

# Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project (UKW-SFM)

It has been six years, the Forest Management Plan (FMP) activities have been implemented aiming at the goal of the State Government to restore and conserve areas that have been encroached in areas of Ulu Kalumpang's Sustainable Forest Management Area – Wullersdorf (UKW-SFM). In 2016, the Annual Work Plan (AWP) activities such as forest restoration, silvicultural treatment, wildlife monitoring, forest resource protection, FSC certification and infrastructure development which have been accomplished were funded under the Sabah Tenth Malaysia (RMK10) with an estimate total of RM2 million.

There are six (06) forest reserve areas that are under the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project. These degraded forest reserve areas were previously encroached with oil palm and other agricultural crops planting and illegal logging activities. With the allocation from the State Government, the department has succeeded in revitalizing the encroached area and will sustain to maintain them in the future. The forest reserves under this project are as follows: -

**Table 1** : Forest Reserve List in the UKW-SFM project;

Forest Reserve	Class	Ha
Ulu Kalumpang	I	50,736
Mt. Wullersdorf	1	8,137
Kalumpang VJR107C	VI	950
Kalumpang VJR107D	VI	1,950
Kalumpang VJR107E	VI	868
Madai Baturong VJR107F (Binuang)	VI	2,312.74
<b>TOTAL</b>		<b>64,953.74</b>

# FIELD ACTIVITIES

## 1. FOREST RESTORATION

As of 2016, an area of 1,776.80 Ha has been restored since the rehabilitation activities were carried out from 2007. The replanted site area was completed at the Mt. Wullersdorf FR involving an area of 140 Ha. There were several obstacles faced by the contractors such as the bad weather conditions, animal attacks on planted saplings but were eventually manage to replace it. A total of four (4) stakeholders, namely GRNR ENTERPRISE, PEMBORONG NR, MID NINE ENTERPRISE and 1 BORNEO GLOBAL have been entrusted to carry out such activities.

As planned in Annual Work Plan (AWP), two locations of 140 ha in the same forest reserve are targeted to be re-planted ie Mt. Wullersdorf. The achievement of restoration is as below: -

**Table 2:** Restoration area in 2016.

Area	Target(ha)	Actual (ha)	(%)	Contractor
HS Mt. Wullersdorf (Balung)	90	90	100	1 Borneo Global
HS Mt. Wullersdorf (Ladang LKSK)	50	50	100	GRNR ENTERPRISE
<b>Jumlah</b>	<b>140</b>	<b>140</b>	<b>100</b>	



**Pic.1** Workers are planting saplings of ketapang and contractor signboard are installing.



**Pic.2** View of restoration and planting of Kupang spesis at the project area.

In addition, maintenance work is also carried out to reduce mortality rate due to grass competition, wildlife attack, seed quality and uncertain weather conditions. A totalled area of 510 Ha replanted area were maintain in the four (04) locations at the Mt. Wullersdorf, Kalumpang VJR107D (Sapang) and Ulu Kalumpang Forest Reserve. Maintenance achievement is shown in the table below: -

**Table 3:** Achievement of seedlings maintenance work in 2016.

Area	Target (ha)	Actual (ha)	(%)	Contractor
HS Mt. wullersdorf (LKSK)	110	110	100	Pemborong NR
HS Kalumpang VJR107D (Sapang)	40	40	100	Mid Nine Enterprise
HS Ulu Kalumpang (Landau)	110	100	100	Pemborong Sri Anak Pemuda
HS Ulu Kalumpang (Sg. Mantri)	250	250	100	Pertanian Kondowoi Pemborong Am
<b>Total</b>	<b>510</b>	<b>510</b>	<b>100</b>	



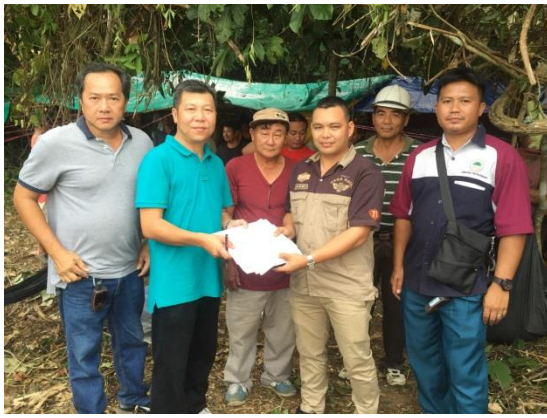
**Pic. 3** Plants are maintained at Mt. Wullersdorf Forest Reserve.

## 2. SILVICULTURE

Silvicultural treatment has come to its fifth year of operation funded by the State Government of Sabah under the allocation of vot D11. The treatment was initially targeted at 1,000 Ha as was set in the 2016 AWP which consists of two (02) compartments. However, in the third quarter, an additional funds under the HOB allocation were granted to further finance the silvicultural treatment activities in the UKWSFM project. At the end of the year, the activity managed to reach 100% of the 2016 target of 3,237 Ha. Up to date, about 4,237 Ha were successfully treated.

**Table 4:** Silvicultural Area Treatment in 2016.

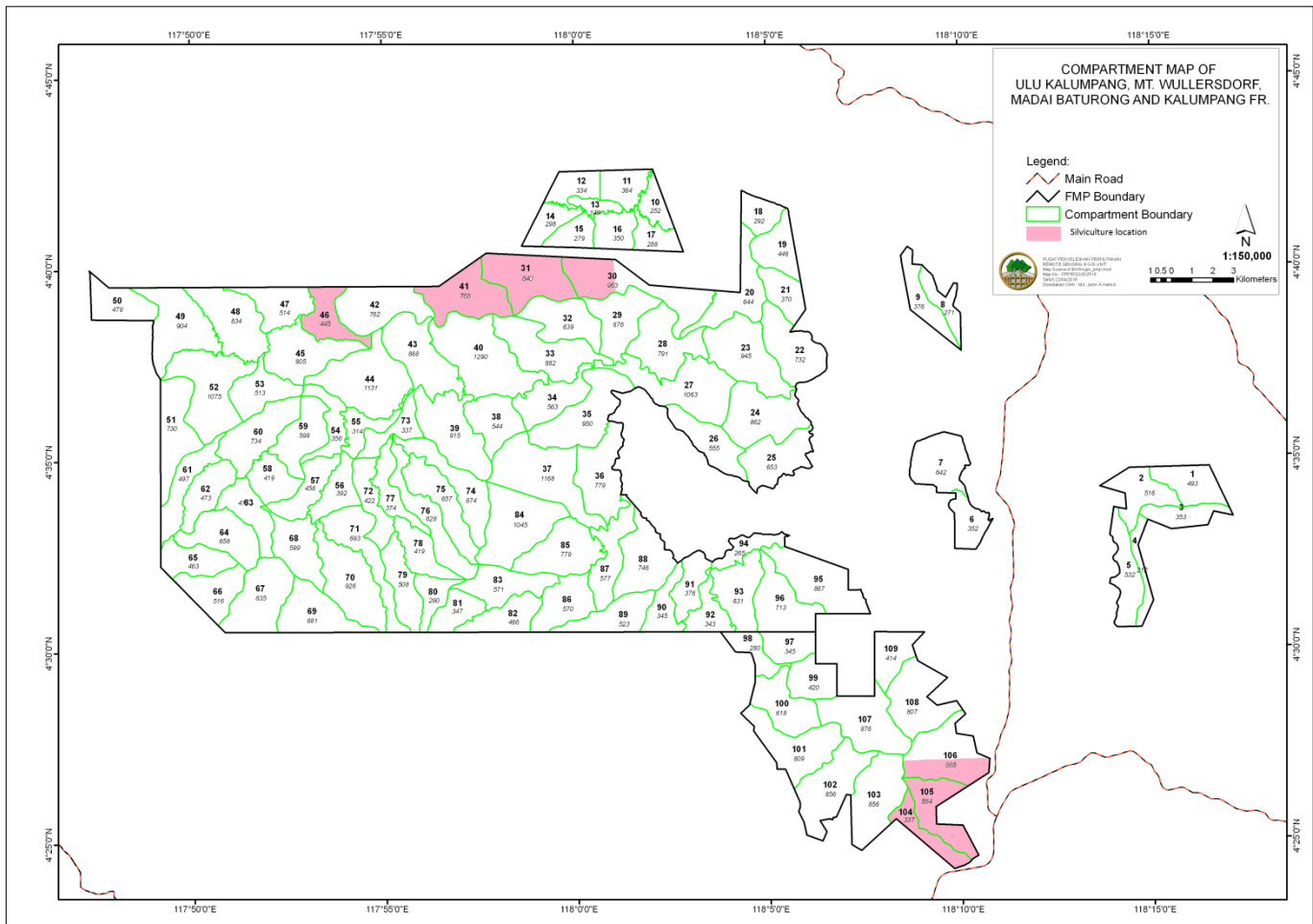
No	Location (Forest Reserve)	Target (ha)	Achievement (ha)	Cpt	(%)	Contractor
1	HS Ulu Kalumpang	500	2,061	30A,31,41 & 46	100%	Sentiasa Maju
2	HS Mt. Wullersdorf	500	1,176	104,105 & 106A	100%	Disamodra Enterprise
	<b>Total</b>	<b>1,000</b>	<b>3,237</b>			



**Pic.4** Site handover to the Sentiasa Maju Contractor and Disamodra Enterprise.



**Pic. 5** View from the air silviculture treatment at Mt.Wullersdorf FR and Ulu Kalumpang FR



**Map 1.** Map of Silviculture Operational in 2016.

3. WILDLIFE MONITORING

There are four (4) methods used for wildlife monitoring activities within Ulu Kalumpang-Wullersdorf Forest Reserve area:

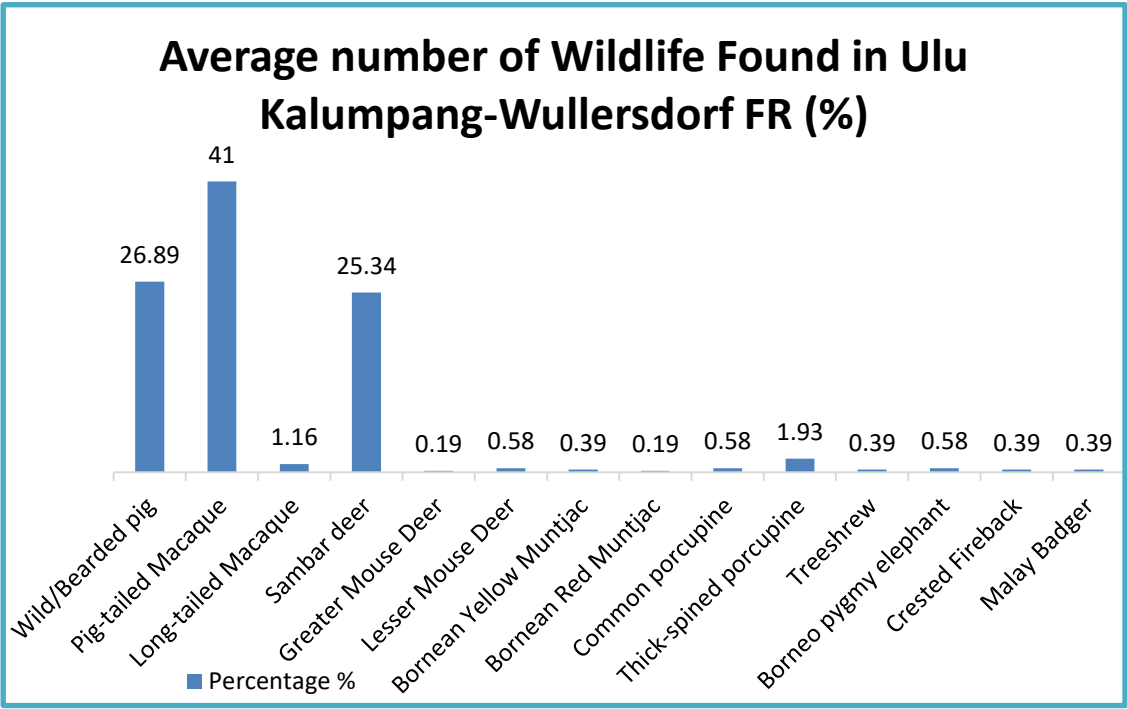
- 1. Opportunistic Sighting
- 2. Camera trapping
- 3. Transect/Recce Walk
- 4. Hornbill Observation

Throughout the wildlife monitoring activities that were carried out, the wildlife unit had successfully collected and analyzed relevant data for the whole year in the Ulu Kalumpang-Wullersdorf Forest Project (UKW-SFM). The following information was collected according to each monitoring method.

3.1 OPPORTUNISTIC SIGHTING

Data information from January to December 2016, 24 species of terrestrial mammals were recorded whereby 3 of them were categorized as threatened species in IUCN red list. Based on the data , Pig-tailed macaque and wild pig are two (2) species that are frequently detected per day. Issues that may affect the probability of detection such as (i) human activities (disturbance such poaching or traffic), (ii) inconsistency in observer effectiveness skill and interest, (iii) fluctuating environment variables such temperature, rainfall, wind speed, time of the day/night and food resources, (iv) differences in species ecology such as breeding habits.

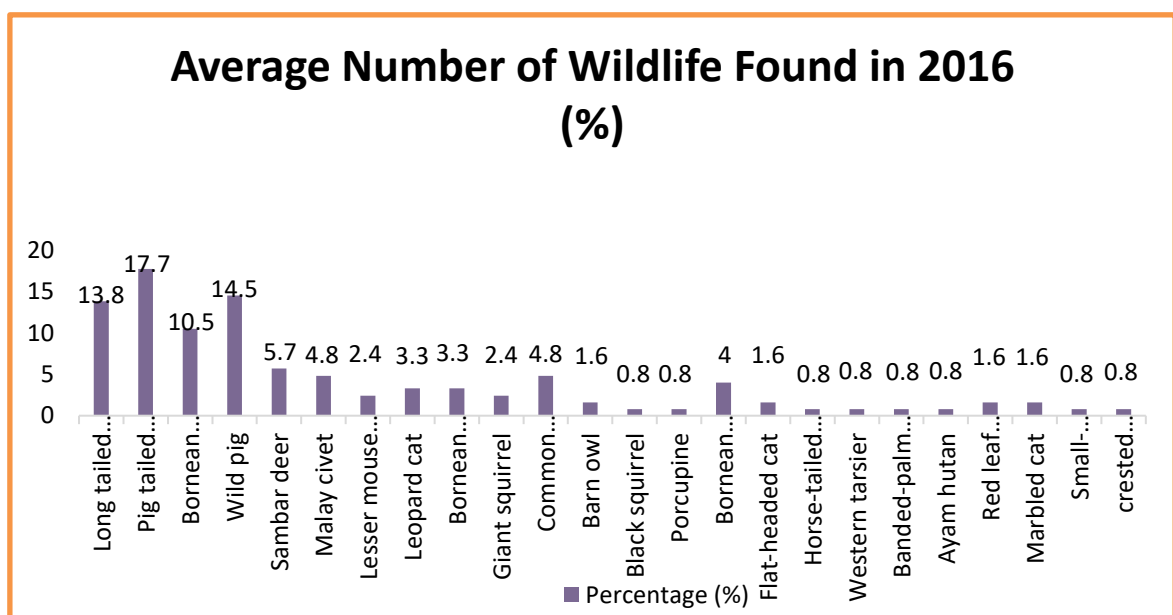
From Graph 1, it is shown that Pig-tailed Macaques are the most commonly detected compare to other wildlife species in the forest reserve areas. Three species that are categorised as endangered species; Bornean pygmy elephant, Common palm civet and Bornean gibbon were also found during the data collection. These data recording were obtained based on the wildlife monitoring, patrolling other activities within forest reserve areas.



Graph 1. Graph shows Opportunistic Sighting data/results from January 2016 until December 2016

### 3.2 CAMERA TRAPPING

The set up of camera trapping were randomly installed at the Ulu Kalumpang FR, Mt. Wullersdorf FR and Kalumpang VJR107 FR. All cameras were placed at a highly potential of wildlife animals sighting and areas such as the wildlife trail. The objective is to collect information on presence and absence of wildlife species within the study areas. Graph 2 below showing that 41% of images taken were Pig-tailed macaque and followed by Bearded pig around 26.89%. Both species are known as common species within the project area. A total of 14 wildlife species were identified, whereby 3 species are classified as threatened, 1 species listed as near threatened and the rest categorized as least concern in IUCN checklist. It also shown that Borneo pygmy elephant which categorised as endangered species by IUCN is present in Ulu Kalumpang-Wullersdorf Forest Reserve area. Overall, there are four camera traps that were placed in specific locations within the forest reserve for data collection.

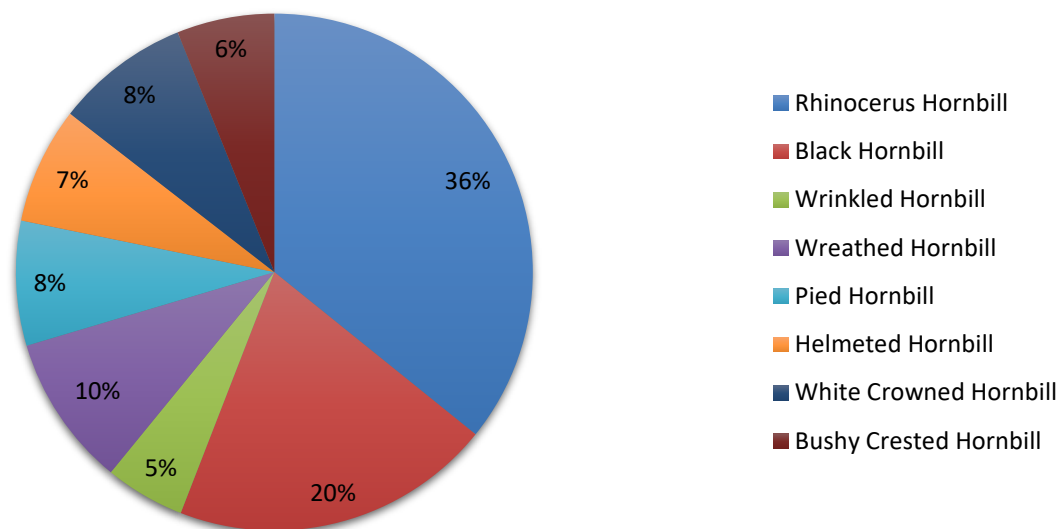


**Graph.2** Graph show Camera trap data Assessment/Result from January 2016 - June 2016

#### 3.3.1 HORNBILL OBSERVATION

Hornbill observation is one of the methods that used in wildlife monitoring by wildlife survey team. It is to identify the species of hornbill presence within Ulu Kalumpang-Wullersdorf SFM Project area either by direct sighting or sound detection. From Chart 1, it is shown that Rhinoceros Hornbill is the most common species that can be found in Ulu Kalumpang-Wullersdorf Sustainable Forest Management area followed by Black Hornbill and other hornbill species.

## Average Number of Hornbill Observation (%)

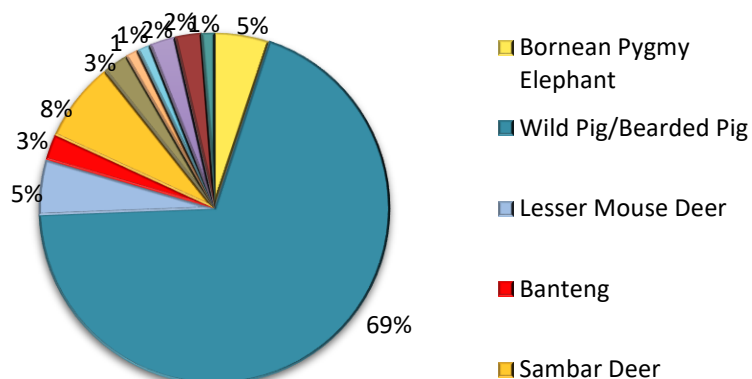


**Chart 1.** Chart shows Hornbill Observation data/results from January until December 2016.

### 3.4 TRANSECT/RECCE WALK

Recce walk/transect line is one of the method used by wildlife survey team for wildlife monitoring activities. There are four (04) permanent transect line based on each forest reserve in Ulu Kalumpang-Wullersdorf SFM Project area (Ulu Kalumpang Forest Reserve, Wullersdorf Forest Reserve, Kalumpang Forest Reserve and Madai Baturong Forest Reserve) for data collection by identifying wildlife trace including footprints, sound, direct sightings and scratching marks.

## AVERAGE NUMBER OF WILDLIFE FOUND IN ULU KALUMPANG FR



**Chart 2.** Chart shows Transect/Recce Walk data/results from January until December 2016.



**Pic. 6** Borneo pygmy elephant (*Elephas maximus*)



**Pic.7** Pig tailed macaque (*Macaca nemestrina*)



**Pic. 8** Crested fireback (*Lophura ignita*)



**Pic. 9** Sambar deer (*Cervus unicolor*)

#### 4. PROTECTION

Enforcement activities are carried out in 2016 were to prevent, monitor and control the encroachment in the project area. Ground patrols were implemented to prevent encroachment such as illegal felling, illegal cultivation, forest fire and poaching within the forest reserve area. The following is a summary of the monthly patrols report for 2016. Only 1 case of bantalan, 2 (two) cases of encroachment and 8 (eight) cases of poaching were recorded.



**Pic. 10** Boundary patrolling and plate installation by protection unit.

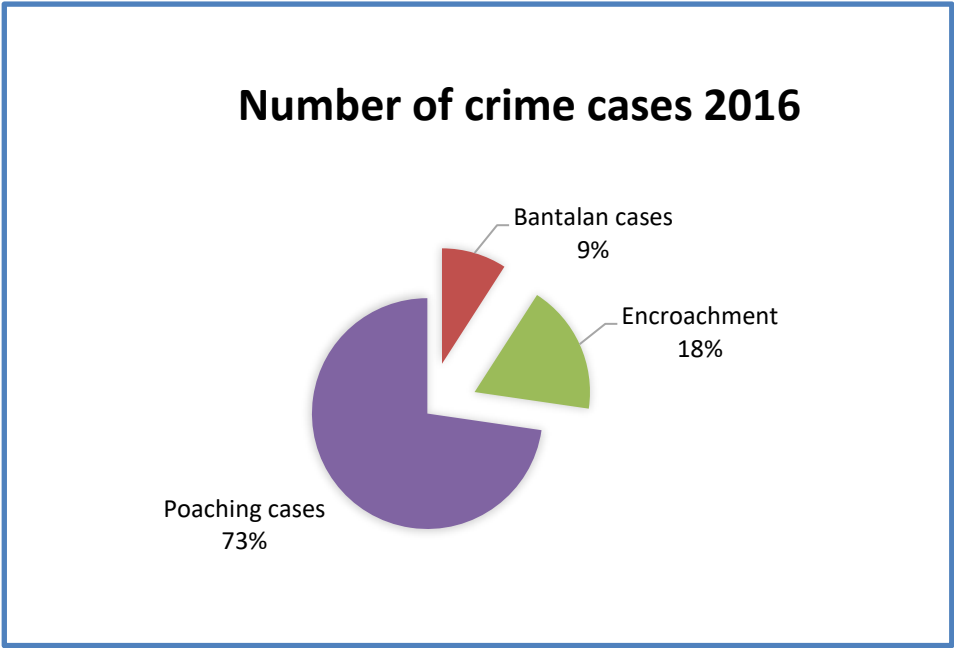


**Pic. 11** Destroyed illegal cultivation inside forest reserve.



**Pic. 12** Aerial survey by UKWSFM staff with Captain Jamahl (Sabah Air).

**SUMMARY OF FOREST CRIMINAL CRIMES IN THE UKW-SFM IN 2016**



**Chart 3.** Chart shows No of cases in 2016.

## 5. FSC CERTIFICATION

In 2016, the FSC Certification program was conducted for the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project (UKW-SFM). Evaluation of the FSC Certification was conducted twice in a year, namely the Preliminary Assessment and the Main Assessment whereby the auditor involved was Dr. Yap Son Kheong and Mr. Angelica Soumin. They were accompanied by an officer from the Headquarters, Ms. Amelia Cynthia Bosi.

### Preliminary Assessment

Preliminary Assessment was conducted on 08 – 12 Aug 2016 by SCS Global Services and led by Dr. Yap Son Kheong is accompanied by Ms. Amelia Cynthia Bosi. Areas visited includes forest reserves, restoration project areas, wildlife transects, forest checking station(FSC) and PSP (Permanent Sample Plots) within the forest reserve area. From the outcomes of the visits, some comments that have been stated from the auditor's to solve and prepare for the Main Assessment.

### Main Assessment

Full Evaluation was done from the 10– 14 October 2016, and UKW SFM managed to pull it off with 1 major, 5 Minors and 4 observations. UKW team managed to close the MAJOR CARS within a month later. The result was sufficient enough to get the recommendation from SCS Global Services for the FSC Certificate. Eventually, on 16 May 2017, FSC awarded the “Well Managed Forest” certificate to the project area, a world class achievement.

### FSC certificate

*SCS Global Services does hereby certify that an independent audit has been completed and conformity to the applicable standard(s) has been confirmed for:*

**Sabah Forestry Department**  
Ulu Kalumpang-Wullersdorf Forest Reserves, Sabah, Malaysia

This operation meets all of the necessary qualifications to be certified for the following claim:  
**Well Managed Certification**  
Sabah Forestry Department has been shown to meet all of the necessary qualifications to be certified as a Well-Managed in accordance with the Forest Stewardship Council®'s Principles & Criteria, as elaborated by the

For the following product(s):  
This is a reserve for conservation benefits

Certificate Code: SCS-FM/COC-005816 Trademark License Code: FSC-C135456  
Valid from: 16 May 2017    Expiry date: 15 May 2022

This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC-certified or FSC Controlled Wood where applicable. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on sales and delivery documents. The scope of this certificate is considered accurate on the date of issuance. The current validity and scope, including the full list of products, shall be verified on <http://info.fsc.org>. The certificate shall remain the property of SCS, and this certificate and all copies or reproductions of this certificate shall be returned to SCS immediately upon request.

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**Pic. 13** Preliminary assessment by SCS Global Services Lead by Dr. Yap Son Kheong held on 08-12<sup>th</sup> August 2017.



**Pic. 14** Main assessment FSC certification by SCS Global Services Lead by Dr. Yap Son Kheong and Puan Angelica on 10-14<sup>th</sup> October 2017.

## 6. BOUNDARY SURVEY

A local surveyor company appointed by the Sabah Forestry Department has taken the task of boundary measurement of the Ulu Kalumpang Forest. The measuring works have commenced in March this year. These measurements involved boundary areas within the forest reserves with conflicts such as illegal palm oil plantation. This measurement is crucial to facilitate the department to enforce the Forest Enactment 1968 and to identify the actual area of oil palm encroachment within the forest reserve area.



**Pic.15** Boundary demarcation by Jurukur Tempatan surveyors at Ulu Kalumpang FR (Sg. Mantri).

## 7. FOREST ROAD

In 2016, no new road construction was build but mostly focused on the maintenance of existing roads. Most of the area that are being maintained is in the project area. This road maintenance will helps the department's staff to monitor forest restoration activities and also to facilitate the contractors to carry out the restoration and maintenance works.

Table 5: Maintenance of forest roads in 2016

No	Location	Target (km)	Achievement (km)
1	HS Mt. Wullersdorf	2	2
3	HS Kalumpang VJR 107D (Sapang)	2	2
	Total	4	4



**Pic. 16** Road maintenance at Mt.Wullersdorf FR restoration and maintenance activities.