

SABAH FORESTRY DEPARTMENT



FOREST MANAGEMENT UNIT 10 (FMU10): TAMBUNAN CONSERVATION AREA MANAGEMENT PLAN (CAMP) VERSION 2



(FMU10: CAMP Ver. 2)

This Second Revised Conservation Area Management Plan (CAMP),
Referred to as **FMU10: CAMP Ver. 2** is
Approved and shall cover the period from
01.01.2017 to 31.12.2026

(DATUK SAM MANNAN)
CHIEF CONSERVATOR OF FORESTS SABAH

Dated: _____

FMU 10: CAMP Ver. 2
PREAMBLE

This Second Revised Conservation Area Management Plan (CAMP) for Forest Management Unit Number Ten (10) (FMU 10), hereby referred to as **FMU10: CAMP Ver. 2** (FMU10: CAMP Version 2) document is prepared as a requirement for the mid – term review to the Revised CAMP document that was approved by the Chief Conservator of Forest Sabah (formerly the Director of Forestry) for implementation in January 2013. The Revised CAMP (2013) was documented by the Management Planning Core Team (MPCT) for FMU10 in four (4) Volumes, namely, Volume 1 (Conservation Targets, Threats, Capacity and Strategies); Volume 2 (Relevant Planning Appendices and Budgetary Submissions); Volume 3 (Guidelines, Relevant Legislations and Policies: Part 1: Guidelines for Managing Ecotourism Development in FMU 10 and Part II: Legislations and Policies in Managing FMU 10 as a Forest Conservation Area); and Volume 4 (Guidelines, Relevant Policies and Legislations for Forest Certification Including Standard Operating Procedures (SOP) for FMU10).

Unlike the previous document, this **FMU10: CAMP Ver. 2** is written as a single document only. It is the third documentation produced by the MPCT following on the Initial CAMP for FMU 10 (01.01. 2009 until 31.12. 2018) and the Revised CAMP (01.01.2013 until 31.12.2022).

VALIDITY OF THE MANAGEMENT PLAN

This **FMU10: CAMP Ver.2** is valid for a period of Ten (10) years from 01.01.2017 to 31.12.2026. It details out the conservation targets, threats and strategies as well as other relevant budgetary and certification requirements and efforts. A mid-term review of this **FMU10: CAMP Ver. 2** will be done towards the end of 2020 by the MPCT. This document will form the basis of the mid – term revision for the Third Revised CAMP for FMU10 to be referred to as **FMU10: CAMP Ver. 3**, which will be valid from 01.01.2021 until 31.12.2030.

PEER REVIEWS

A draft of this document was sent for a review to the following Professional Foresters in the head Office:

1. Frederick Kugan – Deputy Chief Conservator of Forests (Forest Sector Planning)
2. Dr Lee Ying Fah – Deputy Chief Conservator of Forests (Research)
3. Indra P. Sunjoto – Senior Assistant Conservator of Forests (Forest Management Enterprise)
4. Mashur Mohd Jaini – Head, Sustainable Forest Management Division

5. Samit Abdul Sani – Head, Forest Resource Management Division
6. Roslan Junaidi – Head, Forest Law, Enforcement, Governance and Trade (FLEGT) Unit
7. Zulkifli Suara – Head, Forest Investigation, Enforcement and Prosecution Division

Drafts of the FMU10: CAMP Ver. 2 was sent to the above in July 2017. Feedbacks were received from all reviewers within two (2) weeks.

FOREST CERTIFICATION

The FMU10 was subjected to rigorous auditing for Forest Certification by the Scientific Certification System (SCS) Global Services in 2015 under the Principles and Criteria of the Forest Stewardship Council (FSC), which are fully endorsed and subscribed by the MPCT for FMU10 and the Sabah Forestry Department (SFD). A Forest Certification (**SCS-FM/COC-005062; FSC-C122511: SCS-FCP Interim Standard for Forest Management Certification in Malaysia Version 6.1**) was subsequently awarded to FMU10 after the relevant audits. The certificate is valid for a five (5) year period, from 11.05.2015 until 10.5.2020.

Surveillance auditing by SCS Global Services to assess the compliance of the FMU10' s activities to the FSC Certification's requirements under the FSC Principles and Criteria will be done annually. Any unclosed observations, Minor or Major Findings from those annual audits will result in the retraction of the validity of the Forest Certification by FSC. The MPCT shall be held accountable and will need to ensure that this unfortunate situation do not occur at all times. Subscriptions to the Principles and criteria of FSC for Forest Certification must be adhered to at all time by the MPCT for FMU10 and the relevant management staff of the Keningau, Tambunan and Ranau Forestry Districts as well as all operators and holders of occupational permits in FMU10.

Prior to the auditing process by FSC, an Environmental Impact Assessment (EIA) was done by a team from the Forest Research Center (FRC) in November 2013. The EIA Report is available for references at the FMU10 Operational Office. Afifuddin Jadin is the Document Officer for all publications and Reports related to FMU10.

ACKNOWLEDGEMENT

This Second Revised Conservation Area Management Plan (CAMP) for Forest Management Unit No. 10 (FMU 10) Tambunan, hereby referred to as **FMU10: CAMP Ver.2**, as in the case of the initial as well as the previous Revised Documents, was the result of a consultative and iterative planning process, involving a number of expertise and resource persons from within the Sabah Forestry Department (SFD) and also from other relevant government agencies. The selected members were either managers or stakeholders in conserving the flora and fauna of FMU 10. The 5 S Planning Framework, practised widely by The Nature Conservancy (TNC), a non – government organisation with over 50 years of conservation experiences globally, was adopted in preparing the initial, as well as the previous Revised document and this Second Revised CAMP.

Similarly to the two previous documents, revision of this current CAMP was both a challenging and enriching experiences for all members of the MPCT and the Resource Person Group (RPG). The efforts may not be as taxing as compared to the initial development of the CAMP or the Revised CAMP. Nevertheless, an equal amount of efforts, if not more, were put in by all relevant planners, involving a series of meetings, and field visits, which sometimes stretching to the early hours of the morning to deliberate on the content of this document.

The patience and commitments of the MPCT members as well as the RPG in revising the Conservation Targets as well as assessing its biodiversity health, sources of stress and threats, strategies and action plans and the monitoring plans are applauded. Without such dedications, Revision of this CAMP would not have been possible. Appreciations and gratitude are extended to the entire MPCT and RPG members for their valuable input.

Appreciations and gratitude are accorded to Datuk Sam Mannan, the Chief Conservator of Forests Sabah Forestry Department, for the trust, continuous support and encouragement extended to the planning teams. Appreciations are also extended to the Directors of Sabah Wildlife Department, Sabah Parks and both the District Officers of Keningau and Tambunan for allowing their relevant staff to be drafted in the various planning teams. The continuous active involvement of the respective government organisations and personals in the revision of this CAMP for FMU 10 reflects the existence of both the horizontal and vertical integrations in the Sabah State's civil service.

Rahim Sulaiman

Editor

Cum Deputy Chief Conservator of Forests Sabah (Management)

Cum Chairman for the MPCT for FMU10

Cum Chief Planner and Implementer of **FMU10: CAMP Ver. 2**

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SUMMARY OF THE FMU10: CAMP VER. 2

1. Introduction

This Second Revised CAMP for FMU 10, referred to as **FMU10: CAMP Ver.2**, describes and summarizes the revised conservation targets, strategies, and the monitoring plans, including the estimated budgets for FMU 10 for the period from the year 2017 to 2026. It was based on the Revised CAMP FMU10 that was approved by the Chief Conservator of Forest Sabah (*formerly the Director of Sabah Forestry Department*) in January 2013. This document describes the size and location of the FMU 10, including the area's characteristics, namely, its vegetation habitats, topography, soils associations, rainfall distributions, general flora and fauna populations and the extent of the burnt and encroached areas. Assessments of the field conservation capacity, the revised Conservation Targets including the Threats affecting the viabilities of the conservations targets, the relevant Conservation Strategies and the respective annual actions and monitoring plans are also deliberated.

2. Planning Approaches, Identifications of Conservation Targets and Threats

Using the 5 – S planning approaches, a total of eight (8) targets were identified as the main subjects for conservation in the initial CAMP for FMU10 (Rahim, 2009). These Targets were further classified into three (3) habitats and five (5) species group. The Conservation Targets included under the habitat group were the Upland Mixed Dipterocarp Forest (UMDF), the Lower Montane Forest (LMF), and the Summit Scrub (SS). The species group conservation targets comprised of *Nepenthes X trusmadiensis*, *Rafflesia keithii*, Rajah Brooke's Birdwing butterfly, the hornbills and Serawi fish. Poaching of large and small fauna and flora, fire, littering along the summit's trail, encroachment and small scale illegal timber extractions were identified earlier as the five (5) main threats to the viability of conserving the identified eight (8) targets accordingly (Rahim, 2009)

During the mid – term review as documented under the Revised CAMP, both of the Conservation Targets and the Threats were reduced to only four (4) Targets and four (4) Threats respectively (Rahim, 2013). The revision done under this **FMU10: CAMP Ver. 2** further reduced the Conservation targets into just three (3), namely, the Upland Mixed Dipterocarp Forest (UMDF), the Summit Scrub (SS) and the

hornbills. The four (4) threats are further reduced to only three (3). These are Fire, Poaching of large and small fauna and flora as well as area encroachment.

3. The Revised Conservation Targets and Threats

The Conservation targets and threats selected under this **FMU10: CAMP Ver. 2** is as follows:

- The Revised Targets selected are the Upland Mixed Dipterocarp Forest (UMDF), the Summit Scrub (SS) and the Hornbills.

- The Revised Threats selected are Fire, Poaching of large and small fauna and flora, and area encroachment.

Littering along the summit's trails, which was an earlier threat under the initial CAMP in 2009, at the three (3) climbing routes had been controlled and eliminated largely through strict enforcements by the field staff and educations to the visitors and tour operators. The littering threat has thus been removed from the lists documented under the revised CAMP (Rahim, 2013).

The MPCT thought that the awareness and environmental education strategies implemented as well as the presence of Field Outposts in the area had been effective in controlling the damaging threat of fire. However, this notion was proven wrong, as seen from the forest fire that occurred in May 2016 due to the prolonged drought near the Sook and Sinua area. Some 1,200 hectare (ha) of secondary forest vegetations were razed in that particular incident. Fire, thus remains a threat to be dealt with and to be attended well in FMU10.

Small scale timber extractions activities, a threat confined largely to the Tambunan Forestry District's previously, had been put on checked since 2009. The constant monthly surveillances as well as the awareness campaigns and the Community Meetings headed by the Tambunan District Forest Officer (DFO Tambunan) had successfully addressed the recurrence of the threat.

Descriptions and rationales for the selections of the Revised Conservation Targets and Threats for **FMU10: CAMP Ver. 2** are described in **Table A** and **B** respectively.

Table A: Descriptions of the Revised Conservation Targets in FMU 10 for 2017 until 2026

NO	CONSERVATION TARGETS	DESCRIPTIONS OF TARGET AND RATIONALES FOR ITS SELECTION
1	<p align="center">UPLAND MIXED DIPTEROCARP FOREST (UMDF)</p>	<p>This habitat covers about 46 % of the FMU 10. An important habitat that supports about 80% of the flora and 70 % of fauna surveyed in the area. This habitat is the main site for forest restorations, controlled hunting and gateway for ecotourism and mountain climbing activities. It is still susceptible to encroachment, forest fire and illegal poaching for flora and fauna as well as small scale timber extractions if not checked. This Target therefore still need to be maintained and monitored from the revised threats of Fire, illegal poaching and encroachment. A water intake source was also chosen as an HCV 5 area at the Sg Kaintano near the Wokok Sinua. Monitoring of the site will continue and an agenda for discussion in all Forest Communities meetings in Sinua.</p>
2	<p align="center">SUMMIT SCRUB (SS)</p>	<p>Forms the peak habitat at Gunung Trus Madi. Contains unique montane flora and fauna, namely <i>Nepenthes x trusmadiensis</i>. The area covers approximately the size of two (2) football pitch. Due to its fragile habitats, target needs to be managed by restricting the trampling of the habitats by visitors. Impact of frequent visitations to the area could be minimised by providing for a certain path to be used by the visitors. Opening up of new walk paths in the summit will not be allowed. Poaching of <i>Nepenthes x trusmadiensis</i> did not occur at all since the CAMP was fully implemented in 2009 as visitors were prohibited to pick any neither flora nor fauna during their visitations to the peak or all along the three (3) Wayaans. These restrictions will continue to be practiced. This area was also chosen as a site for the HCV 1.3, due to the endemism of the <i>N. x trusmadiensis</i>. Two plots had been established under the HCV 1.3 category in 2014. Monitoring will continue.</p>
3	<p align="center">HORNBILLS</p>	<p>The FMU 10 may support up to seven (7) species of this particular bird. The hornbills group is listed as protected fauna in the Wildlife Conservation Enactment 1997, although its huntings through valid licences are allowed by the Sabah Wildlife Department. Surveys since 2011 indicated the presence of six (6) species in FMU10. Continuation of surveys is necessary. This activity will be led by Mr. Alim Biun of Sabah Parks.</p>

Table B: Descriptions of the Revised Threats in FMU 10 for 2017 until 2026

NO	THREATS TO THE CONSERVATION TARGETS	DESCRIPTIONS OF THE THREATS AND RATIONALES FOR ITS SELECTION
1	FIRE	<p>Since 2009 up to 2015, only one (1) incidence of fire was encountered in the Nuluhon Trusmadi FR. The damage was estimated to cover some 20 ha of secondary vegetation. Awareness campaign done so far has proven to be effective to control this threat. Unfortunately during the dry period from January to June 2016, SFD had to put up a big effort in fire fighting near the Sungai Atug area, in the southern part of Nuluhon Trusmadi FR. Some 1,200 ha were estimated to be burnt and SFD suspected that these fires were initiated from the open burning activities. Ground and aerial surveillances as well as awareness programs will be continued. The Sg Kiluyu FR remained unaffected by fire since 2009. Field staff remained vigilant and alert all the time for this threat.</p>
2	ENCROACHMENT	<p>In the Social Baseline Surveys (SBS) done in 2012 a total of 23 kampungs outside the Nuluhon Trusmadi FR were enumerated. The final tally was reduced to only 18 kampungs after a special SBS done in 2013. An area totalling 2,977.62 ha were encroached by some 519 individuals from the 18 kampungs. Activities had been put on checked through continuous monitoring of these areas through ground and aerial surveillances as well as Forest Communities meetings. Sg Kiluyu FR is free from any encroachment activities. Final recommendation on these encroachments would be put up by the MPCT before the end of 2017 for approval by the Chief Conservator of Forests.</p>
3	ILLEGAL POACHING OF FLORA AND FAUNA	<p>Since 2009, only one (1) incidence of illegal poaching of fauna that has been apprehended at Apin-Apin, Keningau. The culprit was subsequently convicted in court. Surveillance and awareness campaign need to be continued to check on this threat. Records of animals frequenting the area have been done through the night spotting and camera trap methodologies under the supervision of a trained SFD staff. This activity would be continued. Animal surveys together with the Sabah Wildlife Department would be done if the particular Department could spare free time to do this.</p>

A total of twelve (12) Conservation Strategies in abating and managing the various threats were formulated by the MPCT in the revised CAMP FMU10 (Rahim, 2013). Under the **FMU10: CAMP Ver. 2**, a revision was done and a total of ten (10) strategies were identified by the MPCT. **Table C** describes the responsibilities in implementing the Revised Conservation Strategies for the next Ten (10) years under this **FMU10: CAMP Ver. 2**.

Table C: Responsibilities in Implementing the Revised Conservation Strategies Under the FMU 10: CAMP Ver.2

NO	CONSERVATION STRATEGIES	IMPLEMENTERS
1	BOUNDARIES DEMARCATION AND MAINTENANCE	K(FRM) Assisted By DFO Keningau, Tambunan and Ranau and all field staff
2	SURVEILLANCE AND MONITORING ACTIVITIES	DFO Keningau, Tambunan and Ranau assisted by Bonaventure Yampai, Muhd Asri Muhd Shitin, Jafin Abu Bakar, Ricky Yolok and Haji Afifuddin Jadin
3	FOREST RESTORATION	DFO Keningau assisted By Jafin Abu Bakar and Anuar Mohammad
4	MANAGEMENT OF ECO TOURISM ACTIVITIES	DFO Keningau and Tambunan assisted by Haji Afifuddin Jadin and Bonaventure Yampai
5	UPGRADING AND MAINTENANCE OF RELEVANT INFRASTRUCTURES AND WEBSITE	DFO Keningau, Tambunan and Ranau assisted by Bonaventure Yampai, Muhd Asri Muhd Shitin Jafin Abu Bakar, Awangku Effendy, Haji Afifuddin Jadin
6	COMMUNITIES ENGAGEMENT	DFO Keningau and Tambunan assisted By Awangku Effendy, Jafin Abu Bakar, Marjjah Othman, Clarice Alliun, Ricky Yolok and Haji Afifuddin Jadin
7	WILDLIFES SURVEYS IN ULU ROMPON AND ULU PANGAS	DFO Keningau assisted by Sabah Wildlife Department (Keningau) and Jafin A Bakar
8	SURVEY OF HORNBILL	Alim Biun Of Sabah Parks
9	CONSERVATION AWARENESS PROGRAMMES	DFO Keningau and Tambunan assisted by Marjjah Othman (Tambunan) and Clarice Alliun (Keningau and Muhd Asri Muhd Shitin (Ranau))
10	MANAGING SCIENTIFIC STUDY	DFO Tambunan/Keningau/Ranau assisted by Muhd Asri Muhd Shitin , Marjjah Othman and Clarice Alliun and Forest Research Centre

4. High Conservation Value Forest (HCVF)

Based on the recommendation of an Ad Hoc Team headed by Haji Mohd Nooh Jiran, the MPCT had agreed on the establishment of two (2) categories of the HCV (High Conservation Value) areas in FMU 10. The HCV areas were the **HCV 1.3: Endemism of the *Nepenthes x trusmadiensis*** and the **HCV 5: Basic Needs of Local Communities** for water source (Mohd Nooh, 2015). **Table D** describes the two (2) categories and the location of its establishments in FMU10 respectively.

Table D: The HCV Areas Established in FMU10

Categories	Definitaton under the HCVF Toolkit	Area Established in FMU10
HCV 1.3: ENDEMISM	“Any forest containing endemic species as identified by FRIM, MNS, SFC, Forestry Departments and published literature, particularly in high concentrations or highly restricted distribution, can be considered HCV 1.3”.	The Summit scrub, which is also a Conservation Target under the Revised CAMP for FMU10 was chosen by as the habitat that supports the endemic <i>Nepenthes x trusmadiensis</i> , a hybrid species between <i>N. lowii</i> and <i>N. macrophylla</i> . Two Temporary Plots were established for the species at the summit scrub (Mohd Nooh, 2015).
HCV 5: BASIC NEEDS OF LOCAL COMMUNITIES	“Forest area is fundamental to meeting basic needs of local communities”.	A water Intake source for the gravity water system at Sungai Kaintano for the villagers of Kg Sinua was established (Mohd Nooh, 2015)

5. Social Impact Assessment on the communities outside FMU10

There were only two (2) social activities that were impacted by the CAMP’s implementation to the livelihood of the communities outside FMU10 (Awangku Effendy, 2016). The water supply and its source were impacted positively, while the restrictions on the collection of flora and fauna indicated a negative impact. The main conclusions of SIA were as follows:

- a) The decision by the MPCT to include an aquatic management area under Zone 2 in FMU10 under the CAMP was justified by the positive impact on the sources of water supplies for the relevant Kampung, which were harvested either through the Gravity System or directly from the rivers.
- b) The communities had indicated that they were largely satisfied with the water quality derived from those water sources in FMU10.
- c) Management of this agenda was taken on board by the MPCT through the establishment of the HCV 5 area for Kg Sinua and as a permanent topic for discussion in the Kg Sinua Community Meetings headed by the DFO Keningau.
- d) The negative impact on the livelihood of the communities since the CAMP for FMU10 was implemented had resulted in various restrictions in entering the FMU10 area by the communities for collections of wild animals and other needs.
- e) The SBS data recorded in 2012 indicated that the communities were aware of these restrictions once the CAMP for FMU10 was implemented. The data however did not measure the seriousness of the communities' grievances.
- f) The Awareness Program will play a major role in educating the communities on the values of conservations and protecting the FMU10.

6. Forest Certification

Annual surveillance will be done by SCS Global Services. Opening and closing meetings with the MPCT and other implementers will be done accordingly. Audit Findings will need to be taken action by the MPCT as to the requirements of FSC Forest Certification's procedures.

7. Budget

A total budget of RM 41,000,000 was estimated by the MPCT to implement the ten (10) conservation strategies for the next ten (10) years (**Table E**). A major chunk of this budget, at RM 23,000,000, was estimated for the forest rehabilitation strategy alone. The remaining nine (9) strategies were estimated to incur a cost of RM 18,000,000 over the ten (10) year period. A budget requirement of RM 4,100,000 is therefore estimated annually.

Table E: Estimated Budget Required for the Next 10 Years in Implementing the FMU10: CAMP Ver.2

NO	STRATEGY	ESTIMATED TEN YEAR BUDGET (RM)
1	BOUNDARIES DEMARCATION AND MAINTENANCE	3,000,000
2	CONDUCT SURVEILLANCE AND MONITORING ACTIVITIES	3,000,000
3	FOREST RESTORATION	23,000,000
4	MANAGEMENT OF ECO TOURISM ACTIVITIES	2,000,000
5	UPGRADING AND MAINTENANCE OF RELEVANT INFRASTRUCTURE AND WEBSITE	7,000,000
6	COMMUNITIES ENGAGEMENT	500,000
7	WILDLIFES SURVEYS IN ULU ROMPON AND ULU PANGAS	500,000
8	SURVEY OF HORNBILLS	500,000
9	CONSERVATION AWARENESS PROGRAMMES	1,000,000
10	MANAGING SCIENTIFIC STUDY	500,000
TOTAL		41,000,000

8. Mid – Term Review of the CAMP

Similarly to the earlier documents, a review of this **FMU10: CAMP Ver. 2** will be done by the MPCT for FMU10 towards the end of the fourth (4) year of implementation, namely on 2020. This revision is known as the mid -term Review. A Third Revised CAMP for FMU10, to be referred to as **FMU10: CAMP Ver. 3** will be produced by the MPCT for FMU10 before January 2021. The **FMU10: CAMP Ver. 3** to be approved by the Chief Conservator of Forest Sabah will be valid for a period of ten (10) years. The mid - term review will bring on board all the necessary changes for the conservation targets, threats, all relevant changes in the operating environments of FMU10, physically or financially or socially, all relevant new things, technologies, information and the new strategies or even man power and other related planning capacities and capabilities.

9. Updates and Additional Information

Any important or pertinent updates or changes such as manpower and other planning capacities or capabilities or even changes in Forest policies or other relevant policies, which are needed for mass dissemination to the public, if so required, will be taken on board in the Annual Work Plan (AWP) or in the Public Summary on the FMU10 Website. Those updates will either be regularly done or otherwise will be taken as additional notes to this Document. The relevant Chapters in this document will be quoted with regards to those required updates. If those updates are found to be totally new and not detailed in this document, new chapters will be added accordingly and they should be taken as new addendum to this Document. The MPCT for FMU10 will produce an Addendum document for approval by the Chief Conservator of Forest Sabah accordingly, if that write up has not coincided with the mid – term review period.

To ensure continuity and to avoid confusions, the tasks of monitoring and developing the subsequent changes or updates are assigned to *Jafin Abu Bakar* and *Haji Afifuddin Jadin*. Two Chapters namely, Updates and Addendum are added and left vacant in this **FMU10: CAMP Ver. 2** to cater for their subsequent write-ups by the two (2) assigned officers. In the event of any transfers of these two (2) officers, able replacements must be assigned to continue these tasks.