



DENR  
MIMAROPA

# PALAWAN TYPHOON ODETTE

UPDATES AND  
ACCOMPLISHMENTS

AS OF APRIL 18, 2022

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REGIONAL EXECUTIVE DIRECTOR



PALAWAN TASK FORCE BUILD BACK BETTER

# *TYPHOON ODETTÉ* PRESENTATION OUTLINE

1

## SITUATIONAL STATUS

*THE IMPACTS WE ARE ASSESSING*

2

## UPDATES & ACCOMPLISHMENTS

*THE PROGRESS WE ARE ATTAINING*

3

## ISSUES & CONCERNS

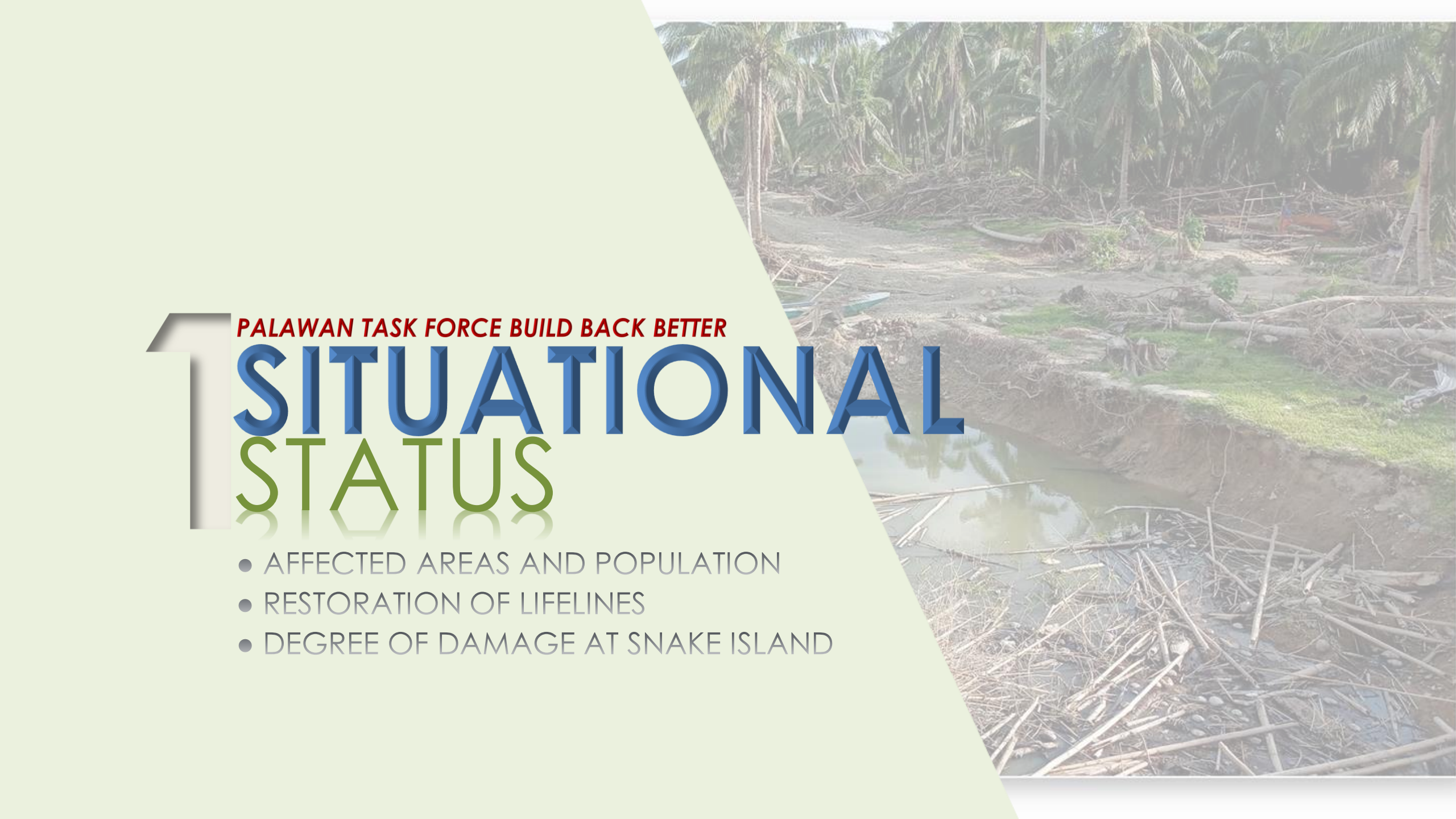
*THE CHALLENGES WE ARE FACING*

4

## WAYFORWARD

*THE SOLUTIONS WE ARE ENVISIONING*





# **PALAWAN TASK FORCE BUILD BACK BETTER**

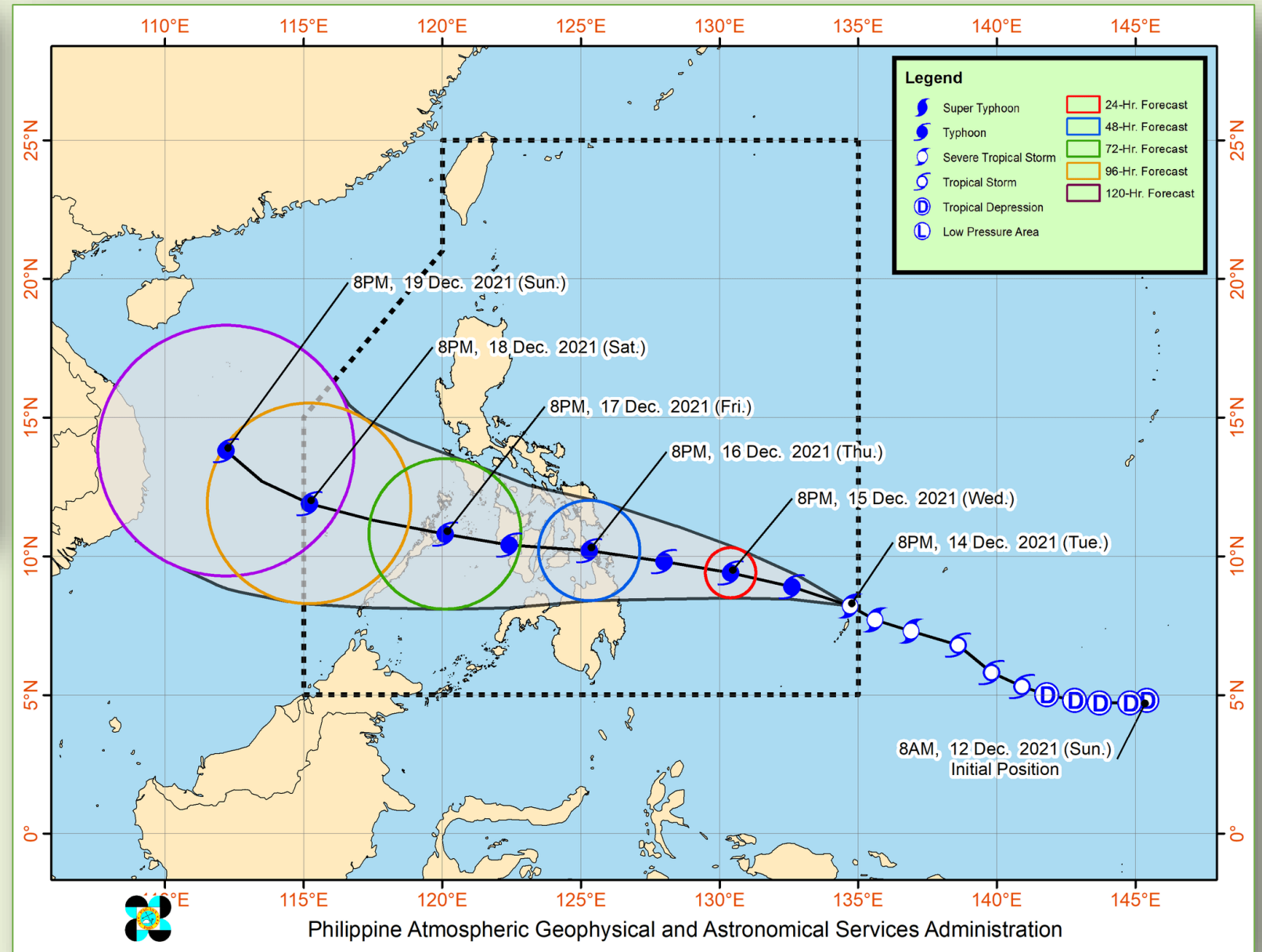
# **SITUATIONAL**

# **STATUS**

- AFFECTED AREAS AND POPULATION
- RESTORATION OF LIFELINES
- DEGREE OF DAMAGE AT SNAKE ISLAND



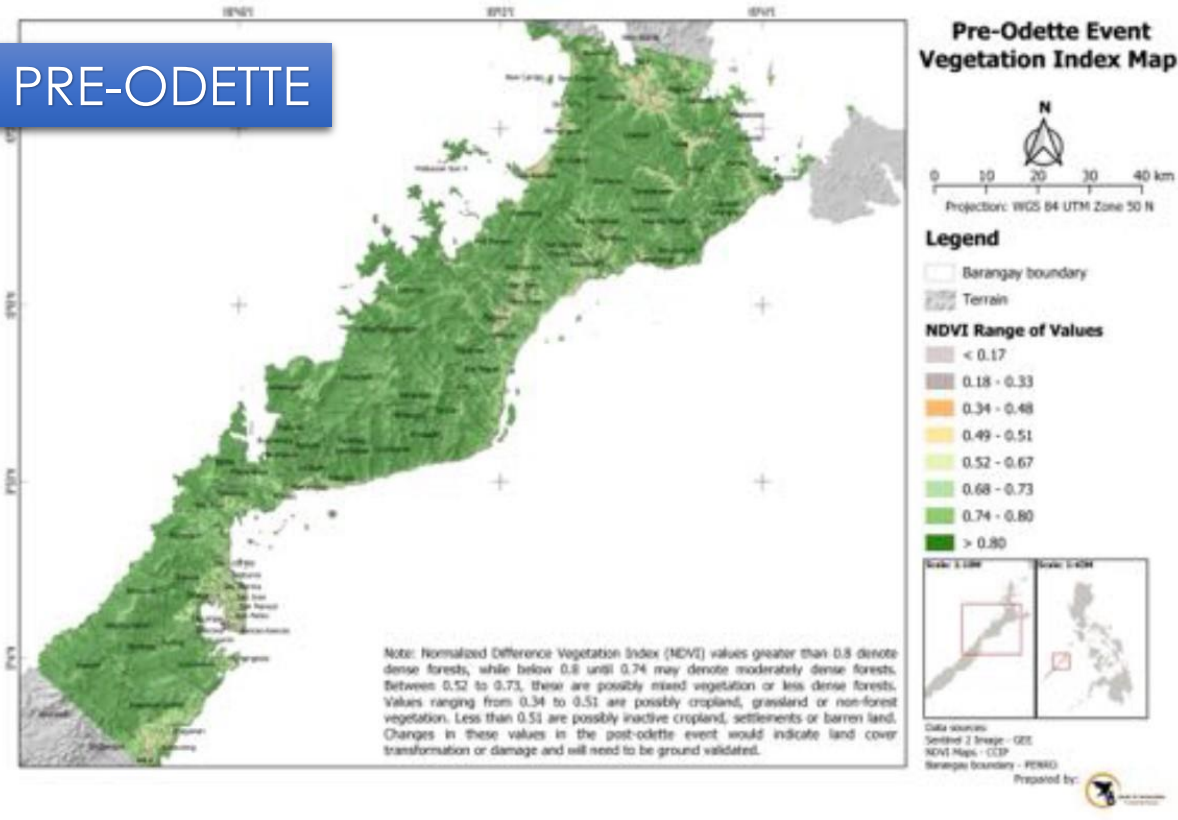
## TRACK OF SEVERE TROPICAL STORM "ODETTE" (RAI)



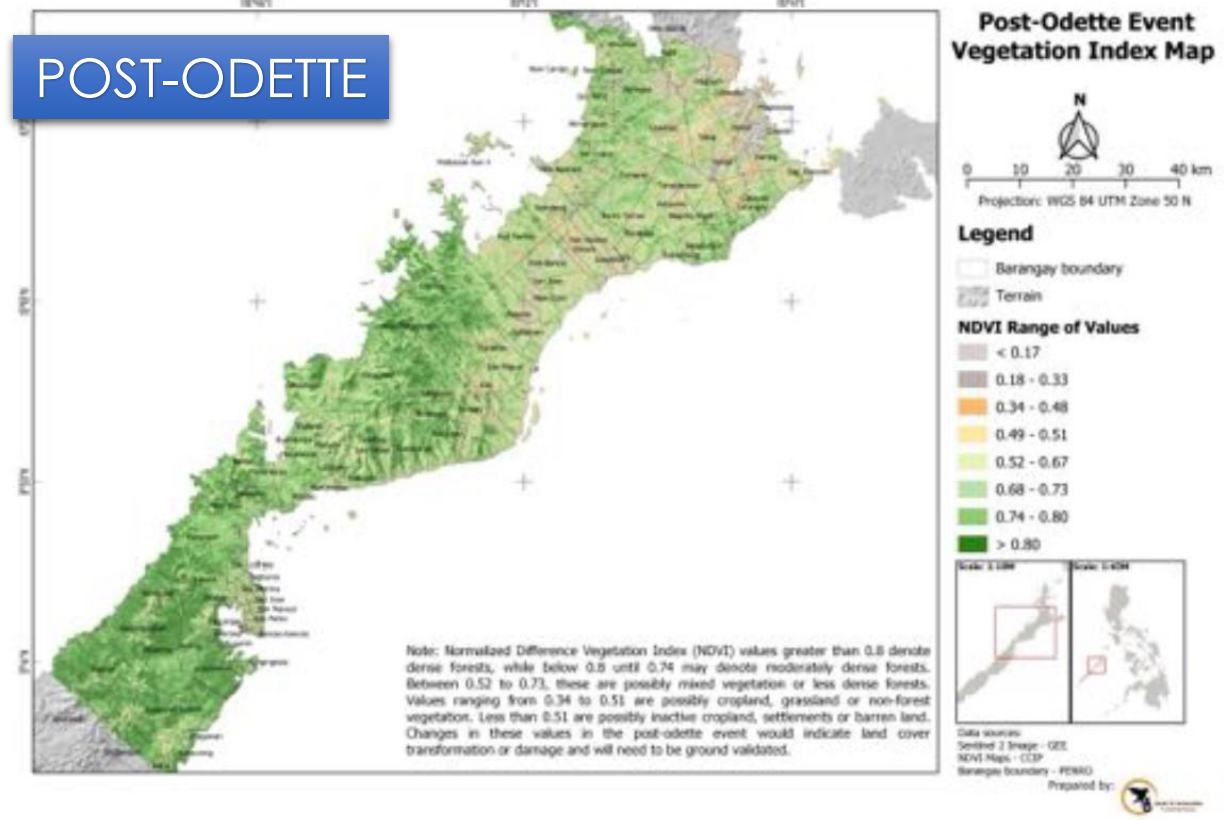


# VEGETATION INDEX MAP

## PRE-ODETTE



## POST-ODETTE

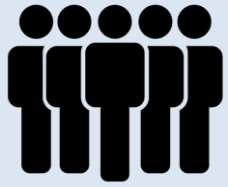


NORMALIZED  
DIFFERENCE  
VEGETATION  
INDEX (NDVI)

< 0.8	Dense forest
0.8 - 0.74	Moderately dense forest
0.52 - 0.73	Less dense forest
0.34 - 0.51	Non-forest vegetation
< 0.51	Barren land

**\*Changes in the values in the post-odette event would indicate land cover transformation or damage and needs to be ground validated**

# 1.1 STATUS OF AFFECTED AREAS AND POPULATION IN PALAWAN



385,624

PEOPLE  
AFFECTED



117,195

FAMILIES  
AFFECTED



308

BRGYS  
AFFECTED



23

CITY/ MUNICIPALITIES  
AFFECTED

# 1.1 STATUS OF AFFECTED AREAS AND POPULATION IN PALAWAN

CENRO	CITY/ MUNICIPALITIES COVERED	BARANGAY	FAMILIES	PERSONS
CORON	Busuanga, Coron, Cullion, Cuyo, Linapacan	55	3,487	11,632
PPC	Aborlan, Agutaya, Cagayancillo, Magsaysay, PPC, Kalayaan	102	44,140	162,942
ROXAS	Araceli, Dumarán, Roxas, San Vicente	72	44,905	139,807
TAYTAY	El Nido, Taytay	46	21,943	61,904
QUEZON	Narra, Quezon, Rizal,	19	2,330	7,493
BROOKE'S POINT	Bataraza, Brooke's Point, Sofronio Espanola	14	390	1,846

23

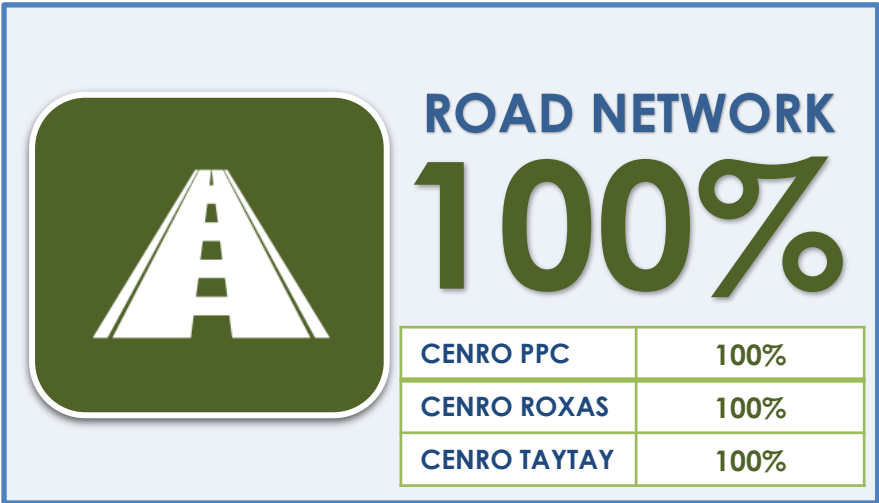
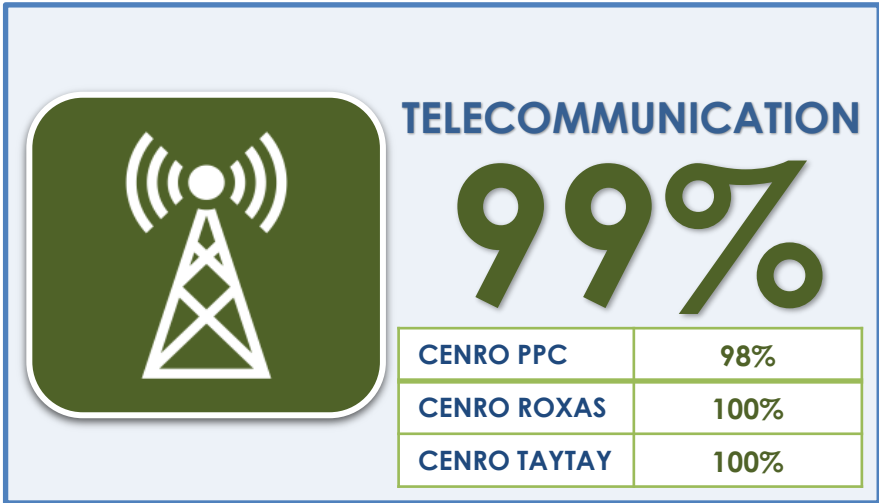
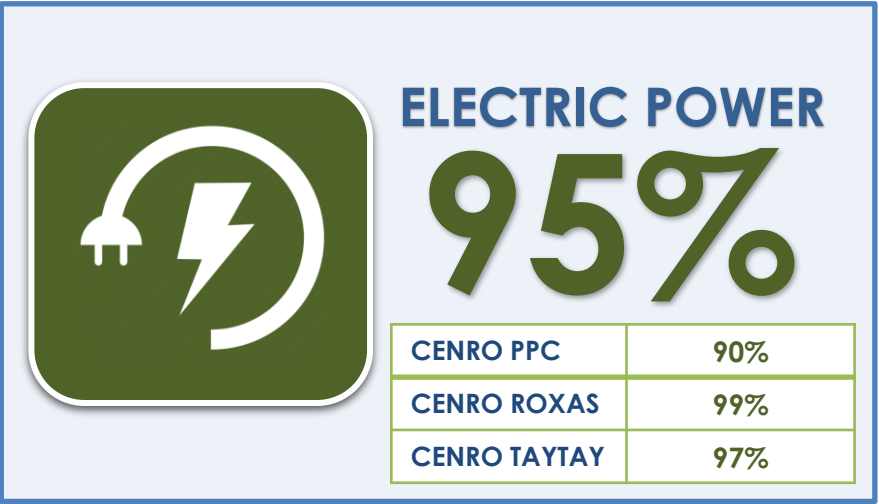
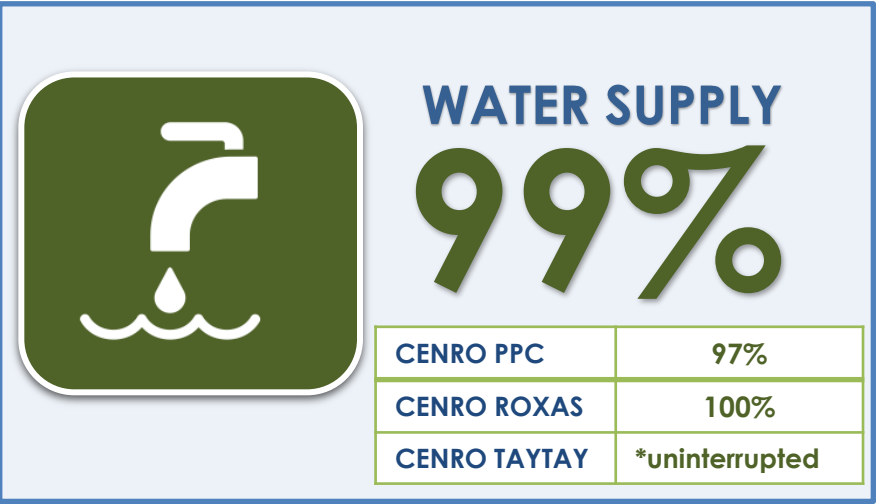
308

117,195

385,624



# RESTORATION OF LIFELINES IN AFFECTED AREAS IN PALAWAN



**DEGREE OF DAMAGE OF TYPHOON ODETTE  
AT SNAKE ISLAND, HONDA BAY,  
PUERTO PRINCESA CITY**

**-THE NATIONAL COASTAL AND MARINE CENTER FOR RESEARCH-**

## BEFORE TYPHOON ODETTIE



## AFTER TYPHOON ODETTIE



### Damages on Speedboat

- Steering wheel and the boat captain's seat were detached from the body
- Cover hood was destroyed and remove, and the all frames were misaligned
- Engine's cover was destroyed and missing

Rough Estimated Repair  
Cost: Php 200,000.00



## BEFORE TYPHOON ODETTIE



## AFTER TYPHOON ODETTIE



### **Damages on M/Bca Kalungpang, 8 seating capacity, 2.96 GT**

- Body of boat was totally shattered
- Debris of the body were scattered in the northern part of the Admin Building and inside of mangrove area

Rough Estimated Repair Cost  
(for new construction):  
Php 100,000.00



## BEFORE TYPHOON ODETTE



## AFTER TYPHOON ODETTE



### Damages on M/Bca Hawksbill, 20 seating capacity (6.59GT)

- The body of the boat was totally wrecked
- The remnants were found inside the mangrove area and some are in the northerly part of the island
- The hull "kasko" with the engine attached found in the northern part of the island which is still submerged in the sea water
- The propeller and other parts were also detached from the body

Rough Estimated Repair Cost:  
Php 1,300,000.00



## BEFORE TYPHOON ODETTE



## AFTER TYPHOON ODETTE



### Damages on Main Building

- The front pathway was tear down and the sand inside of it were washout
- The part of the roof was also damage and portion of outside ceiling was detached
- The ceiling inside of the building (hall part) was tear down
- Some of front windows were scattered by strong winds. There was also cracked and leaked in the other parts of the Admin Building

**Rough Estimated Repair Cost**  
(Front pathway, roof and ceiling, windows, cracks, leaks, and strengthening foundation):

**Php 2,500,000.00**



# BEFORE TYPHOON ODETTIE



## Damages on Other Facilities

- Big shed was ripped down
- The comfort room near the big shed was damaged; part of the roof was removed and the foundation of the CR was emerged due to the washout of the sand
- The part of the boardwalk railings was cracked and destroyed

# AFTER TYPHOON ODETTIE



## Rough Estimated Repair Cost:

Big shed (for new construction) – Php 350,000.00

Comfort room – Php 350,000.00

Boardwalk railings – Php 70,000.00



## BEFORE TYPHOON ODETTE



### Damages on Other Facilities

- The generator house was damaged and the roof was detached from the house
- The kitchen area has also damages; the wall detached and the floor area in the front part which served as the dining area was shattered
- The dive house and comfort room was totally wrecked; the posts were cracked and damaged, the roof of the comfort room was removed and the pathway was also tear down.

## AFTER TYPHOON ODETTE

### Rough Estimated Repair Cost:

Generator House – Php 100,000.00

Kitchen/Receiving Area – Php 80,000.00

Dive House and Comfort room – Php 1,500,000.00



## BEFORE TYPHOON ODETTA



## AFTER TYPHOON ODETTA



### Damages on Mangroves

- Estimated 3.5 Hectares of mangroves felled or uprooted.
- Identified mangrove species felled or uprooted are: *Sonneratia alba*, *Avicennia marina*, *Bruguiera cylindrica*, *Aegiceras floridum* and *Rhizophora stylosa*



# ESTIMATED COST OF REPAIR

SNAKE ISLAND, HONDAY BAY, PPC

Watercraft/Structure/Facility	Rough Estimated Repair Cost
Speedboat	Php 200,000.00
MBca Kalungpang, 8-seating cap. 2.96GT (for new construction)	Php 100,000.00
MBca Hawksbill, 20-seating cap. 6.59GT	Php 1,300,000.00
Main building <ul style="list-style-type: none"><li>• Front pathway</li><li>• Roof and ceiling</li><li>• Windows</li><li>• Cracks, leaks and strengthening foundation</li></ul>	Php 2,500,000.00
Big shed (for new construction)	Php 350,000.00
Comfort room near the big shed	Php 350,000.00
Boardwalk railings	Php 70,000.00
Generator house	Php 100,000.00
Dive house and comfort room	Php 1,500,000.00
Kitchen/Receiving area	Php 80,000.00
<b>Total Amount</b>	<b>Php 6,550,000.00</b>

# WFP 2022

## SNAKE ISLAND, HONDAY BAY, PPC

<b>Maintenance of building and other facilities (P1,903,000.00 less PMS)</b>		<b>P1,712,700.00</b>
<b>Repairs of:</b>		
	<b>Speedboat</b>	<b>200,000.00</b>
	<b>Kitchen</b>	<b>80,000.00</b>
	<b>Generator house</b>	<b>100,000.00</b>
	<b>CR, near of big shed</b>	<b>350,000.00</b>
	<b>Various repairs (windows, roof, ceilings, foundation reinforcement, etc.)</b>	<b>400,000.00</b>
	<b>Hiring of masonry and labor to properly demolish the dive house and damaged pathways</b>	<b>50,000.00</b>
	<b>Boat rentals (for manning the island, DENR personnel and other materials needed)</b>	<b>100,000.00</b>
	<b>Fuel (for speedboat, assuming to repair within 6 months period)</b>	<b>150,000.00</b>
	<b>Supplies</b>	<b>282,700.00</b>

# 2 *BUILD BACK BETTER TASK FORCE* UPDATES AND ACCOMPLISHMENTS

- INVENTORY OF DAMAGES
- OTHER ACTIONS TAKEN



# 2.1 INVENTORY OF DAMAGES ON AFFECTED AREAS IN PALAWAN

SOURCE: LGUs P/M/CDRRM 2022

1

## HOUSEHOLDS & FAMILIES



52,990

CENRO PPC	31,371
CENRO ROXAS	-
CENRO TAYTAY	21,619

3

## RESIDENTIAL HOUSES



37,283

CENRO PPC	25,174
CENRO ROXAS	-
CENRO TAYTAY	12,109

5

## FAMILIES IN EVACUATION CENTER



28,973

CENRO PPC	52
CENRO ROXAS	15,997
CENRO TAYTAY	12,924

2

## GOVERNMENT BLDGS & FACILITIES



34

CENRO PPC	PHP 46M
CENRO ROXAS	-
CENRO TAYTAY	34

4

## FALLEN/ UPROOTED TREES



52,529

CENRO PPC	ON-GOING
CENRO ROXAS	15,407 (6,905.21 cu.m.)
CENRO TAYTAY	37,122 (36,037.56 cu.m.)

6

## ESTABLISHED EVACUATION CENTERS



326

CENRO PPC	2
CENRO ROXAS	263
CENRO TAYTAY	61

# 2.2 **PROGRESS ON RECOVERY REHABILITATION**

SOURCE: LGUs P/M/CDRRM 2022

1

LOGS / LUMBER  
DERIVED FROM  
UPROOTED  
TREES



**2,625**  
(42,942.17 bd.ft.)

CENRO PPC	424
CENRO ROXAS	2,201
CENRO TAYTAY	(8,384.54 bd.ft.)

2

CONFISCATED  
LUMBER  
DONATED TO  
IDENTIFIED  
BENEFICIARIES



**143,724.17 BD.FT.**  
(1,232 FAMILIES)

CENRO PPC	143,724.17 bd.ft.
CENRO ROXAS	-
CENRO TAYTAY	-

3

MINI SAW  
MILLS  
ON WHEELS  
ESTABLISHED



**5** | **40**  
**BENEFICIARIES**

CENRO PPC	3
CENRO ROXAS	2
CENRO TAYTAY	-

4

RESETTLEMENT  
SITES



**12**

CENRO PPC	1
CENRO ROXAS	8
CENRO TAYTAY	3 (489 lots)



## 2.2 OTHER ACTIONS/INITIATIVES TAKEN



01

### MOBILIZATION OF FIELD PERSONNEL FOR POST DISASTER ASSESSMENT

| INSPECTION OF DAMAGES | CLEARING UP OPERATIONS |  
| REPORTING ON THE STATUS OF SAFETY OF PERSONNEL |



02

### COORDINATION WITH CONCERNED AGENCIES (LGUs, PCSD, PRRMO, OCD, DPWH)

| COMPLEMENTATION OF ACTION  
| GIVING PRIORITY IN HARD HIT AREAS |



03

### AERIAL INSPECTION & ASSESSMENT IN FORESTED AREAS

| WITH WESCOM/PAF |



04

### OPERATIONALIZATION OF MINI SAW MILLS IN PPC AND ROXAS

| WOOD PROVISION FOR  
SHELTERS/HOUSING OF AFFECTED FAMILIES |



05

### SITE INSPECTION OF DAMAGED AREAS IN HARD HIT AREAS

PPC | ROXAS | TAYTAY | EL NIDO



06

### COORDINATION WITH STAKEHOLDERS AND PRIVATE SECTORS



07

### SITE INSPECTION AT EL NIDO SEWAGE AND SOLID WASTE TREATMENT PLANT



08

### CAPACITY BUILDING

| THRU LEARNING EVENT ON  
BASIC FOREST FIRE RESPONSE & MANAGEMENT |



09

### GREEN ASSESSMENT WITH SIBOL



10

### CREATION OF MOA IN SUPPORT OF EO 120

## 2.2.1

# MOBILIZATION OF PERSONNEL FOR POST DISASTER ASSESSMENT

## OTHER ACTIONS TAKEN



**AERIAL INSPECTION AND DOCUMENTATION OF DAMAGES OF  
TYPHOON ODETTE WITH WESTERN COMMAND/PHILIPPINE AIRFORCE  
WITH PLGU PDRRM AND PCSDS**



## 2.2.2 COORDINATION WITH OTHER CONCERNED AGENCIES

### OTHER ACTIONS TAKEN



**MEETING WITH  
PALAWAN WESTERN COMMAND OFFICIALS**

## 2.2.2 COORDINATION WITH OTHER CONCERNED AGENCIES

### OTHER ACTIONS TAKEN



**MEETING WITH DHSUD, TESDA AND TRNP PASu**



## 2.2.3

## AERIAL INSPECTION & ASSESSMENT IN FORESTED AREAS



**Aerial View of Landslides, Fallen and Uprooted Trees, River Bank and Coastal Erosion Including Damages to Roads, Bridges and Houses in Barangays San Rafael, Babuyan, Maoyon, Tanabag, Concepcion, Binduyan and Langigan in Puerto Princesa City, Palawan**



**Aerial View of Mangrove Damage at Roxas, Dumaran and Araceli in Palawan**



## 2.2.4 OPERATIONALIZATION OF MINI SAW MILLS IN PPC AND ROXAS

### OTHER ACTIONS TAKEN



FIELD VISIT AT THE ESTABLISHED MINI-SAW MILL AND EVACUEES LOCATED IN BARANGAY CONCEPCION, PPC, PALAWAN



## 2.2.4 OPERATIONALIZATION OF MINI SAW MILLS IN PPC AND ROXAS

### OTHER ACTIONS TAKEN



FIELD VISIT AT THE ESTABLISHED MINI-SAW MILL AT BARANGAY ABAROAN, ROXAS, PALAWAN



## 2.2.5 SITE INSPECTION OF HARD-HIT AREAS

### OTHER ACTIONS TAKEN



PUERTO PRINCESA CITY AND ROXAS, PALAWAN



## 2.2.6 STAKEHOLDER CONSULTATION

### OTHER ACTIONS TAKEN



**STAKEHOLDER CONSULTATION AT  
ONE OF THE FAR FLUNG  
BARANGAYS IN THE  
MUNICIPALITY OF ARACELI,  
BARANGAY CALANDAGAN,  
AFFECTED BY  
TYPHOON ODETTIE  
(80 SMALL FISHING BOATS WERE  
WRECKED/DESTROYED)**

## 2.2.6 STAKEHOLDER'S CONSULTATION

### OTHER ACTIONS TAKEN



MEETING WITH LGU OF BARANGAY GUINLO LOCATED  
WITHIN MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)



## 2.2.6 COORDINATION WITH LGUs

### OTHER ACTIONS TAKEN



**MEETING WITH MUNICIPAL MAYOR OF TAYTAY, PALAWAN**



## 2.2.6

# COORDINATION WITH STAKEHOLDERS

## OTHER ACTIONS TAKEN



**MEETING WITH ENTMRPA STAKEHOLDERS**



## 2.2.7

# SITE INSPECTION OF EL NIDO SEWAGE AND SOLID WASTE TREATMENT PLANT

## OTHER ACTIONS TAKEN





## 2.2.8

# 3-DAY LEARNING EVENT ON BASIC FOREST FIRE RESPONSE & MANAGEMENT

## OTHER ACTIONS TAKEN



**SPEARHEADED BY DENR PENRO AND PROVINCIAL DISASTER RISK REDUCTION & MANAGEMENT OFFICE IN COOPERATION WITH THE PCDS, BFP AND PROVINCIAL GOVERNMENT OF PALAWAN-ENVIRONMENT AND NATURAL RESOURCES OFFICE**

Venue: Farmbelle Park, Barangay New Agutaya, San Vicente, Palawan

Date: March 29-31, 2022

### **Actual Forest Fire Response and Suppression:**

Venue: Sitio Casuyan, Boayan Island, Barangay Poblacion, San Vicente, Palawan  
Date: March 31, 2022



## ACTIVITIES

AERIAL  
GROUND  
TRUTH  
SURVEYS

01

RAPID  
BIODIVERSITY  
SURVEYS

02

STUDY ON  
DRIVERS OF  
LAND USE  
CHANGE

03

CITIZEN  
SCIENCE  
INFORMATION  
GATHERING  
TRAINING

04

## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

MARCH 11, 2022

## MULTI-STAKEHOLDERS KICK-OFF EVENT



Sustainable Interventions for Biodiversity, Oceans and Landscapes



## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

MARCH 14-18, 2022

## AERIAL GROUND TRUTH TRAINING



Sustainable Interventions for Biodiversity, Oceans and Landscapes



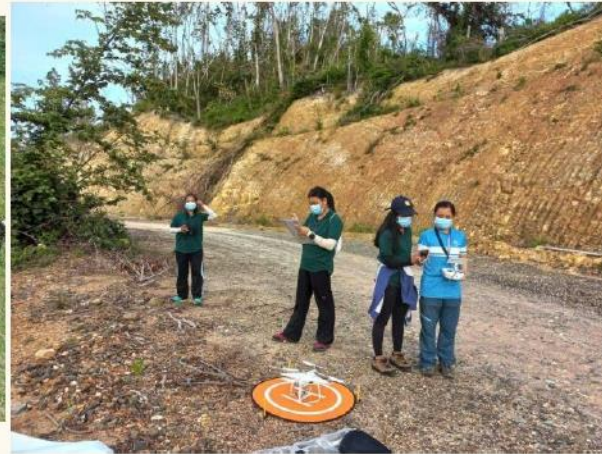
## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

MARCH 14-18, 2022

## AERIAL GROUND TRUTH TRAINING



Sustainable Interventions for Biodiversity, Oceans and Landscapes



## 1. AERIAL GROUND TRUTH SURVEY

### AREAS COVERED

#### PPUR

- Cabayugan (March 31, 2022)

#### CNCH

- San Rafael (April 9, 2022)
- Tanabag (April 10, 2022)

#### San Vicente

- Kemdeng (April 3, 2022)
- Port Barton (April 4, 2022)
- Binga (April 5, 2022)
- Alimanguan (April 8, 2022)
- San Isidro (April 10, 2022)

#### *Areas covered during the aerial ground truthing survey*

- Barren land
- Settlement
- Cropland
- Forest
- And other mixed vegetation

## AERIAL GROUND TRUTH SURVEY

### Aerial Ground Truth Survey

Barangay Cabayugan





## AERIAL GROUND TRUTH SURVEY

### Aerial Ground Truth Survey

Barangay San Rafael ( April 09, 2022)





## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

### AERIAL GROUND TRUTH SURVEY

#### Aerial Ground Truth Survey

Barangay Tanabag ( April 10, 2022)





## AERIAL GROUND TRUTH SURVEY

### Aerial Ground Truth Survey

Sample Orthomosaic Image at Barangay San Rafael  
April 09, 2022



## AERIAL GROUND TRUTH SURVEY

### Aerial Ground Truth Survey

Other areas to be covered (April 18 - May 3, 2022)

#### PPC

- Concepcion
- Binduyan
- Langogan
- Bahile
- Bagong Bayan
- Simpocan
- Napsan

#### Roxas

- Magara
- Caramay
- San Miguel
- Jolo
- Nicanor Zabala
- Tinitian





## 2. RAPID BIODIVERSITY SURVEY

### Rapid Biodiversity Survey

#### Field Sampling sites:

- Sitio Calaga, and Panablan, Marufinas (PPSRNP) - March 11 to 22, 2022
- Sitio Kalakwasan, Tanabag (CNCH) - March 29 to April 5, 2022
- Sitio Mangapin, Langogan (CNCH) - April 7 to 11, 2022

#### Other areas to be covered:

- Roxas - April 23 to May 2, 2022





## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

### RAPID BIODIVERSITY SURVEY

#### Key findings: Habitat Conditions (PPSRNP)



Forest floor has increased leaf litter due to defoliation and dried epiphytes.



Emergent trees were uprooted or broken from the buttress. Small to medium sized trees were broken in the middle.



Understorey and ground cover vegetation underneath the fallen logs



## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

### RAPID BIODIVERSITY SURVEY

#### Key findings: Habitat Conditions (CNCH)



More landslide areas are observed in Kalakwasan, Tanabag and few in Mangapin, Langogan due to heavy rainfall.



## RAPID BIODIVERSITY SURVEY

Canopy Opening -  
Opportunistic species



*Ixora palawanensis*



*Calamus* spp.



## RAPID BIODIVERSITY SURVEY

## Key findings: Fauna



Amphibians and reptiles have higher occurrence records near bodies of water. Occurrences and observations reduces as distance from bodies of water increases.



Observed carcasses (sample found Palawan Hornbill and Palawan Flying Squirrel)



More insect bats are observed in PPSRNP due to low fruiting and flowering trees. In Kalakwasan and Mangapin, large flying foxes and other fruit bats are observed, this is due to presence of fruiting and flowering trees which indicates that the habitat is not totally damaged.



## RAPID BIODIVERSITY SURVEY

## Key findings: Fauna



Palawan Frogmouth



Palawan Blue Flycatcher



Palawan Hornbill



Blue-naped Parrot

In PPSRNP, bird detection especially frugivores reduce with canopy openings due to damaged trees and high defoliation especially.

In CNCH, less trees are damaged and defoliated. Fruit-bearing and flowering trees are able to provide food sources to frugivorous birds.



## STUDY OF DRIVERS OF LAND-USE CHANGE

### Study of Drivers of Land-Use Change





### 3. STUDY OF DRIVERS OF LAND-USE CHANGE

#### Study of Drivers of Land-Use Change





## STUDY OF DRIVERS OF LAND-USE CHANGE

### Study of Drivers of Land-Use Change

#### AREAS COVERED

##### PPUR

- Marufinas (March 12 - 16, 2022)
- Cabayugan (March 17 - 18, 2022)

##### CNCH

- Tanabag (March 23 - 25, 2022)
- Concepcion (March 26 - 30, 2022)
- Langogan (April 04 - 07, 2022)

##### Roxas

- Nicanor Zabala (April 08 - 11, 2022)

##### San Vicente

- Port Barton

*Areas covered during the ground assessment are forest lands that are important to wildlife and communities severely impacted by the storm*

- *Sacred grounds (of Tagbanuas and Batak)*
- *Water sources*
- *Hunting grounds*
- *NTFP Areas (Almaciga, honey and rattan collection areas)*
- *Residential*
- *Tourism*
- *Agricultural lands*

## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

## STUDY OF DRIVERS OF LAND-USE CHANGE





## Key Findings: PPUR (Marufinas and Cabayugan)

- Fallen and uprooted trees due to Typhoon Odette.
  - Trees like **Rumaraw**, which is home to the **Bising** or the flying squirrel, were cut and uprooted. Snag Rumaraw trees caused habitat destruction for this species.
  - Balete trees which is home to the **Palawan Bearcat**.
- Rivers (**Kalaga river**) were lodged with upstream/upland debris which constricted water flow downstream and eventually started to dry up. Clean water sources are starting to run dry affecting the communities dependent on it for water
- Landslides causing water siltation





### Key Findings: PPSRNP (Marufinas and Cabayugan)

- Areas where communities get honey, yantok and almaciga (Bagtik) are severely damaged as well
- Wild animals (like the Baboy-damo) that were once hunted in the higher elevation of their hunting ground can no longer be seen in the same area. Since most of the tree species that were uprooted or cut serve as their food source, their sightings are now confined in the lower elevations near the community foraging within the nearby cropland
- The settlement in Marufinas is near the watershed area (approximately 300m away from the forests). They rely on honey harvesting as their primary source of income. Since Odette uprooted and cut most of the trees in the area, they are now having a hard time searching for honey bees. Most of the houses are made up of light materials. Currently, they are now starting to repair their houses using lumbers from cut trees within their vicinity.





## OTHER ACTIONS TAKEN

Key Findings: CNCH (*Tanabag, Concepcion, Langogan*)

- Areas where they get **honey, yantok and almaciga** (Bagtik) are severely damaged. The ritual of "**Lambay**", a 3-day ritual in Kalakwasan, Tanabag, is usually conducted every 15th of March to ask for blessings in hunting and ntfp collection. In this area, at least, 60 households were destroyed.
- **Quarrying activities** are also present. There is currently a sand quarrying activity in Tanabag legitimately owned by "Palay" (a private company). This quarry activity is near the river connected to the watershed of Kalakwasan.
- The **Batak Center**, a symbolic structure in Brgy. Concepcion, had also been severely damaged by the typhoon. The Batak Center is not only a source of income for the the community but also a venue to share their knowledge and life experiences.
- Wild animals (like the Baboy-damo) that were once hunted in the lower elevation of their hunting ground are now seldom spotted, though they are still within the same area since there are footprints that can be seen. Since most of the tree species which are their source of food were uprooted and cut, and the temperature is high due to canopy defoliation, they are now being spotted more often in the higher elevations in search for food and shade .
- Clean water source such as rivers, creek (**Supil Creek, Languyon river**) and falls (**Purwanan and Piyangambangan Falls**) are starting to show signs of drying up



Tanabag



Concepcion



## Key Findings: CNCH (Tanabag, Concepcion, Langogan)

- Bagtikan, a non-timber forest product and a primary source of livelihood for the Bataks
- Usually found in elevations of 500 to 700 m asl
- Tapping is the most common process of collection; wound is usually left open to accumulate enough resin as it solidifies after a few weeks and collected again two to three more times depending on the productivity of the tree
- A full grown tree can produce 5kg to 75kg of resin which can be sold for PHP 24.00 to Php 44.00 per kg
  - 5kg to 20kg if harvest is every after 2 weeks
  - Price is dependent if high quality or not
    - High quality: pure resin; rarely harvested
    - Low-med quality: mix of resin and bark





## 2.2.9

# GREEN ASSESSMENT WITH SIBOL

## OTHER ACTIONS TAKEN

### Key Findings: CNCH (Tanabag, Concepcion and Langogan)

- Bagtikan Area in Concepcion





## Key Findings : ROXAS (Nicanor Zabala)

- Primary livelihood of the community is highly dependent on ***copra*** (coconut) and ***cashew nut*** harvesting. Coconut and cashew trees are affected by Typhoon Odette.
- Their cashew harvesting is severely affected since Typhoon Odette uprooted and cut some of their trees
- They are dependent on Kaingin where they planted Palay-kaingin, banana and sweet potato for subsistence





## OTHER ACTIONS TAKEN

## Key Findings: ROXAS (Nicanor Zabala)

- Harvesting of cashew is from March to April
  - They usually harvest 2 to 2.5 kg of cashew from 2 cashew trees
  - Can be sold at 45 pesos (lowest price) to 100 pesos (highest price) per salop (2.5 kg)
  - Buyers usually are from Roxas
- 
- Copra is being harvested every three months
  - Can be sold between 8 - 10 pesos (lowest price) up to 40 pesos (highest price)
  - Buyers come from Puerto Princesa





### Other Findings:

- The Philippines should be experiencing the Dry season until May. However, it has been raining hard non-stop since late March
- Some of the communities interviewed are “grateful” that Odette happened. They now have houses built with a strong foundation (hardwood usually from Apitong and Ipil)
- Local government units needs a more **timely and improved** disaster response to natural calamities
  - Risk-oriented land-use planning
    - Location of structures where critical sectors such as power, water and communications are built
    - Schools in the mountains are built on landslide prone areas
    - Houses in the coastal areas are back



## 4. CITIZEN SCIENCE INFORMATION GATHERING TRAINING

## Citizen Science Information Gathering Training

- March 15-17: 10 mentors trained from PPC ENRO, PPSRNP, LGU San Vicente, LGU Roxas, and MENRO Dumarán
- March 22-April 8: around 200 locals trained from 17 barangays in PPC and additional 30 mentors from City ENRO
  - Brgys. Cabayugan, Marufinas, New Pangangan, Tagabinet, Buenavista, Macarascas, Babuyan, Binduyan, Langogan, Concepcion, Tanabag, San Rafael, Manalo, Maruyogon, Salvacion, Lucbuan, Maoyon
- Participants were trained to be Citizen Scientists by using tech-based solutions (EarthRanger and CyberTracker) for data collection and monitoring.



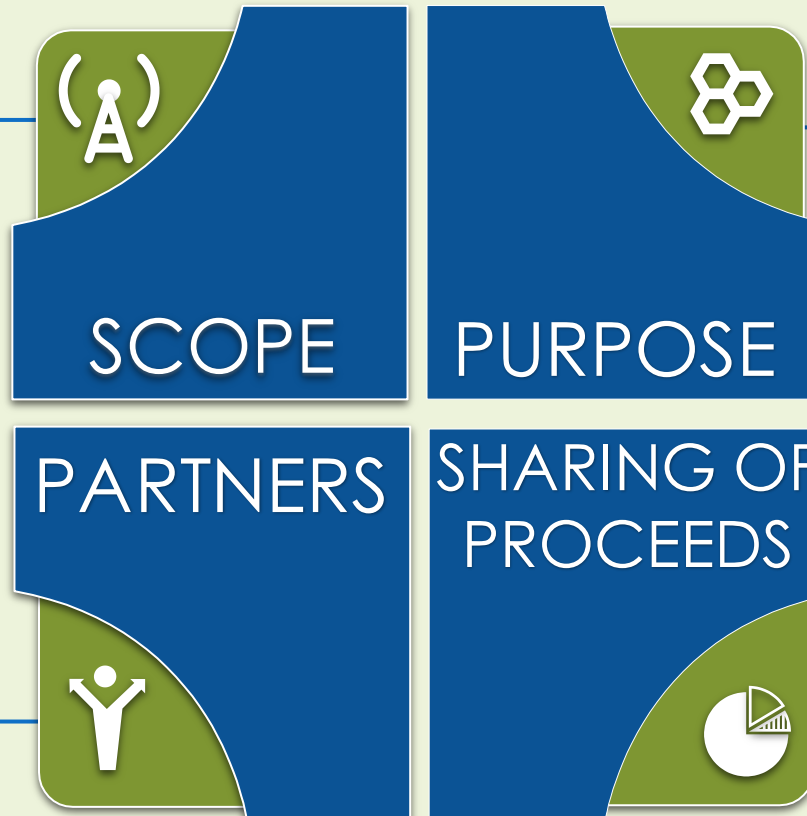


# CREATION OF MOA

IN SUPPORT TO EO 120: BUILD BACK BETTER TASK FORCE

Retrieval, processing and disposition of fallen/uprooted trees in damaged forest areas due to Typhoon Odette in the Municipalities of Roxas, Taytay, El Nido, Dumaran, Araceli and Puerto Princesa City, Province of Palawan

1. National Resources Development Corporation (NRDC)
2. Palawan Council for Sustainable Development (PCSD)
3. Provincial Government of Palawan
4. City of Puerto Princesa
5. Municipality of Roxas
6. Municipality of Dumaran
7. Municipality of Araceli
8. Municipality of Taytay
9. Municipality of El Nido
10. Palawan Chamber of Commerce & Industry (PCCI)



Funds will be allocated for the REHABILITATION and SUSTAINED MONITORING of typhoon affected areas in Palawan

DENR/NRDC – 60%

PCCI – 30%

LGUs (PPC, Taytay, El Nido, Roxas, Dumaran and Araceli) – 10%



CREATION OF  
**MEMORANDUM OF AGREEMENT**  
IN SUPPORT OF EO 120: BUILD BACK BETTER TASK FORCE

**ARTICLE I- SCOPE OF THE AGREEMENT**

This Agreement shall involve the cooperation and collaboration of five (5) agencies/entities: the DENR, NRDC, Provincial Government of Palawan, PCSD, and the Palawan Chamber of Commerce and Industry covering the retrieval, processing and disposition of fallen/uprooted trees in Typhoon Odette affected areas in Palawan, namely: Puerto Princesa City and the municipalities of Roxas, Taytay, El Nido, Dumaran, and Araceli.

The specific scope of the Agreement covers the following:

- a. Retrieval of fallen/uprooted trees in the affected forest areas, which involves tree inventory (100% inventory), tagging, hauling, and on-site/off-site milling;
- b. Processing of retrieved logs into lumber;
- c. Disposition of processed logs/lumber which involves donation to typhoon affected families for construction of housing/shelter; and,
- d. Commercial marketing of lumber to generate proceeds to defray costs for the sustained retrieval operations and for the rehabilitation of the damaged forest ecosystem.

**ARTICLE II- SHARING OF PROCEEDS**

Proceeds from the sale of processed logs or lumber derived from the fallen/uprooted trees, shall be as follows:

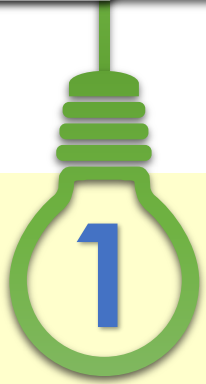
a. DENR/NRDC	60%
b. PCCI	30%
c. LGUs, (Puerto Princesa City Municipalities of Taytay, El Nido, Roxas, Dumaran and Araceli)	10%
Total	100%

**ARTICLE V- EFFECTIVITY**

**Sec. 8.** This AGREEMENT shall take effect upon signing by the parties and shall remain in force for a period of three (3) years to deliver the responsibilities stated herein, and in accordance with the detailed plan of action to be adopted by the parties concerned upon the recommendation of the Steering Committee, to undertake commitment by the parties, in accordance with this Agreement. The agreement may be extended for another 3 years upon the approval of all concerned Parties.



# PALAWAN TFBBB AGREEMENTS



## PROVINCIAL GOVERNMENT OF PALAWAN

1. TO PROVIDE TRUCKS TO HAUL TREES CONVERTED INTO LOGS AND FLITCHES TO DESIGNATED AREAS (BRGY. CMPD)

2. TO SUPPORT MANPOWER (BANTAY PALAWAN OF ENRO PROVINCE

3. TO FIND SUPPORT GROUPS FOR THE SETTING UP OF MINI-SAWMILL ON WHEELS, SOURCE OTHER HOUSING MATERIALS

## PCSDS AND CENROs OF SOUTHERN PALAWAN

TO CONTINUOUSLY AUGMENT THEIR PERSONNEL TO THE DENR INVENTORY TEAM IN THE NORTH AND PROVIDE LOGISTIC SUPPORT

## WESTERN COMMAND THRU PAF

TO CONDUCT AERIAL ASSESSMENT TOGETHER WITH DENR, PCSDS AND LGU INCLUDING GROUND VERIFICATION THRU DRONE AND GEOTAG PHOTOS TO BE USED IN THE DETERMINATION OF FINAL ENVIRONMENTAL ASSESSMENT OF DAMAGES AND NEEDS

## DENR

1. TO INVITE THE FILIPINO-CHINESE CHAMBER OF COMMERCE TO THE TFB BB INCLUDING OTHER ORGANIZATIONS

2. TO COORDINATE WITH PROVINCIAL COUNTERPARTS OF THE TFB BB FOR THE IMPLEMENTATION OF THE PLAN

3. TO FOLLOW UP MEETINGS AND FIELD MONITORING AND EVALUATION

## DTI AND DSWD

TO CONDUCT LIVELIHOOD CARAVAN AND LIVELIHOOD FORUM WITH DENR

**BUILD BACK BETTER TASK FORCE**

# 3 ISSUES AND CONCERNS



## TYPHOON ODETTE

# ESTIMATED COST OF DAMAGES

TOTAL REQUEST:

**9,563,000**

RELEASED FUND:

**600,000**

FOR CENRO TAYTAY

REMAINING REQUEST:

**8,963,000**



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

### MEMORANDUM

FOR : **THE UNDERSECRETARY**  
Legal, Administration, Human Resources  
and Legislative Affairs

FROM : **THE OIC- REGIONAL EXECUTIVE DIRECTOR**

SUBJECT : **REPORT ON THE EFFECTS OF TYPHOON ODETTE**

DATE : 20 January 2022

Further to our memorandum dated 07 January 2022, please find the attached updated reports submitted by the Provincial and Community Environment and Natural Resources Offices of Palawan. Said updated reports contain estimated cost of damages or amount needed for repair of DENR office buildings and other properties in the total amount of **Php 9,563,000.00**, broken down as follows:

OFFICE	AMOUNT (Php)
PENRO Palawan (Snake Island National Coastal and Marine Center for Research)	5,370,000.00
CENRO Puerto Princesa	33,000.00
CENRO Roxas	3,560,000.00
CENRO Taytay	600,000.00
<b>TOTAL</b>	<b>9,563,000.00</b>

We respectfully request for your immediate attention and active support to ensure continuous and better delivery of services to the public, Sir.

  
**LORMELYN E. CLAUDIO, CESO IV**

CC: **THE UNDERSECRETARY**  
Finance, Information Systems and Climate Change

**THE UNDERSECRETARY**  
Field Operations and Environment

**THE ASSISTANT SECRETARY**  
Field Operations-Luzon Cluster



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Website: <http://mimaropa.denr.gov.ph>  
Email: [mimaroparegion@denr.gov.ph](mailto:mimaroparegion@denr.gov.ph)



Republic of the Philippines  
**Department of Environment and Natural Resources**  
Visayas Avenue, Diliman, Quezon City  
Tel Nos. (632) 929-6626 to 29 • (632) 929-6633 to 35  
926-7041 to 43; 929-6252; 929-1669  
Website: <http://www.denr.gov.ph>/E-mail: [web@denrgov.ph](mailto:web@denrgov.ph)

### MEMORANDUM

TO : **The PENR Officer**  
Palawan Provincial Office  
DENR Region 4B (MIMAROPA)  
Puerto Princesa, Palawan

FROM : **The Undersecretary**  
Finance, Information Systems and Climate Change

SUBJECT : **RELEASE OF SUB-ALLOTMENT ADVICE NO. CO-R4B-101-2022-01-034 FOR THE REHABILITATION/REPAIR OF OFFICE BUILDINGS DAMAGED BY TYPHOON ODETTE**

DATE : 19 January 2022

We are issuing Sub-Allotment Advice No. **CO-R4B-101-2022-01-034** of even date amounting to **SIX HUNDRED THOUSAND PESOS ONLY (P600,000.00)** to cover the release of allotment for the rehabilitation/repair of El Nido and CENRO Taytay office buildings damaged by Typhoon Odette per attached Annex A.

This release is chargeable against P/A/P: Protected Areas Development and Management (310201100001000) as authorized under the FY 2022 General Appropriations Act, R.A. 11639.

This amount is intended for the purpose indicated. Disbursement therefrom shall be in accordance with the existing budgeting, accounting and auditing rules and regulations.

  
**ATTY. ANALIZA REBUELTA-TEH**

Cc: **The Regional Executive Director**  
DENR - Region 4B (MIMAROPA)  
Roxas Boulevard, Manila

# 4 *BUILD BACK BETTER TASK FORCE* WAY FORWARD

- PALAWAN TASK FORCE BUILD BACK BETTER
- PENRO/CENROs



01

**VIDEO & PHOTO GEOREFERENCING**

Thru google map of 2019-2020 and transformation into a technical map for the determination of area and rehabilitation to be undertaken

**02 COORDINATION WITH OTHER AGENCIES AND PRIVATE SECTORS**

- Follow-up meeting with industries, business sectors (Chamber of Commerce) and civic organizations re housing materials

**03 FINALIZATION OF MOA**

- To generate and allocate funds for the rehabilitation and sustained monitoring of typhoon affected areas in Palawan

**04 GREEN ASSESSMENT W/ SIBOL**

- To produce GREEN ASSESSMENT FRAMEWORK PLAN after the completion of Ground Validation, Rapid Biodiversity Assessment, Landuse Change after a Disaster & Citizen Science Information
- In partnership of Sustainable Interventions on Biodiversity, Oceans and Landscape (SIBOL) Project

05

**LOGISTIC AND OPERATIONAL SUPPORT****1. HIRING OF ADDITIONAL 140 FPOs (APRIL-DECEMBER 2022)**

- For the continuous inventory of fallen trees and conduct of forest protection activities
- MOOE (Supplies and materials, and travelling expenses)

**2. SUPPORT VEHICLES (4X4) – CENROs PPC AND ROXAS**

- For Typhoon Odette activities (continuous inventory, patrolling and monitoring, IEC, etc.)

08

**POLICY GUIDELINES IN THE UTILIZATION OF UTILIZATION AND DISP OF FALLEN AND UPROOTED NATURALLY GROWN TREES**

- within protected areas both private and public lands

07

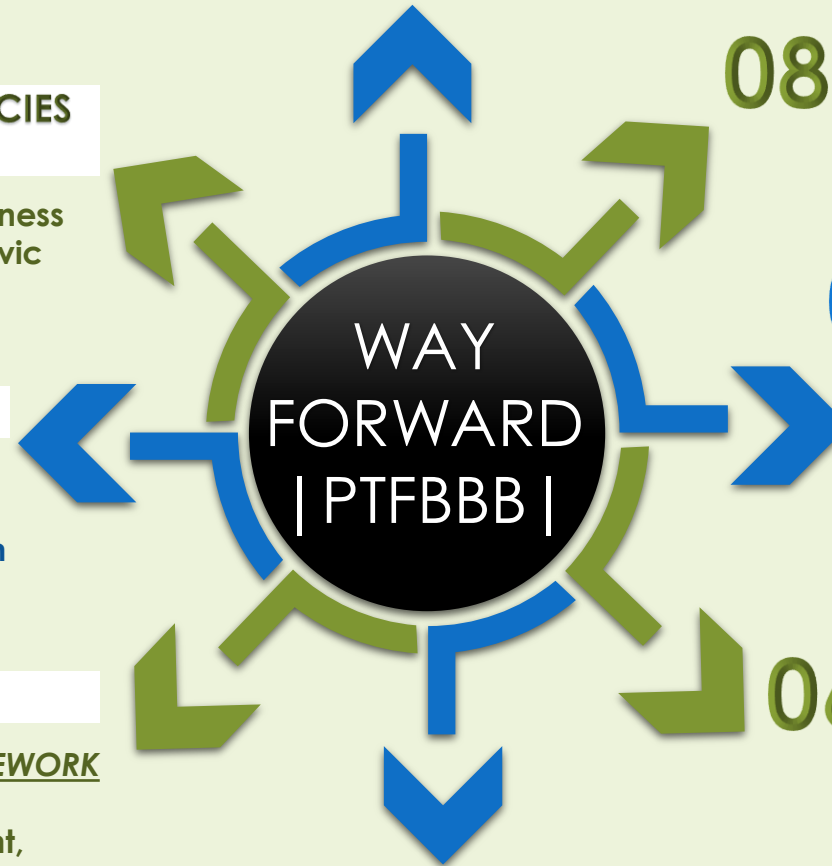
**POLICY GUIDELINES IN THE UTILIZATION OF TREE PARTS**

- i.e tops and branches including stumps to be manufactured into novelty items-souvenirs, small furnitures, etc. as livelihood of the community affected by Typhoon Odette

06

**SUSTAINED GREEN ECONOMY MODEL (GEM) ACTIVITIES**

- Task Force El Nido Challenge and Task Force Coron Bay





DENR  
MIMAROPA

THANK YOU



PALAMANTASK FORCE BUILD BACK BETTER