



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

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April 17, 2023

MEMORANDUM

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

THRU : The OIC Regional Assistant Director for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : **SUBMISSION OF 1ST SEMESTER ACCOMPLISHMENT
REPORT ON BIODIVERSITY MONITORING SYSTEM (BMS)
CONDUCTED WITHIN MOUNT MANTALINGAHAN
PROTECTED LANDSCAPE (MMPL)**

Forwarded is the memorandum dated March 17, 2023 from CENRO Quezon along with the 1st Semester Report on the conducted activities on Biodiversity Monitoring System (BMS) for Mt. Mantalingahan Protected Landscape (MMPL).


Please be informed that series of activities were conducted by the Protected Area Management Office (PAMO) of MMPL from January- March 2023 for BMS using the four (4) methods namely Focus Group Discussion (FGD), Field Diary, Photo documentation and transect walk in three (3) sites located at Barangay Tagusao, Quezon, Barangay Culasian, Rizal and Barangay Puloy Interior, Sofronio Española, Palawan.

This serves as Means of Verification (MoV) for the target activity on Biodiversity Monitoring System (BMS) for Mt. Mantalingahan Protected Landscape (MMPL).

For information and record.




FELIZARDO B. CAYATOC

DENR-PALAWAN
PENRO-RECORDS
RELEASED
By 
Date: 18 APR 2023 23-1054



Republic of the Philippines
Department of Environment and Natural Resources
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DENR-CENRO QUEZON, PALAWAN RECEIVED

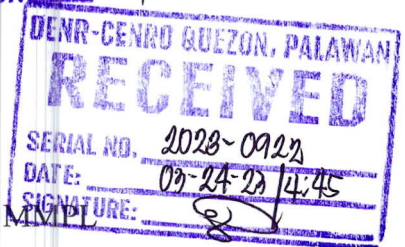
March 17, 2023

MEMORANDUM

FOR : The Provincial Environment and Natural Resources Officer Puerto Princesa City, Palawan

FROM : The OIC Community Environment and Natural Resources Officer/ Concurrent PASu, MMPL, Quezon, Palawan.

SUBJECT : **SUBMISSION OF 1ST SEMESTER ACCOMPLISHMENT REPORT ON BIODIVERSITY MONITORING SYSTEM (BMS) CONDUCTED WITHIN MOUNT MANTALINGAHAN PROTECTED LANDSCAPE (MMPL).**



Submitted is the complete documentation of the conducted Biodiversity Monitoring System (BMS) activities for the 1st semester CY 2023.

Please be informed that Mount Mantalingahan Protected Landscape- Protected Area Management Office (MMPL-PAMO) staff accomplished the said monitoring activity (Transect Walk, Focus Group Discussion (FGD) in the three sites located at Barangay Tagusao, Quezon, Barangay Culasian Rizal (Marcos) and Barangay Pulot Interior, Sofronio Española, Palawan.

The completed BMS report will be presented on the next Protected Area Management Board en banc meeting tentatively schedule on April 4, 2023 at Municipal Lagoon, Barangay Punta Baja, Rizal (Marcos) Palawan.

Moreover, issues and concern were found such as the tree cutting at BMS site Barangay Culasian, Rizal, Palawan, this area is in the lower elevation of MMPL near the community. The said area was prone to illegal cutting of trees for charcoal making. Also, alleged buy and sell of lands at Sitio Kagibang, Songaysongay, Saraysay and Bangkuwang all in barangay Tagusao, Quezon Palawan. This area was approximately 100 meters away from the established BMS site. Moreover, sightings of materials for gathering of common hill mynah at BMS site Sitio Kakawitan, Tagusao Quezon, Palawan was recorded during the conduct of transect walk.

Attached is BMS narrative report for 1st Semester CY 2023, photo documentation, FGD attendance and map.

For information, records and reference.



RENATO S. GONZAGA
OIC-CENRO Concurrent PASu, MMPL

MT. MANTALINGAHAN PROTECTED LANDSCAPE
Biodiversity Monitoring System
1st Semester CY 2023

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I. INTRODUCTION

The Biodiversity Monitoring System (BMS), is an organized way of collecting data in natural and biological resources and utilization. Transect walk and Focus Group Discussion (FGD) are the methods for the assessment. Further, the latter can provide a better and valuable information data that will enable people, particularly the Protected Area Management Board (PAMB) to manage the Protected Area resources in a proper, and better way, it is done four (4) times a year, every first month of every quarter.

Three stations were identified for the transect walk and FGD. In transect walk, the assessment team trek into an installed transect line with the length of two thousand meters (2 Kilometers) with eight (8) stations. Further, Focus Group Discussion is being held with the concerned communities within the area.

Through BMS, the effectiveness of the following can be best determine:

1. Livelihood programs on natural resources;
2. Resource use permit;
3. Establishment of sanctuaries and seasonal closures and;
4. Municipal ordinances, and other management interventions on the part of the PAMB and the Local Government in addressing the threats to the PA.

Additionally, BMS is projected to improve the participants of the Protected Area communities in PA management.

The BMS includes four methods:

1. Transect Walk

As part of the BMS, Mt. Mantalingahan Protected Landscape (MMPL) team conducted transect walk on January 25, February 1, and February 17, 2023 with Forest Rangers in three (3) identified stations (Sitio Kakawitan, Barangay Tagusao, Quezon; Sitio Pinagar-Tagbalogo, Barangay Culasian, Jose Rizal and Sitio Pasi-Pangatban, Pulot Interior, Sofronio Española, Palawan). The team trekked in the transect line with a length of two (2) kilometers (2,000 meters), that covers eight (8) stations, and listed the priority species that was observed seen and heard within the transect line. Time and other details per area were specified in tables.

2. Focus Group Discussion

Focus Group Discussion (FGD) is one of the most important methods in the conduct of BMS, since it involves participation of the community in the particular sites. Similar to transect walk, FGD has also three (3) monitoring stations (Sitio Kakawitan, Barangay Tagusao, Quezon; Sitio Darapiton, Barangay Culasian, Rizal and Sitio Maribong, Pulot Interior, Sofronio Española, Palawan) last March 15, 16, 17, 2023. In this method, people were being ask by MMPL team regarding the biological and natural resources that can be found in their area and compare it with the results of the transect walk to provide the team a more sufficient data.

3. Field Diary

Protected Area (PA) Rangers conducted the activity for the quarter to the abovementioned sites using the available resources.

II. PROPOSED MANAGEMENT INTERVENTION

Issue 1	Tree cutting at BMS site
Municipality	Culasian, Rizal, Palawan
Recommended PAMO Action	Intensify law enforcement in the municipality of Rizal and identification of livelihood for specific for the community.
Supportive BMS Information	This BMS site is in the lower elevation of MMPL and is near the community. Said area is prone to illegal cutting of tress for charcoal making.

Issue 2	Alleged buy and sell of lands
Municipality	So. Kagibang, Songaysongay, Saraysay and Bangkuwang, all in Barangay Tagusao, Quezon, Palawan
Recommended PAMO Action	Continuous CEPA in the area and monitoring and patrolling activities and community meeting.
Supportive BMS Information	This area is approximately 100 meters away from the established BMS site. Also, this is the result of the opening of roads, more building houses were established that is near to the constructed road.

III. IMPORTANT OBSERVATION

	Species or Resource Use (only 2-4 most important)	Changes Observed and Reason (Please indicate municipality)	Proposed Action
Field Diary During patrolling (indicate Spot Report)	1. Road construction	Increase number of house being established by the nearby communities. This communities is near the boundary of MMPL.	Conduct Communication Education Public Awareness (CEPA) campaign. Propose livelihood in coordination with Local Government Office.
Photo Documentation			
Transects (Transect Walk, Transect Cruise, and Transect Swim)	1. Kaingin/Upland Farming	Cultivated Agricultural Farming of the IP community at BMS Site Sitio Kakawitan, Brgy. Tagusao, Quezon, Palawan.	Conduct Communication Education Public Awareness (CEPA) campaign. Propose livelihood in coordination with Local Government Office.
Focus Group Discussion	1. Charcoal making	Cutting and slicing of mangrove at Sitio Tagbalogo, Barangay Culasian, Rizal, Palawan	Close monitoring of the area and conduct CEPA activity in the nearby community

4.1. Summary of Field Diary data 1st Semester Year 2023

PA Name: Mt. Mantalingahan Protected Landscape

Resource Name	Use	Place of Extraction	Method of Extraction	Quantity	Total Number of Days/hours spent in extraction	Remark /Uses
Soft pith of palm (Anibong palm)	Food	Sitio Kakawitan	Cutting the shoot	½ basket	½ hour	Food consumption
Core (Ubod) of Rattan	Food	Sitio Kakawitan	Tapping and collecting after a month	5 bundle	3 hours	Food consumption
Mud crab	Commercial	Sitio Culasian	Used of Bo-bo (Bamboo cage)	1 bundle	4 hours	Food consumption
Wood worm (Tamilok)	Food	Sitio Culasian	Cutting uprooted mangrove	10 glass (Nescafe cups)	Half day	Food consumption
Tabo fruit (<i>Willughbeia sarawacensis</i>)	Food	Sitio Kakawitan	Picked up from the vine	20 pcs.	1 hour	Food consumption
Durian	Food	Sitio Kakawitan	Picked up	2 sacks	3 hours	Food consumption and for commercial
Rambutan (<i>Maraitum</i>)	Food	Sitio Kamantian	Picked up	1 sack	2 hours	Food consumption and commercial purposes
Bagtik		Sitio Pasi	Picked up	1 sack	1 hour	Commercial purposes
Kudog	Food	Sitio Pasi, Kakawitan and Talbalogo	Picked up	10 pcs.	10mins	Food Consumption
Cassava	Food and Commercial	Sitio Pasi	Pulled out	1 pale	30mins	Food consumption & Commercial use

4.2. Summary of Photo Documentation data 1st Semester Year 2023

PA: Mt. Mantalingahan Protected Landscape

Total No. of Established photo sites: 3

Name of Photo site	Code Name of photo, if any	Date of photo this quarter	Date of previous photo	Total no. of times photo-graphed
Sitio Tagbalogo, Culasian, Rizal (Marcos)	BMS001-1-1	January 25, 2023	July 7, 2022	4 shots per station
Sitio Kakawitan, Tagusao, Quezon Palawan.	BMS001-1-2	February 1, 2023	July 20, 2022	4 shots per station
Sitio Pasi-Pangatban, Pulot Interior, Sofronio Española	BMS001-1-3	February 17, 2023	August 4, 2022	4 shots per station

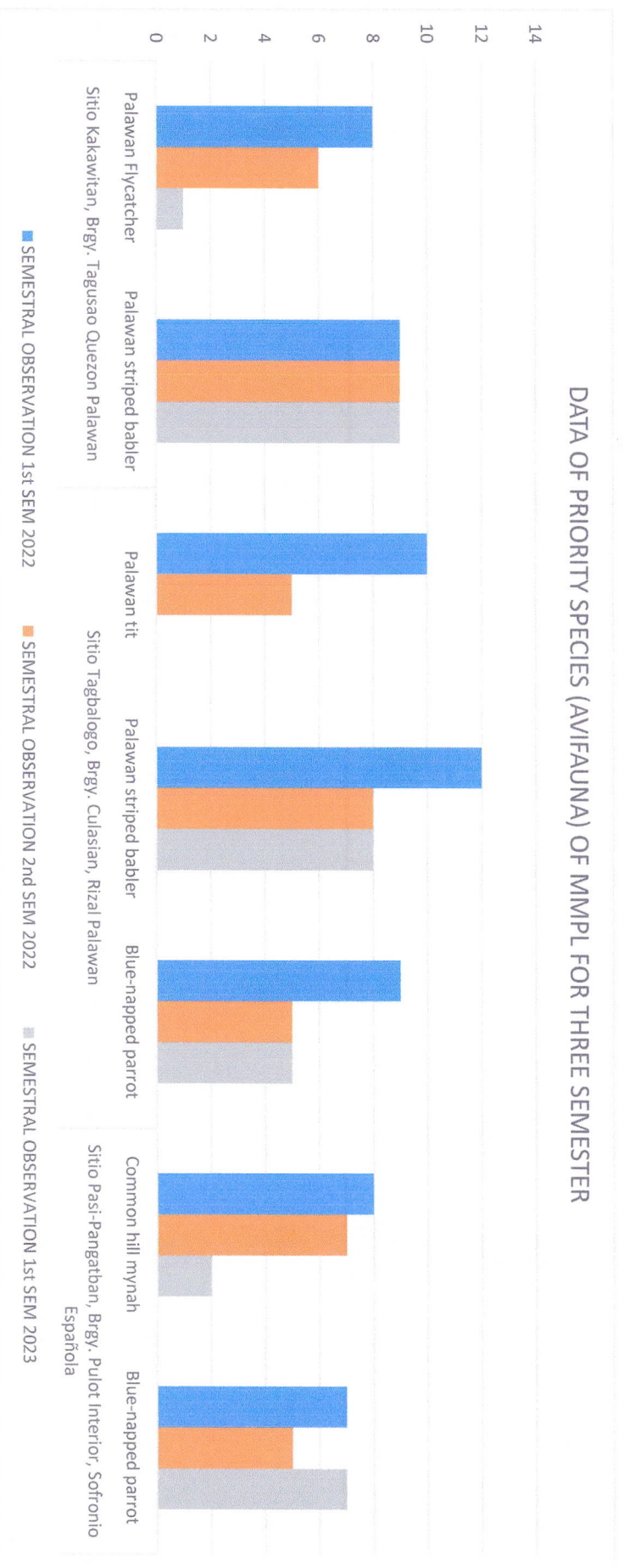
4.3. Summary of Transect data 1st Semester Year 2022

PA Name: Mt. Mantalingahan Protected Landscape

Total no. of Sites with Community Monitoring Groups: 3

Name of Transect route	Date of Survey this semester	No. of times surveyed since establishments	Priority species recorded (Avifauna)	No. recorded this quarter
Sitio Kakawitan, Barangay Tagusao Quezon	February 1, 2023	26	1. Palawan flycatcher	1
			2. Palawan striped Babbler	9
			3. Palawan Tit	0
Sitio Tagbalogo, Barangay Culasian, Rizal	January 25, 2023	39	1. Palawan Tit	0
			2. Palawan striped Babbler	8
			3. Blue-napped parrot	5
Sitio Pasi-Pangatban, Barangay Pulot Interior, Sofronio Española, Palawan	February 17, 2023	14	1. Blue-napped parrot	2
			2. Palawan hill myna	7

TRANSECT ROUTE		SPECIES OBSERVED			SEMESTRAL OBSERVATION		
					1st SEM 2022	2nd SEM 2022	1st SEM 2023
Sitio Kakawitan, Brgy. Tagusao Quezon Palawan	Sitio Tagbalogo, Brgy. Culasian, Rizal Palawan	Palawan Flycatcher			8	6	1
		Palawan striped babler			9	9	9
		Palawan tit			10	5	0
		Palawan striped babler			12	8	8
		Blue-napped parrot			9	5	5
Sitio Pasi-Pangatban, Brgy. Pulot Interior, Sofronio Española		Common hill mynah			8	7	2
		Blue-napped parrot			7	5	7



Other Priority Species that can be found in Transect route of the three (3) barangay.

Name of Transect Route	Priority Species	No. Recorded
Sitio Kakawitan, Barangay Tagusao, Quezon Palawan	Palawan bulbul	7
	White-bellied eagle	1
	Palawan blue flycatcher	1
	Melodious babbler	1
Sitio Tagbalogo, Barangay Culasian, Rizal Palawan	Palawan bulbul	4
	Palawan blue flycatcher	2
Sitio Pasi-Pangatban, Pulot Interior, Sofronio Española	Palawan bulbul	9

Priority Species Recorded (Flora)

Name of Transect route	Date of Survey this semester	No. of times surveyed since establishments	Priority species recorded (Flora)	No. recorded this quarter
Sitio Pasi-Pangatban, Barangay Pulot Interior, Sofronio Española, Palawan	February 17, 2023	14	1. Kamagong (<i>Diospyros blancoi</i>)	1
			2. Apitong (<i>Dipterocarpus Grandiflorus</i>)	10
			3. Amugis (<i>Koordesiodendron pinnatum</i>)	4
Sitio Kakawitan, Barangay Tagusao, Quezon Palawan	February 1, 2023	26	4. Manggis (<i>Koompassia excelsa</i>)	1
			5. Apitong (<i>Dipterocarpus Grandiflorus</i>)	16
			6. Ipil (<i>Instia Bijuga</i>)	11

Summary of Focus Group Discussion data 1st Semester year 2023

PA Name: Mt. Mantalingahan Protected Landscape

Total no. of Sites with Community Monitoring Groups: 3

Name of sitios and members of Community Monitoring Group	Date of CMG meeting this semester	Total no. of CMGs in this barangay
1. Sitio Kakawitan, Barangay Tagusao Quezon	March 15, 2023	10
2. Sitio Darapiton, Barangay Culasian, Rizal (Marcos)	March 16, 2023	11
3. Sitio Maribong, Barangay Pulot Interior, Sofronio Española	March 17, 2023	6

PHOTO DOCUMENTATION

II. BMS AND FGD AT SITIO KAKAWITAN BRGY. TAGUSAO, QUEZON, PALAWAN

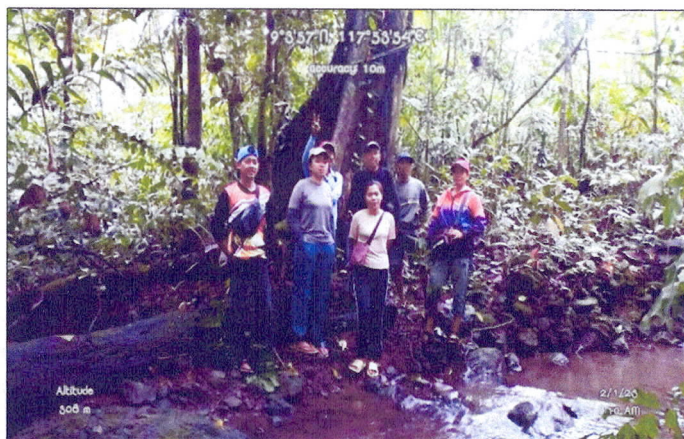


Figure 5. PAMO Staff during the conduct of BMS Transect walked.



Figure 6. BMS Transect walked on February 1, 2023



Figure 7. FGD at Sitio Tagbalogo, Brgy. Culasian, Rizal Palawan



Figure 8. FGD at Sitio Tagbalogo, Brgy. Culasian, Rizal Palawan

PHOTO DOCUMENTATION

III. BMS AND FGD AT SITIO PASI PANGATBAN, PULOT INTERIOR, SOFRONIO ESPAÑOLA, PALAWAN



Figure 9. PAMO Staff during the conduct of BMS Transect walked.



Figure 10. PAMO Staff during the conduct of BMS on March 17, 2023.



Figure 11. PAMO Staff during the conduct of BMS Transect walked.



Figure 12. PAMO Staff during the conduct of BMS Transect walked.

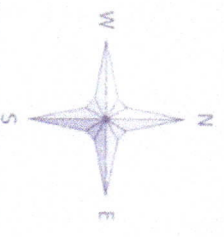
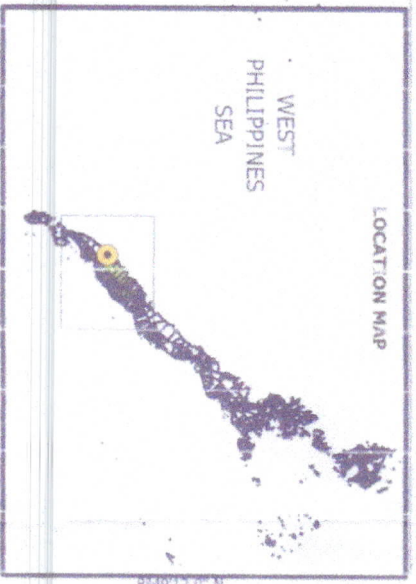
117°27'54.0" E

117°28'2" E

117°28'48.0" E

TECHNICAL DESCRIPTION

Station	Longitude	Latitude
0	117.47716	8.81411
1	117.47536	8.81509
2	117.47399	8.81657
3	117.47145	8.81693
4	117.46941	8.81629
5	117.46759	8.81503
6	117.46697	8.81353
7	117.46584	8.81286
8	117.46546	8.81385



MAP

SHOWING THE REROUTED
BIODIVERSITY MONITORING
SYSTEM (BMS) SITES SITUATED
AT SITIO TAGBALOGO, BRGY.
CULASIAN, JOSE RIZAL,
PALAWAN

Total length: 2.0 Kilometers

SCALE : 1:9000

Projection: Universal Transverse Mercator - Zone 50 (N)
Datum: World Geodetic 1984 (WGS84)

Prepared by:

ARNOLD PETER A. AURINGO
COMS I

Surveyed by:

RENLY L. GREGAS
FR

Noted by:

PRESS JAY S. COCEN
CIBAL PASU

Attended by:

ARMANDO S. GONZAGA
NRC/Concurrent Data MPP

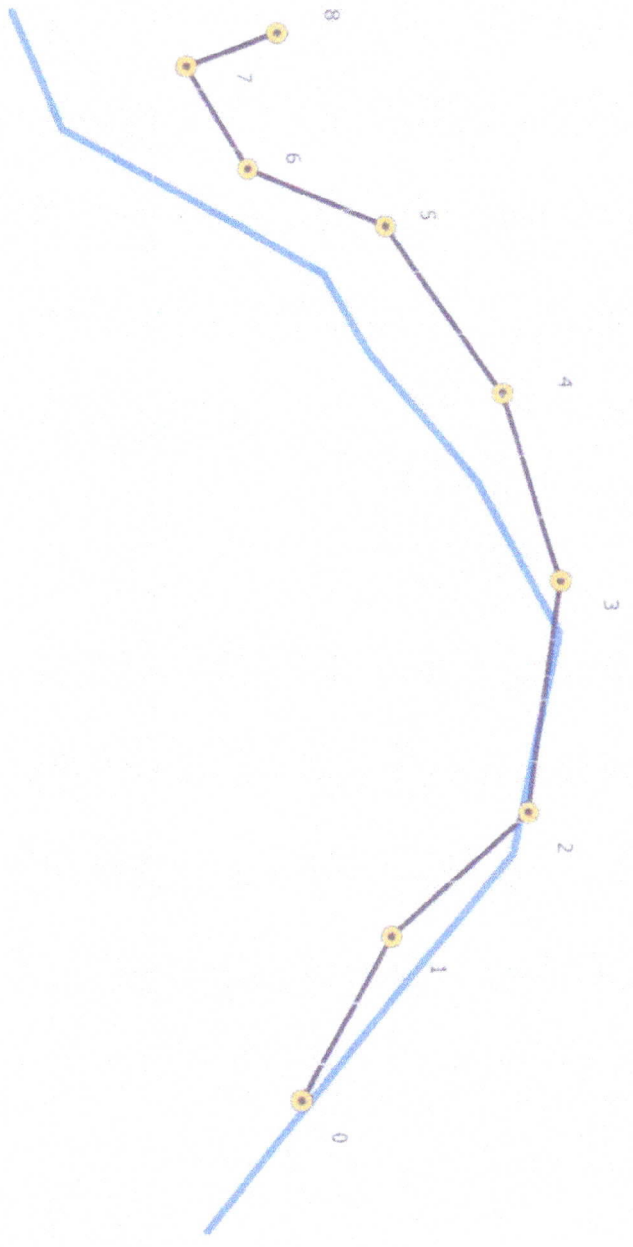
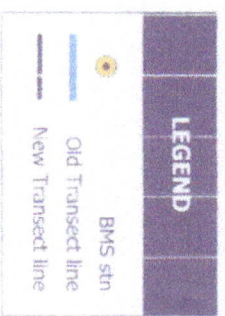
5°48'45.0" N

8°49'12.0" N

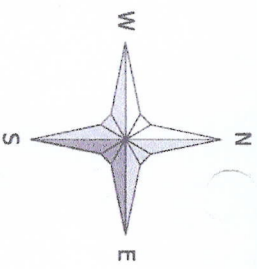
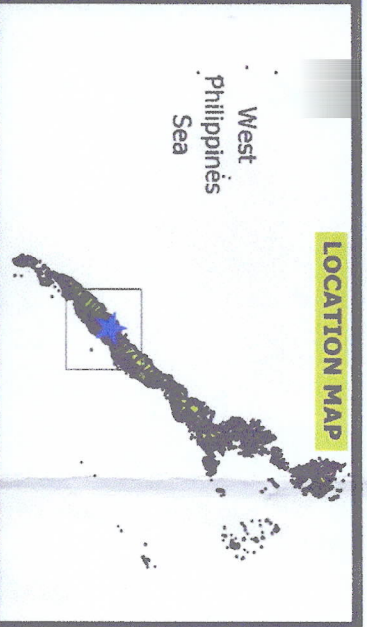
117°27'54.0" E

117°28'21.0" E

117°28'48.0" E



LOCATION MAP



MAP

SHOWING THE DISTANCE OF
CMDC MINE PIT TO MMPL-BMS SITE AT
SITIO PANGATBAN, PULOT INTERIOR,
SOFRONIO ESPANOLA, PALAWAN

Approximate distance to BMS site : 523.20 m

SCALE : 1:20000

Projection: Mercator
Datum : World Geodetic 1984 (WGS84) Auto



Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Community Environment and Natural Resources Office
Quezon, Palawan

Prepared by:

ARNOLD PETER L. AURINO
ECOMS I

Noted by:

RENATO S. GONZAGA
PASu

LEGEND



BMS Transect line
MMPL boundary
Google Maps Satellite Image 4

MMPL AREA

