in 2012 has been limited to identifying the major and big landowners around the vicinity of FMU10. So far, a number of big land owners such as Sabindo Plantation, which was also given an OP on an access road in the Pangas area, Sook Oil Palm Plantation (Ladang Sungala), Sabah Forestry Development Authority (SAFODA) and Lembaga Industri Getah Sabah (LIGS) near Nandagan had been identified and consulted with regards to this Revised CAMP's implementation.

4.12.1 Activities in 2013

For the large part of 2013, minimal land data could be collected from the Land and Surveys, Keningau and Tambunan. Due to the work load of SFC Haji Afiffudin Jadin, thorough consultations with the various Land owners especially the big companies could not be realised.

4.12.1 Activities in 2014

Land data would be collected from the Land and Surveys, Keningau and Tambunan. In November 2012, a letter to acquire land titles' information surrounding Trusmadi Forest Reserve (Ref **JPHTN/KGU700-1/3/2/KLT.2/43** dated **29hb. November 2012**) was sent to the Land and Survey Department. This activity will be followed up vigorously by SFC Haji Afiffudin Jadin as well as through consultations with the various Land owners especially the big companies.

The activities set under this strategy for 2014 to be implemented are as follows:

- Identify and collect data of land owners based on land title data obtained from Land and Survey Department.
- Meeting and discussion with land owners including companies or individuals near or bordering the boundary of Trus Madi FR.
- Recording data during field inspection visit and from the mapping section of FRM.

Table 27: Implementation Schedule for strategy 12 in 2014

Item	Activity	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Identification and collection of data of land owners based on data from Land and Survey Department			X	X	X	X	X	X	X	X	X	X
2	Meeting and discussion with identified land owners						X	X	X	X	X	X	X
4	Record data based on field inspection and from mapping section FRM									X	X	X	X

5. EXPENDITURE IN 2014

The overall operational and development cost for CAMP FMU 10 in 2014 is estimated at **RM 3,636,512 (Appendix 2)**. This estimated cost covers all aspects of expenditure, including allowances, purchasing of necessary Equipments, maintenance and development of infrastructures, field activities and contract services. It is noted that in 2014, the total approved sum for CAMP FMU 10 at the time of writing this AWP is **RM 3,405,735.82**. Given the total estimated expenditure in Appendix 2, it would appear that there will be a budget deficit of **RM 230,776.18** in 2014. The deficit is largely due to the Forest Restoration activities, boundary maintenance and surveying as well as the need for maintenance of necessary activities. Therefore some adjustments may be required to be done on the actual planted area maintenance and new plantings, and the maintenance parts of some of the infrastructures and activities. A monthly review of this AWP will determines whether the additional funding could be derived from the D11 vote to cover the deficit expenditure.

6. CONCLUSION

This AWP is the second of such plan implemented after the revision of the CAMP which was approved by the Director of Forestry in February 2013. Input from the various members of MPCT and RPG was sought in accordance to their area of expertise and responsibilities. Under the Revised CAMP, the Conservation targets had been reduced from Eight (8) into Four (4). Similarly, the threats had been also reduced form Five (5) to Four (4). All Twelve (12) strategies and the Twenty Three (23) strategic actions of the approved CAMP FMU10 are implemented in 2014.

The Forest Certification initiatives will continue in 2014, through the preparation of report to fill the Twenty Seven (27) gaps identified earlier in 2012 as well as Pre – assessment and hopefully for a full assessment by GFTN. All implementers had been assigned their specific duties and briefed on the certification agenda.

The total manpower of Thirty (30) personals from SFD and Ten (10) personals from the other agencies partners in implementing the required strategies for this FMU 10 AWP appeared to be

quite substantial. However, in reality, only about half of the numbers are actually working fulltime. It is imperative therefore that existing cooperation and commitments of all of these personals be executed to the maximum by DD (MGT) Rahim Sulaiman as the Chairman of the MPCT and Chief Implementer. A monthly operational meeting should therefore be done to resolve any problems or deviations that may arise from such cooperations.

A total of **RM 3,405,735.82** budget from various sources has been acquired by the MPCT for funding these strategies and actions in 2014. A total expenditure of **RM 3,636,512** is envisaged to be spent. A deficit budget of **RM 230,776.18** is therefore anticipated. Based on the premises that all of the Twelve (12) strategies and Twent Three (23) strategic actions planned in 2014 have correspondingly been assigned to specific personnel and given the necessary budget allocations, the success of this FMU 10 AWP for 2014 therefore has a very high probability of being implemented subject to mid term review.

Appendix 1: List of Participants of the Honorary Ranger Course for FMU10 in 2013

Bil.	Nama	No Kad Pengenalan	Umur (Tahun)	Alamat
1	Tainis Ikon	680816-12-5327	45	Kg. Sinuah P.O.Box 4 Keningau, Sabah
2	Enderios Daniel	850724-12-6321	28	Kampung Sinua Trusmadi Peti Surat 4 89007 Keningau Sabah
3	Andrew Jemes@Andrew Bin James	700120-12-5869	43	Kg. Sinua Peti Surat 4 89007 Keningau Sabah
4	Hendry James	820708-12-5339	31	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah
5	Wahid Bin Egohalik	730803-12-5769	40	Kg, Tuawon, Peti Surat 787,89008 Keningau Sabah
6	Hilary Bin Junggal	870129-49-5235	26	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah
7	Enjon Bin Maning	910831-12-6679	22	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah
8	Makunsil Dungoh	700329-12-5499	43	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah.
9	Fredolin Joseph	841013-12-5387	29	Kg. Sinua, Sook 89000 Keningau, Sabah.
10	Selidius Asun	840425-12-5397	29	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah.
11	Doline@Daulin Bin Ikung@Ikon	710821-12-5561	42	Kampung Sinua , Pejabat Pelajaran Keningau, 89000 Keningau Sabah
12	Varelli Juakim	840926-12-5627	29	Kampung Sinua Lanas, Pejabat Pelajaran Keningau, 89000 Keningau Sabah
13	Hazlee Robert	891016-49-5063	24	Kg. Sinua, P.O.Box 4, Pejabat Pelajaran Keningau 890007 Keningau.
14	Waidih Paulus	930807-12-6909	20	Kg. Pangas Apin-Apin, Peti Surat 1314, 89008 Keningau
15	Welfray Bin	910926-12-6161	22	Kg. Pangas, 89000 Keningau
16	Jeklos Bin Micheal	910121-12-5911	22	Kg. Pangas Ulu, Apin-Apin, 8900 Keningau
17	Henry Paulus	880705-12-6147	25	Kg. Pangas, Apin-Apin,89000 Keningau, Sabah.
18	Elvin Joseph	830910-12-5041	30	Kg. Apin-Apin, Keningau
19	Clement Alexandria Amat	931123-12-7083	20	Kg. Pangas Ulu 89000 Keningau
20	Calestha Leo	900211-12-5430	23	Kg. Kirokot 89650 Tambunan

21	Elsetah Leo	941102-12-6312	19	Kg, Kirokot 89650 Tambunan
22	Fandy Siggoh	881201-49-5699	25	Kg. Tinompok Liwan, 89650 Tambunan
23	Hazirih Bin Jauti	870908-49-5955	26	Peti Surat 443, 89657 Tambunan
24	Jerrold Petrus	840809-12-5433	29	Kg. Karanaan, P.O.Box 51, 89651 Tambunan
25	Julian Binti Sigoh	850704-12-5188	28	Kg. Tinompok Liwan, Peti Surat 242, 89650 Tambunan
26	Linus Gonsilou	680720-12-5277	45	Peti Surat 62093, 91128 Lahad Datu
27	Margaret Anthony	911108-12-6228	22	Kg. Maras Karas 89650 Tambunan
28	Renaldy Christopher	880703-49-5571	25	Kg. Tibabar, P/S 445, 89651 Tambunan
29	Severinus Sigoh	870117-49-6089	26	Kg. Tinompok Liwan, Peti Surat 242, 89650 Tambunan
30	Towok Bin Tatoi	610411-12-5069	52	Peti Surat 150, 89007 Keningau
31	Johnny Jackson Vitalis	910330-12-5491	22	Kg. Botung, P/S 248, 89657 Tambunan
32	Steve Stephan	910908-12-5595	22	Kg. Botung, 89650, Tambunan
33	Boniefacio Gerald Bin Banad	930130-12-6113	20	Kg. Sawang Melalap, P/S Bil 200, 89908 Tenom
34	Freston Bin Kaliadu	870109-49-5959	26	Kg. Sawang melalap, Peti Surat Bil 200, 89908 Tenom
35	Jickley Bin Johnary	891217-12-5587	24	Kg. Babalang Melalap, P/S Bil. 316, 89908 Tenom
36	Johnny Jackson Vitalis	910330-12-5491	22	Kg. Botung, P/S 248, 89657 Tambunan
37	Tolentinno Bin Tadin	870620-49-5841	26	Kg. langsung Melalap, Peti Surat Bil 190, 89908 Tenom
38	Adelaide Benjamin	870928-49-5979	26	Kg. Langkuas Kinarut 89600 Papar
39	Rijohn Matanggoh	930524-12-6589	20	Kg. Kandawayan laut, Jln. Ranau, 89100 Kota Marudu
40	Roy Athur Moiji	790909-12-5171	34	P.O.Box 14108, 88847 Kota Kinabalu
41	Saiful Afzan Bin Abd. Rahim	890617-12-5549	24	Kg. Timbua, Peti Surat 75, 89308 Ranau
42	Velbarry J. Jinatin	880820-12-5705	25	Kg. Langkuas Kinarut 89600 Papar

Appendix 2: Summary of the Conservation Strategies and Strategic Actions to be implemented in 2014 for CAMP_FMU 10

No	Strategy	Strategic actions	Expenditure (RM)	1	2	3	4	5	6	7	8	9	10	11	12
1	Boundaries Demarcation and Maintenance	1. Boundary demarcation for part C of Trus Madi Forest Reserve (Last 19,000 m) and Sg Kiluyu Forest Reserve (19,900 m)	96,000 + 129,335	X	X	X	X	X	X						
		2. Boundary maintenance	147,750			X	X	X	X	X					
2	Conduct Surveillance Activities	3. Ground Patrol	100,000	X	X	X	X	X	X	X	X	X	X	X	X
		4. Aerial Surveillance	40,000			X			X			X			X
3	Forest Restoration	5. Maintenance of Planted Areas				X	X	X	X	X	X	X			
		6. Rehabilitation of Degraded Areas including planting roads maintenance, constructions and Yield Plots establishments by FRC.	2,050,056 (5 and 6 added together)			X	X	X	X	X	X	X	X	X	X
4	Formulate Suitable Visitation, Flora And Fauna Collections Procedure	7. Management of climbing activities to Mt Trus Madi (Through Kaingaran, Apin-Apin and Sinua) and Flora and Fauna Collection Procedures (Committee Meeting)	5,000			X			X		X				
5	Upgrading And Maintenance Of Relevant Infrastructures	8. Upgrading and Maintenance of Facilities For Wayan Tambunan, Apin-Apin and Sinua and other Infrastructures	260,000 + 237,161 (rehabilitation fund)		X	X	X	X	X	X	X	X	X	X	X
6	Implement Relevant Social Forestry Activities	9. Field Survey at Kaimadang, Milo and Merapok and Analysis for relevant actions to Director of Forestry	To be Decided later by May 2014												
		10. Submission of Analysis and Implement Relevant Community Forestry As Per Directive from Director									X	X			

No	Strategy	Strategic actions	Expenditure (RM)	1	2	3	4	5	6	7	8	9	10	11	12
7	Develop And Implement Controlled Hunting Plan In Ulu Rompon And Ulu Pangas	11. Formulation of Controlled Hunting Plan in Ulu Rompon and Ulu Pangas	30,000					X	X						
		12. Implementation of the Controlled Hunting Plan (CHP)	-							X	X	X	X		
8	Establish Community Woodlots In Stateland Area Near Kg. Kaingaran In Tambunan Adjoining FMU 10 Area	13. Presentation of Proposal to LUC Tambunan	-						X						
		14. Preparation and implementation of Community Wood Lots Management Plan	Expenditure to be prepared when area approved							X	X	X	X	X	
9	Understanding Of The Target Species Through: A) Inventory Of Hornbills By 2018 B) Inventory Of Rajah Brooke And Their Host Plants By 2018	15. Field Inventory and Analysis	30,000			X			X			X			
10	Implement Relevant Conservation Awareness Programmes Including Website	16. Maintenance of Website	30,000	X	X	X	X	X	X	X	X	X	X	X	X
		17. Awareness/ Educating Public on Conservation Issues	5,000			X	X	X	X	X	X	X	X	X	X

No	Strategy	Strategic actions	Expenditure (RM)	1	2	3	4	5	6	7	8	9	10	11	12
		18. Expedition (Kiluyu and Kaingaran)										X			
11	Scientific/ Biodiversity Study	19. Workshop/ Seminar	15,000											X	
		20. Development of Trus Madi Flora and Fauna Database		X	X	X	X	X	X	X					
12	Collaborate With Adjacent Landowners At Relevant Boundaries Of FMU10	21. Identify the Big and Individual Landowners around FMU10	-	X	X	X									
		22. Collect Relevant additional Data From Lands and Survey	-				X	X	X						
		23. Consultations with Relevant Land Owners/Workshops/ Stakeholders Meetings	20,000							X	X	X	X	X	X
A		TOTAL (RM)	3,165,302												
B		Vehicles Maintenance	471, 210												
C		GRAND TOTAL	3,636,512												

Appendix 3: Summary of Monitoring Activities to be done in 2014 under CAMP FMU 10

Table 1: Summary of the Monitoring Activities for the U MDF/LMF Conservation Targets

Item	Target	Indicator	Methodology	Frequency	Responsibility
1	UMDF/ LMF	Area of undamaged Forest by fire: macro view	Remote sensing interpretation;	Annually	Forestry Department: Management (HQ) Level
2	UMDF/ LMF	Area of undamaged Forest by fire: micro view	Inspection and Direct Interpretation	Bi-Weekly Surveillance	Respective Mukim Staff
3	UMDF	Area of undamaged Forest by Illegal Timber Extraction	Inspection and Direct Interpretation	Bi-Weekly Surveillance	Respective Mukim Staff
4	UMDF	Encroached areas are not enlarged	Inspection and Direct Interpretation	Bi-Weekly Surveillance	Respective Mukim Staff
5	UMDF	Controlled Hunting Area Not Encroached and Regulations not violated	Inspection and Direct Interpretation	Bi-Weekly Surveillance	Respective Mukim Staff

**Table 1: Summary of the Monitoring Activities for the
MHDF/LMF Conservation Targets (Continuation)**

Item	Target	Indicator	Methodology	Frequency	Responsibility
6	UMDF	Burnt Area Planted and Restored	Inspection and Random Enumerations	Quarterly for Planted Acreage	Jafin Abu Bakar & Awgku Effendy
7	UMDF	Growth and Yield Plots	Direct Growth Measurement & Mortality	Annually	FRC Research Team
8	UMDF	Demarcated Forest Boundaries are not Encroached	Remote sensing interpretation	Annually	Forestry Department: Management (HQ) Level
9	UMDF	Demarcated Forest Boundaries are not Encroached	Inspection and Direct Interpretation	Monthly Surveillance	Respective Mukim Staff
10	UMDF/ LMF	Eco tourism Guidelines adhered	Direct Interpretation and Observation	Every Climb	Respective Mukim Staff

Table 3: Summary of the Monitoring Activities for the Hornbills and Rajah Brooke's Birdwing Conservation Targets

Item	Target	Indicator	Methodology	Frequency	Responsibility
11	Hornbills	Population density/ Species Distributions of Hornbills	Plots and population census	After each Survey	Forestry and Sabah Parks Integrated Field Team
12	Rajah Brooke's Birdwing	Population density: Distribution and Occurrence	Inspection and observation on Fixed plots	After each Survey	Forestry Field Team