Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1515 DENR By the Bay Building, Roxas Boulevard,
Barangay 668, Ermita, Manila

THRU : The ARD for Technical Services

FROM : The OIC, PENR Officer

SUBJECT : **MILESTONE REPORT ON MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT**

Forwarded is the memorandum dated May 18, 2023 of CENRO Sablayan regarding Milestone Report on Mompong Watershed Characterization and Vulnerability Assessment under the target on Adaptive Capacities of Human Communities and Natural Systems Improvement.

The following activites were conducted related to Mompong Watershed Characterization and Vulnerability Assessment:

1. Key Informant Interview at the 4 Barangays for Adaptive Capacity
2. Soil Sample Collection conducted at the 27 identified sites
3. Biodiversity Assessment Monitoring System was conducted using the methodologies of; Transect Walk of Avifauna, Modified Belt Transect method for Flora and Mist netting for flying mammals at the established 2 km transect along Aruyan River. These activities were conducted to monitor the present status of flora and fauna types, abundance and distribution of ecosystem, species and ecosystem services present within Mompong watershed.

Attached herewith are the milestone report re: activities conducted in Mompong Watershed Characterization and Vulnerability Assessment, Field Forms and GIS generated Maps for your reference.

For information and record.

For the OIC, PENR Officer:

EMILIZA A. CALABIO
SVEMS

TSD-CSD5/26/2023

So. Pag-asa, Brgy. Payompon, Mamburao, Occidental Mindoro
Email:penrooccmin@denr.gov.ph

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources Office

MAY 18 2023

RECORDED
Date: 5-18-23
By:

MEMORANDUM

FOR : The OIC, PENR Officer
Mamburao, Occidental Mindoro

THRU : The Chief, Technical Services Division

FROM : The CENR Officer

SUBJECT : **MILESTONE REPORT ON MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT**

Respectfully forwarded is the milestone activities conducted for Mompong Watershed Characterization and Vulnerability Assessment carried out by CDS - CENRO Sablayan under the target on Adaptive Capacities of Human Communities and Natural Systems Improvement.

For information, record and evaluation.

For the CENR Officer

ISAIAS A. GUIMOD
DMO IV/Deputy CENRO

RECORDS
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CDS
RECEIVED BY:
DATE: 5/24/23 TIME: 3:23PM
RELEASED BY:
DATE: 5/25/23 TIME: 3:01PM

National Road, Brgy.Sto. Niño, Sablayan, Occidental Mindoro
E-mail: cenrosablayan@denr.gov.ph

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources Office

MAY 18 2023

MEMORANDUM

RECORDED
Date: 5-18-23
By:

FOR : The OIC, PENR Officer
Mamburao, Occidental Mindoro

THRU : The Chief, Technical Services Division

FROM : The CENR Officer

SUBJECT : **MILESTONE REPORT ON MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT**

Respectfully forwarded is the milestone activities conducted for Mompong Watershed Characterization and Vulnerability Assessment carried out by CDS - CENRO Sablayan under the target on Adaptive Capacities of Human Communities and Natural Systems Improvement.

For information, record and evaluation.

For the CENR Officer

ISAIAS A. GUIMOD
DMO IV/Deputy CENRO

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DATE: 5/25/23 TIME: 3:01PM

National Road, Brgy.Sto. Niño, Sablayan, Occidental Mindoro
E-mail: cenrosablayan@denr.gov.ph

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources Office

May 16, 2023

MEMORANDUM

FOR : The CENR Officer

THRU : The DMO IV, Deputy CENR Officer

FROM : The Chief, CDS

SUBJECT : **MILESTONE REPORT ON MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT AS OF MAY 2023**

Respectfully submitted is the milestone activities conducted for Mompong Watershed Characterization and Vulnerability Assessment as of May 2023 carried out by CDS - CENRO Sablayan under the target on Adaptive Capacities of Human Communities and Natural Systems Improvement.

Please be informed that the CDS - CENRO Sablayan conducted the following activities related to Mompong Watershed Characterization and Vulnerability Assessment to wit; (1.) Key Informant Interview at the 4 Barangays for Adaptive Capacity, (2.) Soil Sample Collection conducted at the 27 identified sites, (3.) Biodiversity Assessment Monitoring System was conducted using the methodologies of; Transect Walk for Avifauna, Modified Belt Transect method for Flora and Mist netting for flying mammals at the established 2 km transect along Aruyan River. These activities were conducted to monitor the present status of flora and fauna types, abundance and distribution of ecosystem, species, and ecosystem services present within Mompong Watershed.

Attached herewith are the milestone report re: activities conducted in Mompong Watershed Characterization and Vulnerability Assessment, Field Forms and GIS generated Maps for reference and documentation

For information, record and evaluation.

HEROLD S. CASTRO

National Road, Brgy.Sto. Niño, Sablayan, Occidental Mindoro
E-mail: cenrosablayan@denr.gov.ph

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources Office

I. TITLE

MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT MILESTONE REPORT AS OF MAY 15. 2023

II. INTRODUCTION

Watershed Characterization is an activity that involves the gathering of information describing the bio-physical and socio-economic condition of a watershed from the forest down to the coastal areas (as the case may be) and determination of issues, vulnerability, and opportunities for development interventions in order to have an understanding of and control over the various biological, physical and socio-economic processes in the watershed. And Vulnerability Assessment is a profile discussing the relationship between natural and anthropogenic hazards and recipient subject (watershed). The vulnerability assessment identifies the strength and weaknesses of the recipient subject in relation to the identified hazard.

Mompong watershed covers 33071.88 hectares and encompasses 12 barangays (Burgos, Ligaya, General Emilio Aguinaldo, Malisbong, Batongbuhay, Tuban, Sta.Lucia, Poblacion, Buenavista, Sto. Nio, and San Vicente) within the municipality of Sablayan. This watershed also falls within CADT R04-SAB-0309-098 of the Mangyan-Alangan Tribe and within the jurisdiction Sablayan Prison and Penal Farm. Mompong watershed provides drinking water and agricultural water via irrigation canals, deep wells, and pitcher/hand water pumps (*poso*); some part of the Mompong River is also utilized for bathing and swimming.

III. OBJECTIVES

The preparation of a watershed characterization and vulnerability assessment is the first step in the sustainable management of our watershed resources. It provides watershed managers and decision-makers basis for development and conservation strategies to be implemented. The aim of vulnerability assessment is to provide the policy and decision-makers with science-based information on the magnitude and/or degree of vulnerability of a watershed to natural and anthropogenic hazards. It also analyzes and determines as to where and what interventions should be conducted as well as the strategies and methods to be applied.

The goal is to ensure adequate protection from the environmental hazard, thus the
process include identification of hazard, assessment of vulnerability and formulation of interventions to reduce possible damage or enhance the coping capacity of the system. *(Manual on Vulnerability Assessment of Watershed).*

IV. ACTIVITIES

A. COORDINATION

The CENRO Sablayan has coordinated and requested assistance regarding the activities to be conducted for Mompong Watershed Characterization and Vulnerability Assessment to Sablayan Prison and Penal Farm (SPPF), and within the covered barangays *(Burgos, Ligaya, General Emilio Aguinaldo, Malisbong, Batongbuhay, Tuban, Sta.Lucia, Poblacion, Buenavista, Sto.Niño and San Vicente)*.

B. SOIL SAMPLING COLLECTION

The CDS team conducted Soil Sampling Collection at 27 identified sites within the Mompong Watershed. The collected samples were from the level to nearly level, gently sloping to undulating and steep to very steep following the soil collection procedure being employed by Bureau of Soil and Water Management (BSWM). Soil samples were taken from the topsoil (0-20cm) and subsoil (21-50cm) portion of the soil horizon. Lastly, the geographic coordinates, where the soil samples were taken, are recorded for the mapping and documentation process. The collected soil sample was subjected to air drying and will be forwarded to BSWM for Soil Analysis.

C. BIODIVERSITY ASSESSMENT MONITORING SYSTEM (BAMS) SITE

The team conducted Biodiversity Monitoring Assessment System (BAMS) for Mompong Watershed Characterization at established transect starting at *51P 272472, 1415877* and ending at *51P 273732, 1415627* in the area along the Aruyan River.

● ECOSYSTEM LEVEL ASSESSMENT

Ecosystem Level Assessment was conducted along the transect starting from point 1 to point 8 with an interval of 50 m. The assessment was done in every 50m section the transect line. Each section is classified following the 12 forest formations developed by Fernando *et al.*

● FLORAL ASSESSMENT

Species level assessment was performed using the modified transect method at the established 2-km transect line. Species level assessment covered flora and fauna identification. There were eight (8) plots established along the 2-km transect line with an interval of 250 meters starting from 0 meters. Each plot comprises three (3) quadrats that serve as the study area: quadrat 1 (20x20 m), quadrat 2 (5x5 m), and quadrat 3 (1x1 m). Every plot was assessed at three different forest layers: Upper canopy on quadrat 1, understorey on quadrat 2, and ground cover on quadrat 3. The survey was conducted following the principle of modified belt transect method.

Upper canopy diversity includes the woody trees with diameter at breast height (DBH) of at least 10 cm. The survey was done in the entire 20 by 20m quadrat collecting the DBH, merchantable height (MH), and total height (TH). Diameter at breast height measured at 1.3 meters above the ground. Merchantable height is the height measured from the stump up to the usable or merchantable part of the tree, either at the first branching or where the diameter becomes too small to be utilized. Total height refers to the height of the tree from the ground up to the top of the tree.

Understory species includes the small trees, poles, saplings, and shrubs with height of at least 1m. The survey for the understorey diversity was conducted within the 5 x 5m quadrat established inside the 20 x 20m quadrat.

Ground cover assessment includes identification and estimation of ground cover percentage which includes grasses, vines, ferns, sedges, other plants less than 1m in height, forest litter, and barren soil. Ground cover diversity was surveyed within the 1 x 1 m quadrat established inside the 5 x 5m quadrats.

●FAUNA ASSESSMENT

1. TRANSECT WALK (Birds)

The observation of birds was also conducted in the established 2-km transect for the faunal assessment which is along the Aruyan River. Transect walk was conducted from point 1 at *51P 272472, 1415877* and ending at point 8 at *51P 273732, 1415627.* Birds heard and seen during transect were identified to species level. Bird identification trough transect walk was done early morning from 6:00 am - 8:00 am.

2. MIST NETTING (Mammals and Avifauna)

For bats and avifauna, mist nets were used to sample this group. Net locations were set up in areas of highest likelihood for bat capture (e.g., forest trails and gaps, near fruit trees, along rivers). The four (4) net stations used for birds were also used for bats and were in operation for two nights. All net stations were checked during the evening, starting at 08:00 to 11:00 pm; mist nets were also checked during early morning at 05:30 am. Retrieved bats were documented and recorded using the field forms and it will be later be identified using Key to the Bats of the Philippine Islands (Ingle and Heaney 1992).

D. KEY INFORMANT INTERVIEW

The CDS team conducted Key Informant Interviews regarding the Adaptive capacities in the barangays within Mompong Watershed using tagalog-translated forms based on FMB Technical Bulletin 16-A at 4 Barangays.

LOCATION	No. of Interviews conducted
Barangay Sta.Lucia	30
Barangay Sto.nino	30
Barangay Buenavista	30
Barangay Ligaya	5

E. HYDROLOGY/STREAMFLOW MEASUREMENT

In order to determine the volume of the water discharge within the Mompong Watershed during the dry and wet seasons, streamflow measurement was scheduled monthly from February to November 2023. For this quarter, two stream flow measurements were conducted in April and May at the established streamflow sites (upper stream, middle stream, and lower stream).

V. RESULTS (BAMS)

A. ECOSYSTEM LEVEL ASSESSMENT

Ecosystem Level Assessment was conducted along the transect starting from point 1 to point 8 with an interval of 50 m. The whole transect was classified as Tropical Lowland Evergreen Forest, with stand maturity of Secondary Growth Forest to Old Growth Forest.

B. FLORA ASSESSMENT

At the Upper Canopy, a total of 140 trees were recorded and the most dominant species are Guiho with a total of 13 trees followed by Kalantas with a total of 10 trees.

The Guiho, with 50 trees documented, the Amugis, with 28, and the Kalantas, with 24, are the most recorded species in the understory diversity, with a total of 405 trees recorded.

Forest Litters dominated the ground cover diversity ranging from 73-95% followed by Grasses/Ferns by 5-40 % and wildlings of Kalantas and Amogues by 2-5%

C. FAUNAL ASSESSMENT

i. TRANSECT WALK (Birds and other species)

During transect walk, the team recorded 11 different bird species with a total of 33 individual.

ii. MIST NETTING (Mammals and Avifauna)

On Mist netting, a total of 13 individual bats were captured and documented. Based on initial identification, bats species are the *Lesser short nosed fruit bat, Long tongue nectar bat, common pipistrelle and Little golden-mantled flying fox*. These species will be later verified using Key to the Bats of the Philippine Islands (Ingle and Heaney 1992).

species will be later verified using Key to the Bats of the Philippine Islands (Ingle and Heaney 1992).

VI. ATTACHMENTS

- Field data sheet for Ecosystem level assessment
- Field data sheet for Upper canopy assessment
- Field data sheet for Understory assessment
- Field data sheet for the Ground cover diversity assessment
- Field data sheet for Flying Mammals
- Field Data sheet for Avifauna
- GIS generated Maps

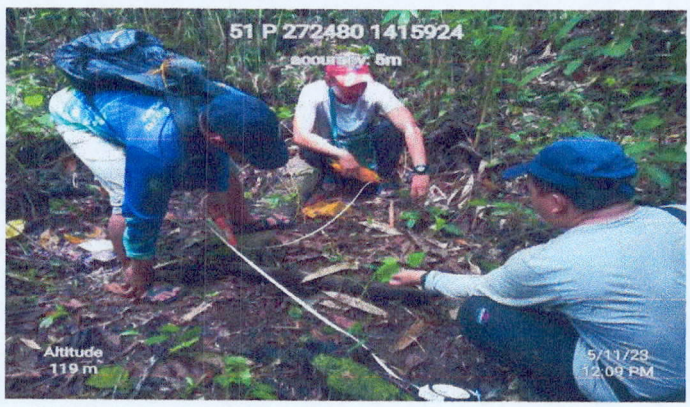
Prepared and submitted by:

JOSEPH M. MATEO
Ecosystems Management Specialist I

Checked by:

HEROLD S. CASTRO
ECOMS I/ Chief, CDS

FLORA ASSESSMENT USING BAMS METHOD



FAUNA ASSESSMENT MIST-NETTING

Annex H.2. Field data sheet for modified strip transect method for herpetofauna

Site Location				Date: 5/10-11/2023	Time:
Plot No. 1-4	Quadrat No. _____	Vegetation Type:		Observers: Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral	
		Weather:			
	Transect No. _____	Elevation:masl			
		GPS Unit:			
Transect Coordinates					Transect Length:
Starting Point:	51 P 273780 1415590	Endpoint:		51P 273254 1415511	1000 m

NO.	SPECIES	HEARD and/or SEEN	FREQ	SAMPLE MEASUREMENTS*					REMARKS
				SVL	tL	HL	FL	Wt	
001	Imperial pegion		15						
002	Pide fantail		2						
003	Egret		1						
004	Kilyawan		3						
005	Sunbird		3						
006	Balud		1						
007	Crow		4						
008	Bulbul		1						
009	woodpecker		1						
010	koel		1						
011	Quail		1						
012		total	**33**						
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*SVL - Snout-to-vent length, TL - Tail length, HL - Head length, HL - Hindfoot length, FL - Forefoot length, Wt - Body weight (in grams)

Annex G.1. Field data sheet for ecosystem level assessment (Sheet 1 of 2)

Site Location:			Date: 5/11/2023	Time:
Plot No. 1-8	Quadrat No. _____	Coordinates: N E	Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral	
	Transect No. _____	Elevation: masl	Vegetation Type:	
		GPS Unit:	Weather:	
SECTION	FOREST FORMATION	STAND MATURITY	PHOTO NUMBERS	REMARKS
0.0 - 0.1	Evergreen	Old	2	
0.1 - 0.2	Tropical lowland evergreen	Old	2	
0.2 - 0.3	Tropical lowland evergreen	Old	3	
0.3 - 0.4	Tropical lowland evergreen	Old/close	2	
0.4 - 0.5	Tropical lowland evergreen	Old/close	2	
0.5 - 0.6	Tropical lowland evergreen	Old/close	2	
0.6 - 0.7	Tropical lowland evergreen	Old/open	3	
0.7 - 0.8	Tropical lowland evergreen	Old/open	2	
0.8 - 0.9	Tropical lowland evergreen	Old/close	2	
0.9 - 1.0	Tropical lowland evergreen	Old/close	2	
1.0 - 1.1	Tropical lowland evergreen	Old/close	2	
1.1 - 1.2	Tropical lowland evergreen	Old/close	2	
1.2- 1.3	Tropical lowland evergreen	Old/open	2	
1.3 - 1.4	Tropical lowland evergreen	Old/open	2	
1.4 - 1.5	Tropical lowland evergreen	Old/open	2	
1.5 - 1.6	Tropical lowland evergreen	Old/open	2	
1.6 - 1.7	Tropical lowland evergreen	Old/open	2	
1.7 - 1.8	Tropical lowland evergreen	Second open	3	
1.8 - 1.9	Tropical lowland evergreen	Second open	2	
1.9 - 2.0	Tropical lowland evergreen	Second open	2	
2.0 - 2.1	Tropical lowland evergreen	Second open	2	
2.1 - 2.2	Tropical lowland evergreen	Second open	2	
2.2 - 2.3	Tropical lowland evergreen	Second open	2	
2.3 - 2.4	Tropical lowland evergreen	Second open	2	

2.4 - 2.5	Tropical lowland evergreen	Second open	2	
2.5 - 2.6	Tropical lowland evergreen	Second open	2	
2.6 - 2.7	Tropical lowland evergreen	Second open	2	
2.7 - 2.8	Tropical lowland evergreen	Second open	2	
2.8 - 2.9	Tropical lowland evergreen	Second open	2	
2.9 - 3.0	Tropical lowland evergreen	Second open	2	
3.1 - 3.2	Tropical lowland evergreen	Second open	3	
3.1 - 3.3	Tropical lowland evergreen	Second open	3	
3.1 - 3.4	Tropical lowland evergreen	Second open	2	
3.1 - 3.5	Tropical lowland evergreen	Second open	2	
3.1 - 3.6	Tropical lowland evergreen	Second open	2	
3.1 - 3.7	Tropical lowland evergreen	Second open	2	
3.1 - 3.8	Tropical lowland evergreen	Second open	2	
3.1 - 3.9	Tropical lowland evergreen	Second open	2	
3.9 - 4.0	Tropical lowland evergreen	Second open	2	

Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/10/2023		Time:
Plot No. _1__	Quadrat No. _____	Coordinates: 51 P 273780 1415590		Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral		
	Transect No. _____	Elevation: masl 146		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Guiho		36	18	25	
002	Nato		28	20	26	
003	Lawaan		58	25	30	
004	Tuog		40	7	18	
005	Anonang		18	7	12	
006	Malasantol		30	10	17	
007	Palm Tree		15		14	
008	Balinghasay		11	7	15	
009	Lawaan Bagtikan		60	17	23	
010	Binuang		51	15	20	
011	Balinghasay		11	6	12	
012	Anabiong		20	8	15	
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Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/10/2023		Time:
Plot No. _2__	Quadrat No. _____	Coordinates: 51P 273600 1415583		Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral		
	Transect No. _____	Elevation: masl 143		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Guiho		82	25	30	
002	Malugai		24	10	25	
003	Kalantas		10	2	12	
004	Guiho		35	30	35	
005	Guiho		35	20	25	
006	Kamagong		18	8	15	
007	Guiho		25	20	27	
008	Balinghasai		12	1	20	
009	Lauan-Bagtikan		28	20	27	
010	Balinghasai		14	2	15	
011	Guiho		65	20	30	
012	Balinghasai		10	3	16	
013	Malugai		40	28	35	
014	Guiho		32	30	34	
015	Anilao		15	5	8	
016	Guiho		32	19	25	
017	Malaruhat		18	7	14	
018	Fishtail		12	-	7	
019	Lauan puti		65	30	40	
020	Kalantas		18	20	30	
021	Guiho		120	35	45	
022	Anilao		24	15	22	
023	Bayag usa		29	5	14	
024	Bugtatae		26	15	20	
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Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/10/2023		Time:
Plot No. _3__	Quadrat No. _____	Coordinates: 51P 273352 1415568		Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral		
	Transect No. _____	Elevation: masl 111		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Dao		25	20	27	
002	Bayag usa		17	8	15	
003	Malugai		85	28	32	
004	Kamagong		33	27	33	
005	Lawaan		40	25	30	
006	Bayag usa		18	55	13	
007	Bayag usa		15	4	11	
008	Bayag usa		20	10	18	
009	Bayag usa		20	9	20	
010	Lauan Bagtikan		35	25	32	
011	Malaruhat		32	17	25	
012	Amugis		190	30	42	
013	Guiho		25	25	35	
014	Malaruhat		19	16	23	
015	Guiho		22	12	21	
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Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/10/2023	Time:	
Plot No. 4	Quadrat No. _____	Coordinates: 51P 273254 1415511		Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No. _____	Elevation: masl 95		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Malasantol		45	12	18	
002	Kalantas		60	8	16	
003	Bulong aeta		10	2	5	
004	Malugai		18	3	21	
005	Lawaan		30	6	21	
006	Guiho		56	15	30	
007	Palsahingin		10	3	10	
008	Tibig		12	5	10	
009	Guiho		30	12	21	
010	Amugis		30	15	25	
011	Mulawing asa		15	4	13	
012	Malugai		22	8	15	
013	Dau		40	20	35	
014	Balinghasai		10	2	8	
015	Amugis		90	30	40	
016	Mulawing aso		17	7	15	
017	Kalantas		26	6	20	
018	Tibig		15	3	8	
019	Tibig		10	2	10	
020	Kalantas		10	3	10	
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Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/11/2023	Time:	
Plot No. 5	Quadrat No. _____	Coordinates: 51P 273094 1415571		Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No. _____	Elevation: masl 95		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Katmon		32	7	12	
002	Ligas		41	14	20	
003	Tan ag		30	6	12	
004	Tan ag		22	10	14	
005	Kamagong		22	7	12	
006	Tibig		18	2	8	
007	Kamagong		18	7	10	
008	Kamagong		10	2	5	
009	Lawaan		10	6	6	
010	Tibig		22	2	12	
011	Anilao		35	3	11	
012	Tibig		14	5	7	
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Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/11/2023	Time:	
Plot No. 6	Quadrat No. _____	Coordinates: 51P 272836 1415624		Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No. _____	Elevation: masl 90		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Malainyam		22	3	8	
002	Kalantas		20	5	9	
003	Kalantas		32	7	12	
004	Alim		10	1	8	
005	Mambog		32	10	14	
006	Bangkal		20	7	10	
007	Kalantas		32	7	12	
008	Alim		10	3	9	
009	Alim		10	2	9	
010	Banabang Tirik		28	8	12	
011	Alim		11	2	14	
012	Banaba		10	5	10	
013	Banaba		13	7	17	
014	Biaga		12	2	8	
015	Biaga		18	7	12	
016	Banaba		20	8	14	
017	Anonang		24	10	12	
018	Binuang		25	10	14	
019	Pandan dagat		18	1	8	
020	Tibig		15	1	10	
021	Anonang		24	10	15	
022	Banabang Tirik		18	7	10	
023	Alim		12	2	8	
024	Binuang		31	18	22	
025	Katmon		26	7	13	
026	Tuog		40	20	30	
027	Kalantas		35	9	18	
028	Kalantas		20	2	15	
029	Fish tail		15	-	10	
030						
031						
032						

Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/11/2023		Time:
Plot No. _7__	Quadrat No. _____	Coordinates: 51P 272615 1415776		Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral		
	Transect No. _____	Elevation: masl 86		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Kupang		60	20	30	
002	Kaymito		10	2	9	
003	Fishtail		18		8	
004	Batino		15	5	10	
005	Antipolo		10	1	15	
006	Kupang		70	25	35	
007	Batino		15	4	10	
008	Bayag usa		16	2	8	
009	Irok		35		10	
010	Tibig		22	2	11	
011	Alim		10	5	9	
012	Tuog		40	8	14	
013	Batino		45	12	20	
014	Tuog		24	4	18	
015	Kaymito		18	5	11	
016	Irok		35		8	
017						
018						
019						
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021						
022						
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024						
025						
026						
027						
028						
029						
030						
031						
032						

Annex G.2. Field data sheet for upper canopy assessment

Site Location:				Date: 5/11/2023		Time:
Plot No. 8	Quadrat No. _____	Coordinates: 51P 272472 1415877		Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral		
	Transect No. _____	Elevation: masl 81		Vegetation Type:		
		GPS Unit:		Weather:		
NO.	SPECIES	VOUCHER NO.	DBH	MH	TH	REMARKS
001	Alim		28	9	25	
002	Anonang		35	8	15	
003	Kupang		55	15	24	
004	Banaba		16	2	10	
005	Banaba		17	4	11	
006	Talisay gubat		25	8	15	
007	Bangkal		35	15	24	
008	Tibig		40	9	16	
009	Tibig		16	4	8	
010	Kalantas		16	2	18	
011	Malugai		24	5	12	
012						
013						
014						
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030						
031						
032						

Annex G.3. Field data sheet for understory assessment

Site Location:			Date: 5/10/2023		Time:
Plot No. 1	Quadrat No.	Coordinates: 51 P 273780 1415590	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 146	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Malasantol		3		
002	Ligas		1		
003	Irok		4		
004	Balingasay		1		
005	Nato		2		
006	Bunga		1		
007	Bayag usa		5		
008	Mala guyabano		20		
009					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date: 5/10/2023		Time:
Plot No. 2	Quadrat No.	Coordinates: 51P 273600 1415583	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 143	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Rattan		2		
002	Guiho		50		
003	Balinghasai		12		
004	Lawaan		18		
005	Kalantas		5		
006	Bagto		6		
007					
008					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 3	Quadrat No. _____	Coordinates: 51P 273352 1415568	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No. _____	Elevation: Masl 111	Vegetation Type:		
		GPS Unit:	Weather:		

NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Amugis		22		
002	Kalantas		5		
003	Malugai		3		
004	Aglao		3		
005	Bayag usa		26		
006					
007					
008					
009					
010					
011					
012					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 4	Quadrat No. _____	Coordinates: 51P 273254 1415511	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No. _____	Elevation: Masl 95	Vegetation Type:		
		GPS Unit:	Weather:		

NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Malasantol		9		
002	Kalantas		9		
003	Amugis		6		
004	Malapapaya		1		
005	Irok		2		
006	Bagto		8		
007	Nito		2		
008	Orchids		1		
009	Matang aswang vine		1		
010	Fish tail		1		
011	Aglao		5		
012	Pandan		1		
013	Bagto		2		
014	Liana (woody vine)		5		
015	Pakpak lawin		1		
016					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 5	Quadrat No.	Coordinates: 51P 273094 1415571	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 95	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Kamagong		1		
002	Irok		4		
003	Bagto		7		
004	Potat		1		
005	Bunga		1		
006	Pako		1		
007	Pakpak lawin		1		
008	Kalantas		1		
009	Bayong yong		2		
010					
011					
012					
013					
014					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 6	Quadrat No.	Coordinates: 51P 272836 1415624	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 90	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Irok		4		
002	Fishtail		4		
003	Anonang		5		
004	Rattan		2		
005	Alim		6		
006	Kalantas		8		
007	Aglao		8		
008	Bungarngar		2		
009	Banaba		2		
010	Tan ag		1		
011	Pakil		4		
012	bagto		5		
013					
014					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 7	Quadrat No.	Coordinates: 51P 272615 1415776	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 86	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Ligas		1		
002	Potat		2		
003	Kaymito		5		
004	Alim		9		
005	Anunang		3		
006	Tan ag		11		
007	Tibig		2		
008	Pakil		3		
009					
010					
011					
012					
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Annex G.3. Field data sheet for understory assessment

Site Location:			Date:		Time:
Plot No. 8	Quadrat No.	Coordinates: 51P 272472 1415877	Observer(s): Joseph M. Mateo, Ferdinand B. Magno, Marlon C. Cortez, Rodel S. Capiral		
	Transect No.	Elevation: Masl 81	Vegetation Type:		
		GPS Unit:	Weather:		
NO.	SPECIES	VOUCHER NO.	COUNT	EPIPHYTES	REMARKS
001	Buho		24		
002	Kalantas		16		
003	Irok		6		
004	Biaga		4		
005	Anunang		2		
006	Nito		1		
007	Bagto		2		
008	Aglao		1		
009	Bangkal		4		
010					
011					
012					
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Annex G.4. Field data sheet for the ground cover diversity assessment

<table>
<tr><td colspan="3">Site Location:</td><td>Date:</td><td>Time:</td></tr>
<tr><td rowspan="3">Plot No.
1</td><td>Quadrat No.</td><td>Coordinates:
51 P 273780 1415590</td><td colspan="2">Observer(s):
Joseph M. Mateo
Ferdinand B. Magno
Marlon C. Cortez
Rodel S. Capiral</td></tr>
<tr><td rowspan="2">Transect No.</td><td>Elevation:masl 146</td><td colspan="2">Vegetation Type:</td></tr>
<tr><td>GPS Unit:</td><td colspan="2">Weather:</td></tr>
</table>

SPECIES	VOUCHER NO.	% COVER	REMARKS
Malasantol		1	
Irok		3	
Malaguya bano		20	
Nato		1	
Grass		20	
Forest litter		73	

Annex G.4. Field data sheet for the ground cover diversity assessment

Site Location:			Date:	Time:
Plot No. _2___	Quadrat No. _____	Coordinates: 51P 273600 1415583	Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral	
	Transect No. _____	Elevation:masl 143	Vegetation Type:	
		GPS Unit:	Weather:	

SPECIES	VOUCHER NO.	% COVER	REMARKS
Rattan		2	
Balingasay		2	
Irok		1	
Guiho		3	
Mushroom		2	
Amugis		1	
Forest litters		80	
Fern		4	

Annex G.4. Field data sheet for the ground cover diversity assessment

Site Location:			Date:	Time:
Plot No. __3__	Quadrat No. ______	Coordinates: 51P 273352 1415568	Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral	
	Transect No. ______	Elevation:masl 111	Vegetation Type:	
		GPS Unit:	Weather:	

SPECIES	VOUCHER NO.	% COVER	REMARKS
Forest litters		90	
Bayag usa		3	
Grass		7	
Kalantas		2	
Amugis		2	

Annex G.4. Field data sheet for the ground cover diversity assessment

Site Location:			Date:	Time:
Plot No. __4__	Quadrat No. ______	Coordinates: 51P 273254 1415511	Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral	
	Transect No. ______	Elevation:masl 95	Vegetation Type:	
		GPS Unit:	Weather:	

SPECIES	VOUCHER NO.	% COVER	REMARKS
Bagto		4	
Fishtail		1	
Liana (woody vines)		2	
Forest litter		90	
Kalantas		1	
Fern		1	

Annex G.4. Field data sheet for the ground cover diversity assessment

Site Location:			Date:	Time:
Plot No. __5__	Quadrat No. _____	Coordinates: 51P 273094 1415571	Observer(s): Joseph M. Mateo Ferdinand B. Magno Marlon C. Cortez Rodel S. Capiral	
	Transect No. _____	Elevation:masl 95	Vegetation Type:	
		GPS Unit:	Weather:	

SPECIES	VOUCHER NO.	% COVER	REMARKS
Kalantas		1	
Tan ag		2	
Lawaan		10	
Pako		1	
Forest litter		86	

Annex G.4. Field data sheet for the ground cover diversity assessment

<table>
<tr><td colspan="3">Site Location:</td><td>Date:</td><td>Time:</td></tr>
<tr><td rowspan="3">Plot No.
6</td><td>Quadrat No.</td><td>Coordinates:
51P 272836 1415624</td><td colspan="2">Observer(s):
Joseph M. Mateo
Ferdinand B. Magno
Marlon C. Cortez
Rodel S. Capiral</td></tr>
<tr><td rowspan="2">Transect No.</td><td>Elevation:masl 90</td><td colspan="2">Vegetation Type:</td></tr>
<tr><td>GPS Unit:</td><td colspan="2">Weather:</td></tr>
</table>

SPECIES	VOUCHER NO.	% COVER	REMARKS
Kalantas		6	
Banaba		5	
Weeds/sedges		40	
Forest litter		50	

Annex G.4. Field data sheet for the ground cover diversity assessment

<table>
<tr><td colspan="3">Site Location:</td><td>Date:</td><td>Time:</td></tr>
<tr><td rowspan="3">Plot No.

__7__</td><td>Quadrat No.</td><td>Coordinates:
51P 272615 1415776</td><td colspan="2">Observer(s):

Joseph M. Mateo
Ferdinand B. Magno
Marlon C. Cortez
Rodel S. Capiral</td></tr>
<tr><td rowspan="2">Transect No.</td><td>Elevation:masl 86</td><td colspan="2">Vegetation Type:</td></tr>
<tr><td>GPS Unit:</td><td colspan="2">Weather:</td></tr>
</table>

SPECIES	VOUCHER NO.	% COVER	REMARKS
Anonang		1	
Kaymito		1	
Sampalok sampalokan		2	
Vine		1	
Forest litter		95	

Annex G.4. Field data sheet for the ground cover diversity assessment

<table>
<tr><td colspan="3">Site Location:</td><td>Date:</td><td>Time:</td></tr>
<tr><td rowspan="3">Plot No.

__8__</td><td>Quadrat No.

______</td><td>Coordinates:
51P 272472 1415877</td><td colspan="2">Observer(s):

Joseph M. Mateo
Ferdinand B. Magno
Marlon C. Cortez
Rodel S. Capiral</td></tr>
<tr><td rowspan="2">Transect No.
______</td><td>Elevation:masl 81</td><td colspan="2">Vegetation Type:</td></tr>
<tr><td>GPS Unit:</td><td colspan="2">Weather:</td></tr>
</table>

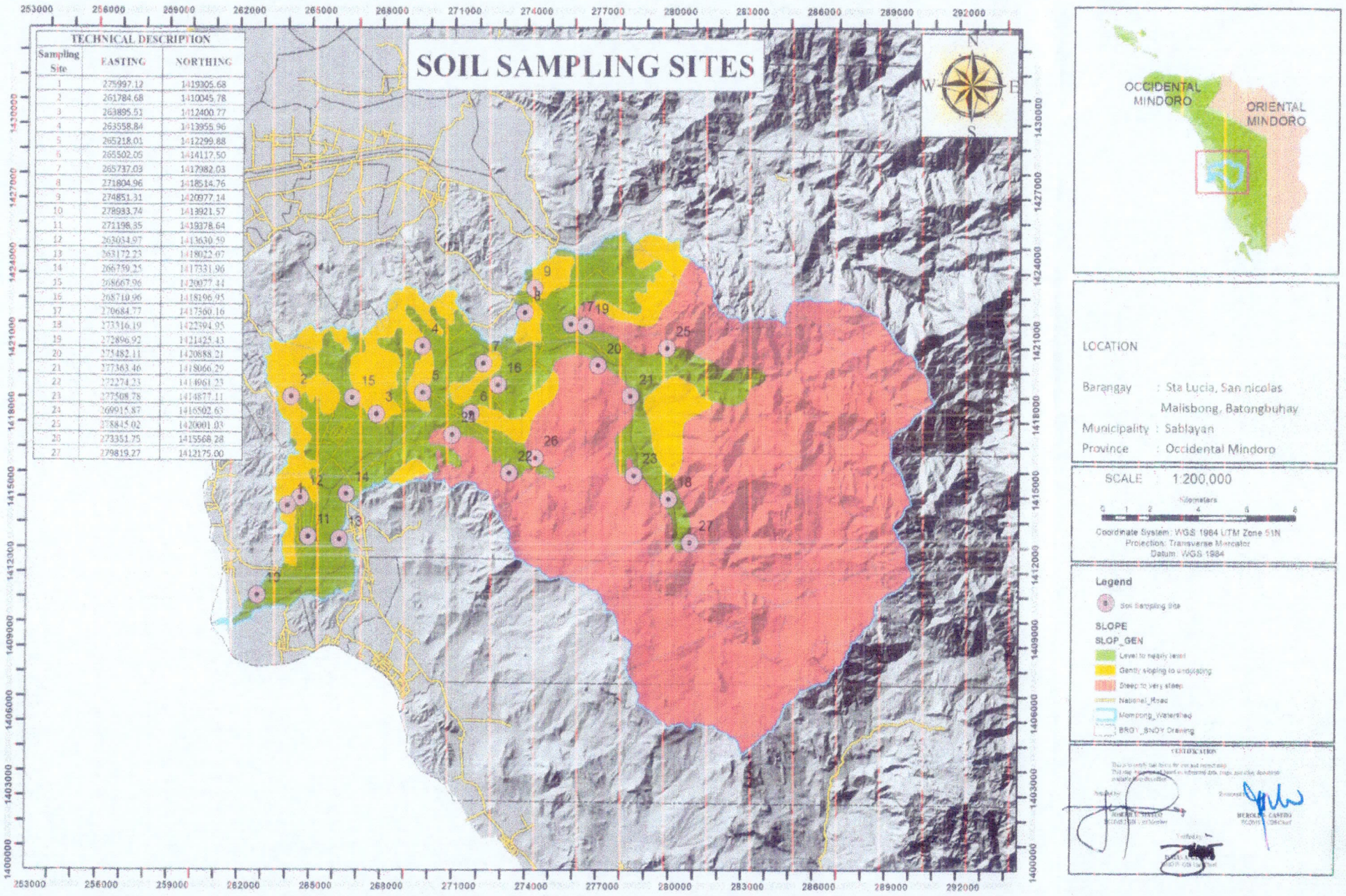
SPECIES	VOUCHER NO.	% COVER	REMARKS
Vine		1	
Moss		3	
Forest litter		95	
Dita		1	
grass		1	

Appendix 6

FAUNAL ASSESSMENT (MAMMALS)
Location : So. Mayba, Brgy. Pagasa, Sablayan, Occidental Mindoro
Date of Assessment : May 11-12, 2023
Assessment Method : Mist Netting

Date/Time	Net. No	Common Name	Scientific Name	Authority	Conservation Status	Frequency
5/11/2023						
(6:00AM)	1	Lesser short-nosed fruit bat	*Cynopterus brachyotis*	Muller, 1838	LC	3
12-May-23						
(6:00AM)	1	Long-tongue nectar bat	*Macroglossus minimus*	Muller, 1838	LC	1
		Lesser short-nosed fruit bat	*Cynopterus brachyotis*	Muller, 1838	LC	3
		Common pipistrelle	*Pipistrellus pipistrellus*			1
	2	Lesser short-nosed fruit bat	*Cynopterus brachyotis*	Muller, 1838	LC	1
		Little golden-mantled flying fox	*Pteropus pumilus*		near threatened	2
	3	Lesser short-nosed fruit bat	*Cynopterus brachyotis*	Muller, 1838	LC	4

MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT



TECHNICAL DESCRIPTION

Sampling Site	EASTING	NORTHING
1	275997.12	1419305.68
2	261784.68	1410045.78
3	263895.51	1412400.77
4	263558.84	1413955.96
5	265218.01	1412299.88
6	265502.09	1414117.50
7	265737.03	1417982.03
8	271804.96	1418514.76
9	274851.31	1420977.14
10	278933.74	1413921.57
11	271198.35	1419378.64
12	263034.97	1413630.59
13	263172.23	1418022.67
14	266759.25	1417331.96
15	268667.96	1420077.44
16	268718.96	1418196.95
17	270684.77	1417560.16
18	273516.19	1422394.95
19	272896.92	1421425.43
20	275482.11	1420688.21
21	277363.46	1418066.29
22	272274.23	1414961.23
23	277508.78	1414877.11
24	269915.87	1416502.63
25	278845.02	1420001.03
26	273351.75	1415568.28
27	279819.27	1412175.00

LOCATION

Barangay : Sta Lucia, San nicolas
Malisbong, Batongbuhay
Municipality : Sablayan
Province : Occidental Mindoro

SCALE 1:200,000

Kilometers
0 1 2 4 6 8

Coordinate System : WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

Legend

Soil Sampling Site

SLOPE

SLOP_GEN

Level to nearly level

Gently sloping to undulating

Steep to very steep

National_Road

Mompong_Watershed

BROY_BNDY Drawing

CERTIFICATION

Prepared by:

Verified by:

MOMPONG WATERSHED CHARACTERIZATION AND VULNERABILITY ASSESSMENT