

PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2025



PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL



TOYOTA
RESCUE



**LOCAL DISASTER RISK REDUCTION
AND MANAGEMENT PLAN
2023 TO 2025**
PROVINCE OF BOHOL

SP Resolution Adopting the LDRRMP

PDRRM

PROVINCE OF BOHOL
OFFICIAL SEAL

Republic of the Philippines
PROVINCE OF BOHOL
City of Tagbilaran

OFFICE OF THE SANGGUNIANG PANLALAWIGAN
THE 29TH BOHOL LEGISLATURE

EXCERPT FROM THE RECORD OF PROCEEDINGS OF THE REGULAR SESSION OF THE SANGGUNIANG PANLALAWIGAN OF BOHOL HELD AT THE SENATOR BENIGNO S. AQUINO, JR. SESSION HALL, BOHOL PROVINCIAL CAPITOL BUILDING, LINO CHATTO DRIVE, TAGBILARAN CITY, ON MAY 09, 2023.

PRESENT:

Hon. Dionisio Victor A. Balite, Ph.D.	Vice Governor, Presiding Officer
Hon. Venzencio B. Arcamo	Member
Hon. Lucille Y. Lagunay	Member
Hon. Greg Crispinito L. Jala	Member
Hon. Aldner R. Damalerio	Member
Hon. Tomas D. Abapo, Jr.	Member, Floor Leader
Hon. Elpidio L. Bonita, M.D., M.H.A.	Member
Hon. Vierna Mae F. Boniel	Member
Hon. Gloria B. Gementiza	Member, Ex-Officio, PCL
Hon. Christian Victor S. Bolos III	Member, Ex-Officio, SK Federation President

ON OFFICIAL BUSINESS:

Hon. Tita V. Baja	Senior Member, Asst. Floor Leader
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ABSENT:

Hon. Nathaniel O. Binlod, MPA	Member, <i>On Leave</i>
Hon. Jiselle Rae Aumentado Villamor	Member, Asst. Floor Leader, <i>On Leave</i>
Hon. Romulo G. Cepedoza, D.M.D.	Member, Ex-Officio, Liga ng mga Barangay, <i>On Leave</i>

RESOLUTION NO. 2023-421

APPROVING AND ADOPTING THE LOCAL DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2025.

(Sponsored by **Hon. Tomas D. Abapo, Jr.**)
(Co-sponsored by the **Honorable Presiding Officer,**
Vice Governor Dionisio Victor A. Balite, Ph. D.)

"WHEREAS, the Provincial Disaster Risk Reduction and Management Council (PDRRMC), through the Provincial Disaster Risk Reduction and Management Office, crafted the Local Disaster Risk Reduction and Management Plan 2023-2025;

"WHEREAS, the Plan was presented to the members of the PDRRMC and was likewise approved and adopted by the Council;

"WHEREAS, a corresponding Resolution from the Sangguniang Panlalawigan is also required for its approval and adoption;

"WHEREFORE, be it resolved, as it is hereby resolved by the Sangguniang Panlalawigan of Bohol in session duly assembled -

BOHOL

Sangguniang Panlalawigan of Bohol
Resolution No. 2023-421

- 2 -

That the Local Disaster Risk Reduction and Management Plan 2023-2025, is hereby approved and adopted.

"RESOLVED FURTHER, to furnish copies hereof to all concerned for their information and appropriate action;

"APPROVED."

I hereby certify to the correctness of the above-quoted Resolution.



BONIFACIO M. QUIROG, JR., J.D., Ph.D.
Secretary, Sangguniang Panlalawigan

ATTESTED:



DIONISIO VICTOR A. BALITE, Ph.D.
Vice Governor
(Presiding Officer)

Message from the Local Chief Executive



Republic of the Philippines
PROVINCE OF BOHOL
City of Tagbilaran

OFFICE OF THE GOVERNOR

First and foremost, allow me to congratulate the members of the Provincial Disaster Risk Reduction and Management Council (PDRRMC) and all stakeholders in the province of Bohol for completing the series of workshops to come up with an updated Provincial Disaster Risk Reduction and Management Plan for 2023-2025.



Their cohesive and collective efforts in coming up with this PDRRM Plan is a manifestation of how Boholanos unite as one to show their support to this administration's governance and prioritization of DRR programs.

The M7.2 Great Bohol earthquake in 2013, the COVID-19 and Typhoon Odette that hit the province of Bohol may be catastrophic, but it cemented the Boholano spirit of resiliency that allowed us to rise from the rubbles and pushes us to become what we are and to where we are now.

I am deeply honored for the province of Bohol to be one of only two provinces in the country to be piloted by the Office of Civil Defense (OCD) with the Japan International Cooperation Agency (JICA) on this new face of LDRRM plan, of which our PDRRM Plan will serve as the model in LDRRM planning.

This crafting of this LDRRM Plan provides the guidelines for hazard information use and risk assessment; guidelines for the formulation of RDRRMPs/LDRRMPs; OCD's information management (including global indicators such as Sendai Framework for Disaster Risk Reduction), monitoring, and evaluation system; establishment of training system to replicate the project outcome and conduct training for regions and LGUs in the Philippines. The overall purpose of this Plan is to reduce disaster human casualties and economic losses.

Lastly, I enjoin all Boholanos to work hand-in-hand in achieving a safer, adaptive and disaster resilient Filipino communities toward sustainable development.

Good luck and God bless us all!


ERICO ARISTOTLE C. AUMENTADO
Governor

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Acronyms and Abbreviations

ASF	African Swine Flu
BACH	Bohol Art and Cultural Heritage
BDRRMC	Barangay Disaster Risk Reduction and Management Committee
BEA	Bohol Earthquake Assistance
BFP	Bureau of Fire Protection
BISU	Bohol Island State University
BLGU	Barangay Local Government Unit
BOHECO	Bohol Electric Cooperative Corp.
BLCI	Bohol Light Company Inc.
Brgy	Barangay
CCAD	Center for Culture and Arts Development
CLUP	Comprehensive Land Use Plan
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DOH	Department of Health
DOST	Department of Science and Technology
DOT	Department of Tourism
DPWH	Department of Public Works and Highways
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
EIL	Earthquake-Induced Landslides
ENSO	El Niño Southern Oscillation
EREID	Emerging and Re-emerging Infectious Diseases
ERT	Emergency Response Team
EWS	Early Warning System
GIS	Geographic Information System
GPS	Global Positioning System
Ha	Hectare
HEI	Higher Education Institutions
IEC	Information, Education and Campaign
JICA	Japan International Cooperation Agency
LCCAP	Local Climate Change Adaptation Plan
LDRRMC	Local Disaster Risk Reduction and Management Council
LDRRMP	Local Disaster Risk Reduction and Management Plan
LGU	Local Government Unit
MHPSS	Mental Health and Psychosocial Support

MLD	Manual Load Dropping
MLGU	Municipal Local Government Unit
NAMRIA	National Mapping and Resource Information Authority
NBF	North Bohol Fault
NCCA	National Commission on Culture and Arts
NCIP	National Commission on Indigenous Peoples
NDRRMP	National Disaster Risk Reduction and Management Plan
NGA	National Government Agency
NGC	National Grid Corporation
NGO	Non-government Organization
NHI	National Historical Institute
NM	National Museum
NSO	National Statistics Office
OCD	Office of Civil Defense
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PDNA	Post Damage and Needs Assessment
PDPFP	Provincial Development and Physical Framework Plan
PESTEL	Political, Economic, Social, Technological, Environmental, Legal
PHIVOLCS	Philippine Volcanology and Seismology
PhP	Philippine Peso
PLDT	Philippine Long Distance Telephone Company
PLGU	Provincial Local Government Unit
PNP	Philippine National Police
PO	Peoples Organization
PPAs	Programs, Projects, and Activities
PPDO	Provincial Planning and Development Office
PPE	Personal Protective Equipment
PSA	Philippine Statistics Authority
REDAS	Rapid Earthquake Damage Assessment System
RIL	Rain-Induced Landslide
SAR	Search and Rescue
Sq.m	Square Meter
SWM	Solid Waste Management
SWOC	Strengths, Weaknesses, Opportunities, and Challenges
USAR	Upland Search and Rescue
VAW	Violence Against Women
WASH	Water, Sanitation and Hygiene
WESM	Wholesale Electric Spot Market

Chapter 1: Preliminary Analysis

1. Ecological Profile

Physical Characteristics

Geographic Location and Accessibility

Bohol is situated in Region 7 (Central Visayas), with the islands of Cebu at its northwest across the Bohol Strait, Leyte in the northeast separated by the Camotes Sea and Canigao Channel and Mindanao at its southern border with the Bohol Sea in-between. The main island is surrounded by about 73 smaller islands, with Panglao Island at the southwest and Lapinig Island in the northeast among its larger islands. Located almost centrally in the Philippine archipelago, the island province of Bohol is about 1 hour and 45 minutes by airplane directly south of Manila and about 30 minutes southeast of Mactan Island, Cebu.

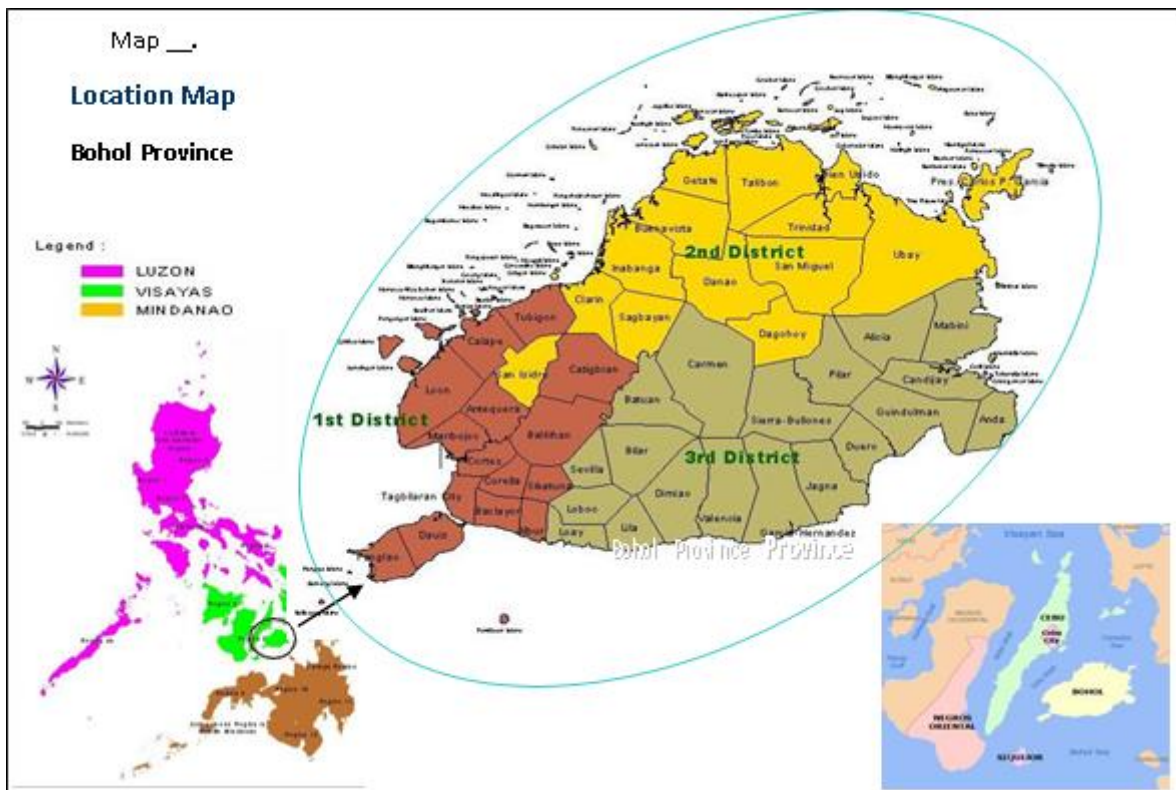


Figure 1: Location of Bohol (Source: PDPFP 2016-2028)

Land Area

The total land area of Bohol is approximately 411,726 hectares representing 1.4% of the total land area of the Philippines.

Demographic Characteristics

Population and Settlements

Bohol's total resident population, in the latest census survey conducted by the Philippine Statistics Authority (PSA) in 2022 registered at 1.394 million Boholanos. The province ranked as the 20th most populous province among the country's 81 provinces in 2020 (PSA, 2020).

Table 1: Total Population by City/Municipality

	TOTAL POPULATION			
	01-May-2000	01-May-2010	01-Aug-2015	01-May-2020
BOHOL	1,139,130	1,255,128	1,313,560	1,394,329
ALBURQUERQUE	8,715	9,921	10,540	11,246
ALICIA	21,605	22,285	23,517	24,374
ANDA	17,863	16,909	16,462	17,778
ANTEQUERA	13,758	14,481	14,425	14,990
BACLAYON	14,996	18,630	20,591	22,461
BALILIHAN	16,837	17,147	17,903	18,694
BATUAN	11,835	12,431	12,767	13,845
BILAR	16,628	17,098	17,590	18,512
BUENAVISTA	25,960	27,031	27,261	29,711
CALAPE	27,921	30,146	30,863	33,079
CANDIJAY	30,389	29,043	29,475	30,119
CARMEN	40,713	43,579	46,306	49,191
CATIGBIAN	21,461	22,686	22,675	23,805
CLARIN	18,040	20,296	20,301	21,158
CORELLA	6,048	7,699	8,479	9,479
CORTES	12,702	15,294	16,954	18,344
DAGOHOY	16,845	18,868	19,158	19,874
DANAO	17,265	17,952	17,890	20,245
DAUIS	26,415	39,448	45,663	52,492
DIMIAO	14,151	15,166	14,364	14,889
DUERO	16,485	17,580	17,876	18,861
GARCIA HERNANDEZ	21,428	23,038	24,194	24,430
GUINDULMAN	31,028	31,789	32,408	34,104
INABANGA	40,714	43,291	45,880	48,534
JAGNA	30,643	32,566	33,892	35,832
GETAFE	26,826	27,788	30,955	33,422
LILA	10,322	11,985	12,257	12,240
LOAY	14,433	16,261	16,691	17,855
LOBOC	15,734	16,312	15,993	17,418
LOON	45,215	42,800	43,034	44,224
MABINI	27,250	28,174	27,171	28,701
MARIBOJOC	16,786	20,491	20,688	22,178
PANGLAO	21,337	28,603	33,553	39,839
PILAR	25,095	26,887	27,256	28,693
PRES. CARLOS P. GARCIA (PITOGO)	20,744	23,287	23,356	23,625
SAGBAYAN (BORJA)	18,346	20,091	22,339	24,335
SAN ISIDRO	9,106	9,125	8,744	9,909
SAN MIGUEL	20,828	23,574	24,135	25,356
SEVILLA	10,281	10,443	10,661	11,376
SIERRA BULLONES	25,499	24,698	24,745	26,095

	TOTAL POPULATION			
	01-May 2000	01-May-2010	01-Aug-2015	01-May-2020
SIKATUNA	6,602	6,380	6,726	6,906
CITY OF TAGBILARAN (Capital)	77,700	96,792	105,051	104,976
TALIBON	54,147	61,373	66,969	71,272
TRINIDAD	25,683	28,828	31,956	35,119
TUBIGON	40,385	44,902	45,893	47,886
UBAY	59,827	68,578	73,712	81,799
VALENCIA	24,363	27,586	27,126	28,392
BIEN UNIDO	22,176	25,796	27,115	26,666

Source: PSA, Census of 2000, 2010, 2015 & 2020, Bohol Province

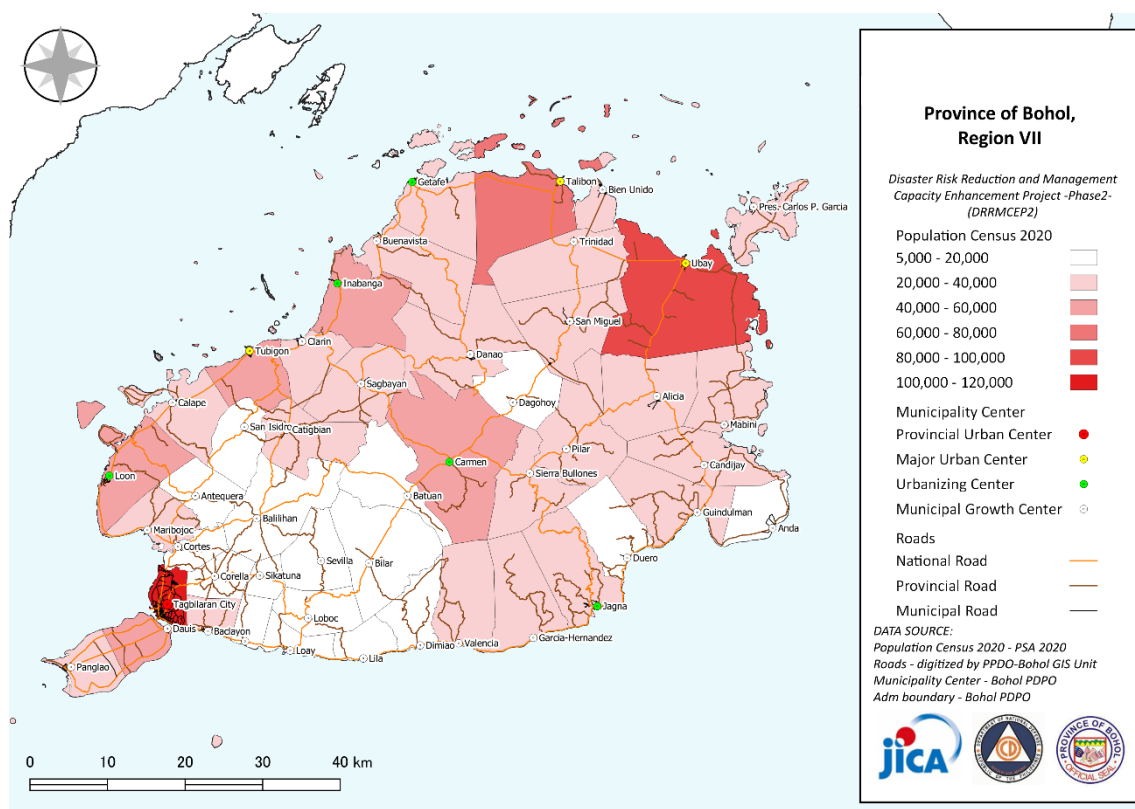


Figure 2: Population Size Map in 2020 (Source: PSA 2020)

Household Characteristics

There are a total of 322,022 households in the province of Bohol with an average household size of 4.3 members per household (PSA, 2020).

Density and Urbanization

As of 2020, Tagbilaran City, Dauis, Bien Unido, Panglao, Cortes, Baclayon, Tubigon, Talibon, Maribojoc, and Calape are the most populated LGUs.

Table 2: Population Density and Land Area

Area	Population (2020)	Land Area (km ²)	Density (persons/km ²)
PHILIPPINES	109,033,245	300,000.00	363
Region VII – Central Visayas	8,081,988	15,872.58	598
Bohol	1,394,329	4,772.52	288
Tagbilaran City (Capital)*	104,976	36.50	2,876
Dauis**	52,492	43.33	1,211
Bien Unido**	26,666	27.39	974
Panglao*	39,839	47.79	834
Cortes**	18,344	27.32	671
Baclayon*	22,461	34.43	652
Tubigon **	47,886	81.87	585
Talibon**	71,272	140.46	507
Maribojoc	22,178	49.35	449
Calape	33,079	75.36	439
<i>Notes:</i> * Land area is based on cadastral survey (certified and provided to the DBM) from the LMB, DENR, as of December 2013. **Estimated land area (certified and provided to the DBM) from the LMB, DENR, as of December 2013.			

Physical and Infrastructure

General Land and Water Characteristics

Bohol is composed of 12 rock formations. The oldest rock formation belongs to the Basement Complex particularly found at the eastern flank of the island. Because of the sub-crustal movements like faulting, seven different geomorphological landforms were produced, namely, (1) Anda Peninsula, (2) Loon Peninsula, (3) Northwestern Area, (4) Central-Northern Sedimentary Area, (5) Eastern Volcanic, (6) Limestone-Haycock Hills and (7) Central Volcanic. The elevation ranges from zero in the coastal areas where subsidence occurred after the 2013 Earthquake to 800 meters in the mountainous areas (Figure 3).

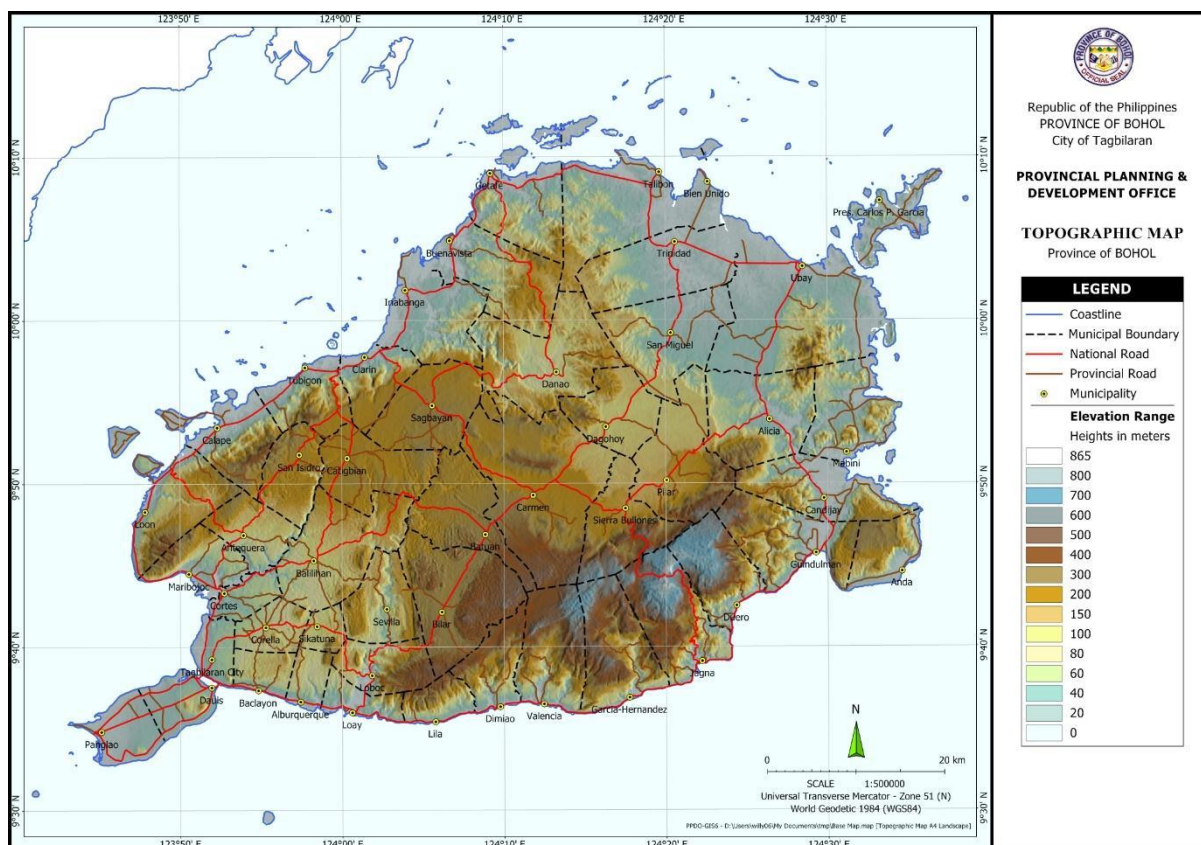


Figure 3: Topographic Map (Source: PPDO Bohol)

Bohol as an island province has a total land area of 4,772.52 square kilometers, 654 kilometers of coastline and 6,245 kilometers of inland waterways.

This system supplies water for domestic, agricultural, and industrial uses mainly based on 2,224 springs, 59 rivers and 200 creeks. There are 22 river basins or watersheds that are valuable sources of water for drinking and irrigation (Figure 4). Surface water from rivers and streams in these basins are impounded and distributed for irrigation, electric generation, and industrial use as well as for domestic use. The rivers and river estuaries in Bohol (Figure 5) are the other sources of surface water commonly serving as harbors and navigation routes, areas for aquaculture development (Inabanga River), fishing and sand quarrying (Abatan River) and recreation and tourism (Cambuhat River in Buenavista and the Loboc River in Loboc and Loay towns). They also provide water for irrigation (Malinao Dam on the Wahig River that feeds the Bohol Irrigation Project-Stage I) as well as domestic and industrial uses such as power supply (Loboc River Hydro-power Plant and mini hydro-power plants in Sevilla and Balilihan municipalities).

Irrigation

Irrigation system includes the three national irrigation systems namely, Bohol Irrigation System-Stage 1 (Malinao Dam), Capayas Irrigation System and Bohol Irrigation System-Stage 2 (Bayongan Dam), and communal irrigation systems including constructed/assisted by the government and privately-owned scattered in the different municipalities.

Local Disaster Risk Reduction and Management Plan
Province of Bohol

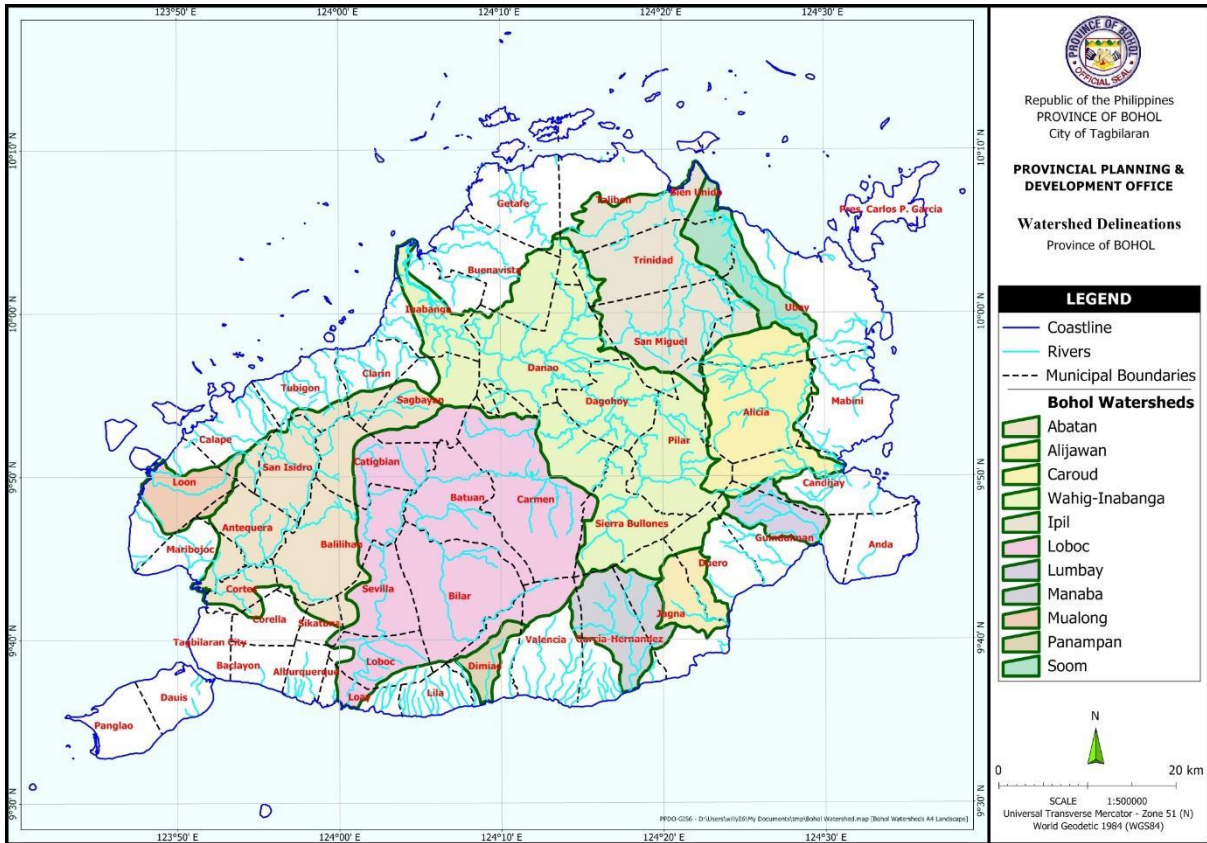


Figure 4: Watersheds Map (Source: PPDO Bohol)

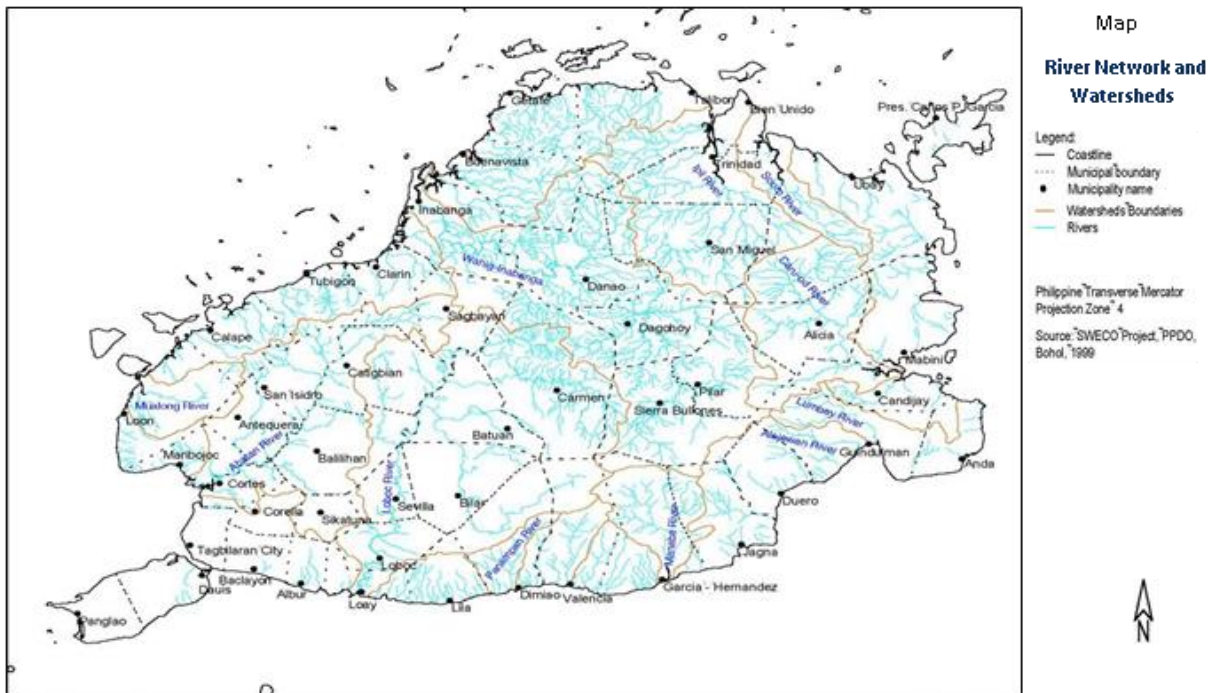


Figure 5: Watershed and River Systems Map (Source: PDPFP 2016-2028)

Roads and Bridges

Bohol has a total length of 6,131.725 kms. as per Road and Bridge Inventory and Condition Survey (RBICS) of December 31, 2016. The longest sections of these roads are barangay roads (66%), followed by provincial roads (13.6%), national roads (11.0%), city roads (1.5 %), municipal roads (5.0%) and farm to market roads (2.0%). A very small portion are either privately owned (0.3%) or are used as NIA access roads (0.6%).

The roads within the province are classified according to type of pavement: asphalt, concrete, gravel, and earth. The data from the Provincial Engineer's Office shows that as of December 2016 roads under the Department of Public Works and Highways have the longest length of asphalted or concreted roads; on the other hand, barangay roads have the longest length of gravel or earth roads.

The National government is maintaining the majority of the length of the province's bridges (57%). Seventy-seven (77) bridges with a total length of 1.579 kilometers are under the jurisdiction of the Provincial Government. Barangay/ Municipal bridges account for 24%

National bridges have the longest length in concrete and steel-type bridges, while barangay bridges have the longest length in timber and bailey-type bridges.

Provincial Roads and Bridges. The provincial roads are distributed in the three Project Management Divisions (PMDs), with the grouping just slightly different from that of the congressional districts.

Of this total, PMD 1 has 49 roads totaling 260.403 kms; PMD 2 has 38 roads totaling 220.379 kms; and, PMD 3 has 70 roads totaling 354.768 kms. Sixty-two percent (62%) of provincial roads are graveled and most of these road sections are in PMD III. ¹

Table 3: Roads by Type of Pavement (LRNDP, 2018-2022)

Project Management Division	TOTAL	Pavement/Surface Type		
	Road length (km)	Asphalt (km)	Gravel (km)	Concrete (km)
PMD 1	260.403	17.026	147.427	95.549
PMD II	220.379	10.868	157.152	51.988
PMD III	354.768	16.448	213.944	123.569
TOTAL	835.55	44.342	518.523	271.106
	33%	5%	62%	100%

¹ Local Road Network Development Plan, 2018-2022, PPDO

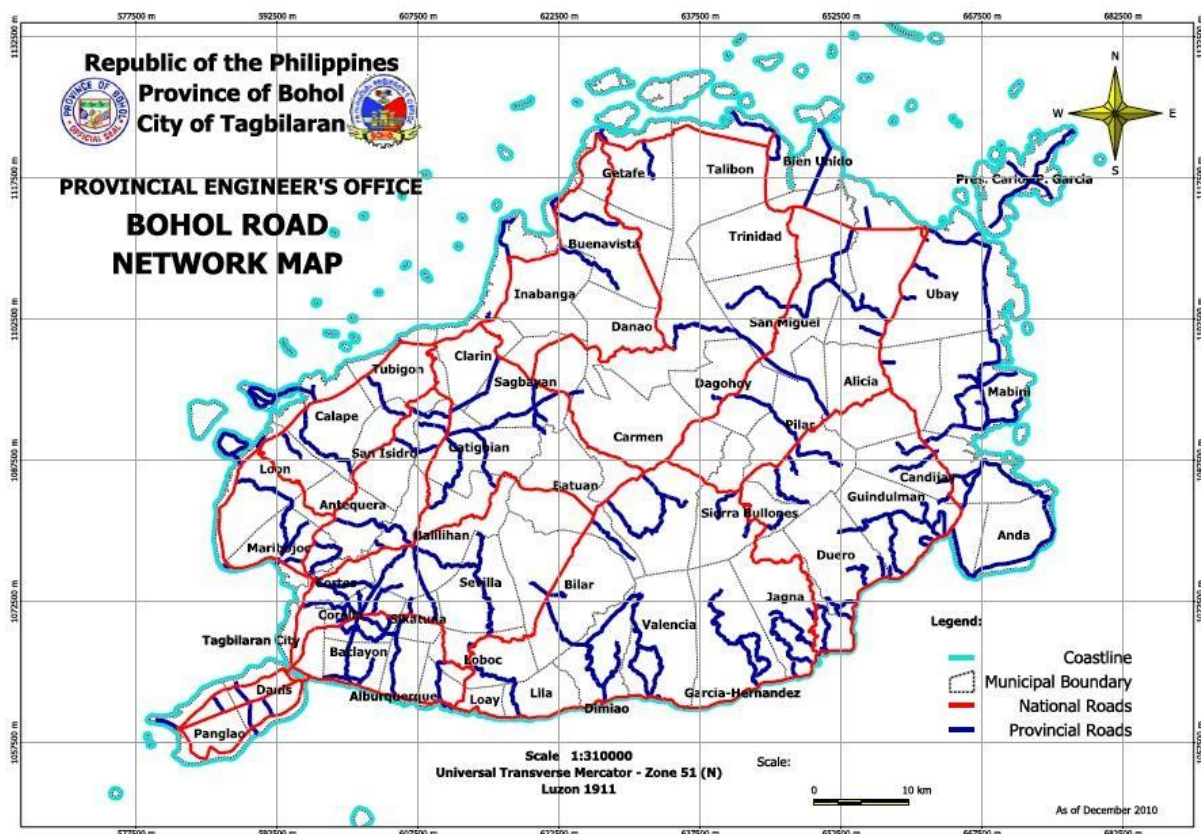


Figure 6: Road Network Map (Source: PPDO Bohol)

Sea Ports

The province has one base port located in the Port of Tagbilaran, four terminal ports located in Tubigon, Talibon, Ubay and Jagna while two outports are distributed in strategic locations in Catagbacan, Loon and Getafe Port.

Lifeline Facilities

Power and Communications

The province of Bohol is wired with the rest of the world through the state-of-the-art telephone facilities that provide domestic and international linkages through three service providers, namely PLDT/SMART, CRUZTELCO and Globelines where the public calling stations are scattered throughout the province. CRUZTELCO concentrates their telephone services in Tagbilaran City, Jagna, Calape and Tubigon. PLDT and CRUZTELCO also provide payphones capable of international direct dialing. The Digital Telephone Exchange funded by the DOTC operates in the municipality of Tubigon, Talibon and Ubay.

Bohol is supplied primarily by power plants located in Leyte and Cebu, with more than 50% for Bohol Electric Cooperative I (BOHECO-I), 100% for Bohol Light Company, Inc. (BLCI) and BOHECO-II. The province has indigenous Hydro Power resources, as evidenced by the existing 7.5 MW hydro power plant (about 11% of current total demand of the island). The Visayas Wholesale Electric Spot Market (WESM) supplies up to 29% of energy mix for BOHECO-I. On the transmission system, Bohol is quite vulnerable owing to a single Bohol transmission interconnection with Leyte. There is also the problem of line congestion because the National Grid Corporation (NGCP) implements Manual Load Dropping (MLD).

Social Services and Facilities

Health and Sanitation Facilities

The Department of Health (DOH) ensures compliance to quality standards on health services through accreditation of health facilities. With this, the department provides assistance to the Provinces and Local Government Units (LGUs) through the Health Facility Enhancement Program (HFEP). A macroplant for the upgrading/development of government hospitals to those of LGUs, DOH and other national government agencies like the DND, DILG-PNP SUCs and UP System.

The program aims to improve health infrastructure and allocates medical /dental equipment among government hospitals, Rural Health Units (RHUs) and Barangay Health Stations (BHS). This quality improvement in health infrastructure aims to support the facility to comply and qualify with the necessary requirements for License to Operate (LTO) set by the DOH and for the accreditation to PhilHealth in TSEKAP, TB-DOTS, Newborn Screening, Animal Bite Treatment Center and Maternity Care Package for RHUs/BHS. A bulk of the budget is intended for health facility upgrading coupled with improving the systems for health facility operations and management. Furthermore, health facility enhancement also increases the LGU's revenue from the National Health Insurance Program (NHIP) benefits and other medical and non-medical revenue that help sustain the health facilities in providing quality services especially to the poor.

Table 4: List of RHUs with DOH LICENSING and PHILHEALTH ACCREDITATION

NAME OF RHU	DOH Licensing/Accreditation				PHILHEALTH Accreditation		
	PCF	Birthing Facility	TB DOTS (PHILCAT Cert)	Ambulance	Konsulta Package	MCP	TB DOTS
1. Albuquerque		✓	✓				
2. Alicia		✓	✓				✓
3. Anda		✓	✓				✓
4. Antequera		✓	✓				
5. Baclayon		✓	✓			✓	
6. Balilihan		✓	✓				✓
7. Batuan		✓	✓			✓	
8. Bien Unido		✓	✓				✓
9. Bilar		✓	✓				✓
10. Buenavista			✓				
11. Calape			✓				
12. Candijay		✓	✓	✓		✓	✓

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13. Carmen		✓	✓			✓	
14. Catigbian			✓				
15. Clarin		✓	✓				✓
16. Corella		✓	✓				✓
17. Cortes		✓	✓			✓	
18. Dagohoy		✓	✓				✓
19. Danao		✓	✓				✓
20. Dausi		✓	✓				✓
21. Dimiao		✓	✓			✓	
22. Duero		✓	✓				✓
23. Garcia Hernandez		✓	✓				✓
24. Guindulman			✓				✓
25. Inabanga		✓	✓			✓	
26. Jagna RHU 1		✓	✓	✓			✓
27. Jagna RHU 2			✓				
28. Jetafe		✓	✓				✓
29. Lila		✓	✓			✓	
30. Loay		✓	✓			✓	
31. Loboc		✓	✓				✓
32. Loon RHU 1			✓				✓
33. Loon RHU 2			✓				
34. Mabini		✓	✓	✓			✓
35. Maribojoc		✓	✓			✓	
36. Panglao		✓	✓			✓	

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37. Pilar		✓	✓			✓	
38. Pres. CPG			✓				
39. Sagbayan			✓				
40. San Isidro		✓	✓				✓
41. San Miguel			✓		✓		
42. Sevilla		✓	✓	✓		✓	
43. Sierra Bullones		✓	✓				✓
44.) Sikatuna		✓	✓	✓			✓
45.) Tagbilaran City (Capital)		✓	✓				✓
46.) Tagbilaran Birthing ang Baby Care Facility		✓	✓			✓	✓
47.) Talibon		✓	✓				✓
48.) Trinidad		✓	✓		✓		✓
49.) Tubigon		✓	✓	✓			✓
50.) Ubay RHU 1		✓	✓				✓
51.) Ubay RHU 2		✓	✓				✓
52.) Ubay RHU 3							
53.) Valencia			✓				
TOTAL	0	41	52	8	2	40	29
PERCENTAGE	0%	77%	98%	15%	4%	75%	55%

Source: RLED, PHO, DMO (2022)

Table 4 shows that none of the fifty-three (53) CHO/RHUs are accredited on PCF. The Regulation, Licensing, and Enforcement Division (RLED) of the Center for Health Development Central Visayas (CVCHD) just recently cascaded the licensing of PCF last 2021, hence the reason for the low accomplishment. All of the CHO/RHUs in the Province of Bohol are still working to meet the standard set by the Health Facility Services and Regulatory Bureau (HFSRB).

For Birthing Homes, although there are a lot of existing birthing centers yet there are only forty-one (41) or seventy-seven percent (77%) of CHO/RHUs have licensed birthing home facilities and out of that, only forty (40) or seventy-five percent (75%) are accredited for Maternal Child Package (MCP). In general, there is a high percentage of compliance in Birthing Home but those that are not accredited are due to inadequate manpower and lack of training such as the Basic Life Support (BLS) and Basic Emergency Obstetrics and Newborn Care (BEmONC) Training. Although the DOH has provided assistance with physical infrastructure, medical equipment, supplies, and medicines yet there are RHUs that are still insufficient to provide the service.

On the other hand, with the efforts and determination of the public health sectors in the entire province of Bohol almost all RHUs were able to accredit their facility to TB DOTS except Ubay RHU 3 which was just inaugurated on November 2021 but was badly hit by Super Typhoon Odette last December 16, 2021. Fifty-two (52) or ninety-eight percent (98%) have TB DOTS licenses and out of that, only forty (40) or seventy-five percent (75%) are PhilHealth Certified TB DOTS. Though the majority of the public health facilities are TB DOTS licensed there are still thirteen (13) or twenty-five percent of CHO/RHUs that were not able to accredit their facility to PhilHealth because of the following hindering factors namely: lack of manpower specifically on Medical Technologist, partially-damaged infrastructure due to Super Typhoon Odette and lack of equipment and supplies to qualifying for a standard NTP Laboratory.

Table 5: Birthing Facilities with DOH LICENSING and PHILHEALTH ACCREDITATION

Private Birthing Homes with DOH license			
No.	LGU	Birthing Facility	ABC
1	Tagbilaran City	Bohol Lying-In Clinic	3
2	Tagbilaran City	IMAP Lying-in Clinic, Inc. – Bool Branch	1
3	Calape	IMAP Lying-in Clinic, Inc. – Calape Branch	4
4	Tagbilaran City	IMAP Lying-in Clinic, Inc. – Calceta Main	2
5	Carmen	IMAP Lying-in Clinic, Inc. – Carmen Branch	1
6	Loon	IMAP Lying-in Clinic, Inc. – Catagbacan Branch	1
7	Tagbilaran City	IMAP Lying-in Clinic, Inc. – St. Camillus Branch	2
8	Duero	IMAP Lying-in Clinic, Inc. – Duero Branch	7
9	Panglao	IMAP Lying-in Clinic, Inc. – Panglao Branch	2
10	Talibon	IMAP Lying-in Clinic, Inc. – Talibon Branch	1
11	Tubigon	IMAP Lying-in Clinic, Inc. – Tubigon Branch	10
12	Dausis	IMAP Lying-in Clinic, Inc. – Totolan Branch	1
13	Tagbilaran City	IMAP Lying-in Clinic, Inc. – UB Branch	2
14	Ubay	Ma. Teresa Onate Maternity and Lying-in Clinic	3
15	Tagbilaran City	Mary Our Mother OBGYN & Birthing Clinic	3

16	Jagna, Bohol	San Pedro Calungsod Maternity & Lying-in Clinic	6
		Total	49

Source: RLED, PHO (2022)

Table 5 shows that there are sixteen (16) birthing homes owned by private individuals or cooperation. Twelve (12) or seventy-five percent (75%) are owned by IMAP Incorporation, owning the majority of private birthing homes in the Province of Bohol. Private birthing homes are distributed in different municipalities of the province but six (6) or thirty-seven (37%) are concentrated in Tagbilaran City.

Birthing Homes that are licensed by DOH CVCHD are no longer monitored by the PhilHealth Accreditation Team since the standards set by the two agencies are almost similar. Those birthing homes that are accredited by PhilHealth but with no DOH license is still under the monitoring and assessment of PhilHealth every year. However, details of these facilities are not included in this report.

Table 6: Public and Private Hospitals in Compliance to DOH Licensing

No.	Name of Hospital	Compliance of Hospitals to DOH Licensing		
		License Level	Authorize Bed Capacity	Ownership
1.	Allied Care Experts (ACE) Medical Center	Level II	100	Private
2.	Borja Family Hospital Corp.	Level I	40	Private
3.	Calape Mother & Child Hosp.	Infirmary	12	Government
4.	Candijay Community Hosp	Infirmary	10	Government
5.	Catigbian District Hospital	Level I	25	Government
6.	CDG Bohol Doctor's Hospital Incorporated	Infirmary	24	Private
7.	Clarin Community Hospital	Infirmary	15	Government
8.	Conception Memorial Hosp.	Level I	40	Private
9.	Cong.Simeon G. Toribio Memorial Hospital	Level I	40	Government
10.	Cong. Natalio P. Castillo Sr. Memorial Hospital	Infirmary	25	Government
11.	Dimiao Municipal Infirmary	Infirmary	10	Government

12.	Don Emilio Del Valle Memorial Hospital	Level I (DOH retained)	200	Government
13.	Dr. Lim's Clinic & Hosp	Level I	25	Private
14.	Francisco Dagohoy Municipal Hospital	Infirmary	10	Government
15.	Garcia Memorial Prov. Hosp.	Level I	75	Government
16.	Gov.Celestino Gallares Memorial Hospital	Level III (DOH retained)	200	Government
17.	Holy Name University Medical Center, Inc.	Level II	70	Private
18.	Lim Community Hosp	Level I	25	Private
19.	Maribojoc Community Hospital	Infirmary	15	Government
20.	Medical Mission Group Hosp. & Health Services Cooperative (Bohol)	Level I	50	Private
21.	Pres. Garcia Municipal Hospital	Infirmary	10	Government
22.	Ramiro Community Hospital	Level II	118	Private
23.	San Miguel Hospital	Infirmary	10	Government
24.	Tagbilaran Community Hospital Corporation	Level II	58	Private
25.	Teodoro B. Galagar District Hospital, Jagna	Level I	75	Government
26.	Tubigon Community Hospital	Infirmary	15	Government

Source: RLED, PHO (2022)

The Province of Bohol has twenty-six (26) Licensed Health Facilities distributed in different municipalities of the province both government and privately owned.

Eleven (11) or forty-two percent (42%) are classified as Infirmary. Of which, ten (10) or ninety-one percent (91%) are government owned while only one (1) or nine percent (9%) is privately owned. The majority of these hospitals were classified as Level 1 but last 2012 they were reclassified due to non-conformity of the new standard as stated in Administrative Order 2012-0012 "Rules and Regulations Governing the New Classification of Hospitals and Other Health Facilities in the Philippines". An infirmary is no longer classified as a hospital but as a Primary Care Facility which is the first-contact healthcare facility for patients and offers basic healthcare services such as emergency service and provision of normal deliveries.

Ten (10) or thirty-eight percent (38%) are classified as Level 1 Hospitals of which five (5) or fifty percent (50%) are government owned and the other half are privately owned. A Level 1 Hospital has the capabilities mentioned in the infirmary plus with Operating Room, Isolation Room, Dental Services, Blood Station, Secondary Level of Clinical Laboratory, and Licensed Pharmacy.

Four (4) or fifteen percent (15%) are classified as Level 2 hospitals of which all or one hundred percent (100%), are privately owned. Level 2 hospitals have all the capabilities stated in level 1 hospitals plus the provision of an Intensive Care Unit (ICU), Neonatal Intensive Care Unit (NICU), High-Risk Pregnancy Unit (HRPU), Respiratory Therapy Services, Tertiary Clinical Laboratory, Level 2 Radiology with mobile X-ray Unit and should be departmentalized in 4 specialties namely: Medicine, Pediatric, Surgery, and Obstetrics and Gynecology.

Only one (1) or four (4%) is classified as a Level 3 hospital which is a DOH retained facility in Tagbilaran City. A level 3 hospital has all the capabilities stated in level 2 hospitals plus the provision of a physical and rehabilitation unit, ambulatory surgical clinic, dialysis facility, blood bank, Tertiary Clinical Laboratory with histopathology examination, Level 3 Radiology with interventional radiology, and should be a teaching and training hospital with an accredited residency training program for four (4) major specialties namely: Medicine, Pediatric, Surgery, and Obstetrics and Gynecology.

In 2017, the total number of households reached 259,139. Out of this, only **224,996** have existing sanitary toilet facilities or **86.82%**. In succeeding year of 2018, the no. of sanitary toilet facilities is increasing to **231,356** and by the year 2019 as the number of household increases to **298,462**, the number of households with sanitary toilet facilities also decreases to 233,933 (8.4%) for mostly of our newly constructed houses especially the tiny houses, sanitary toilet is not included during the construction so our households with sanitary toilet are decreasing by 8.42% same with the succeeding year of 2020 it decreases more to 208,967. Last year of 2021 marks the highest no. of **Households with Basic Sanitation Facility(new indicator)** to **266,313 (88%)**. Through the years, the Provincial Health Office distributed Latrine materials, a support from DOH National (bowls only) and a complete set of latrines through the funding from the Provincial Government of Bohol.²

² Regulations, Licensing and Enforcement Division, DOH7, PHO

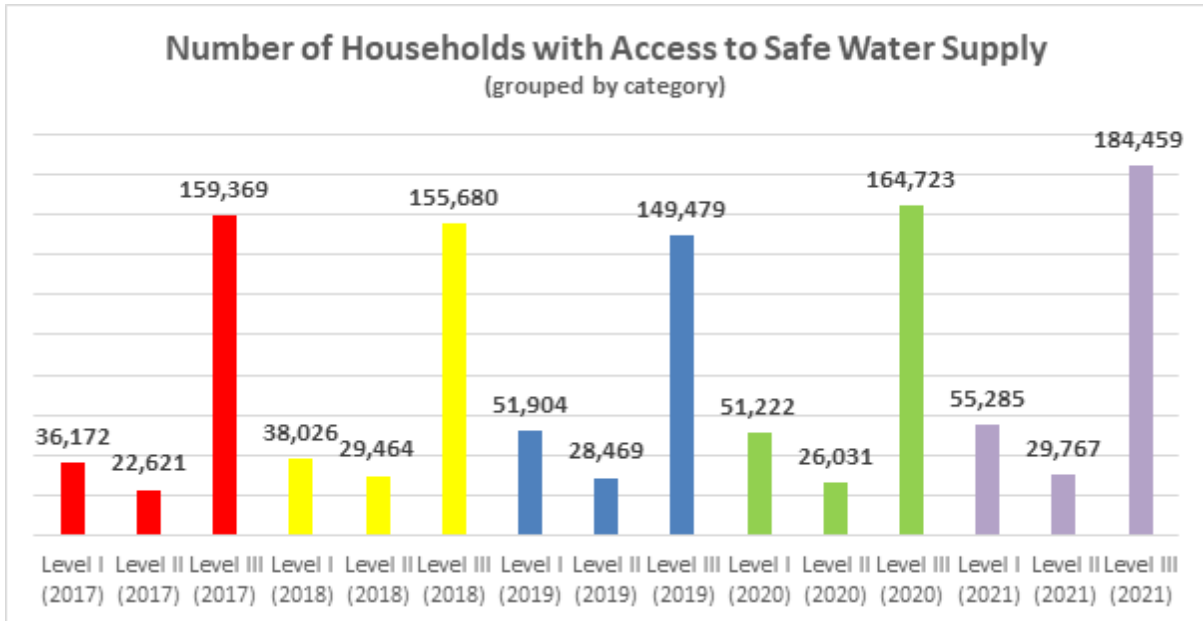


Figure 7: Number of Household with Access to Safe Water Supply

Source: PHO, 2021

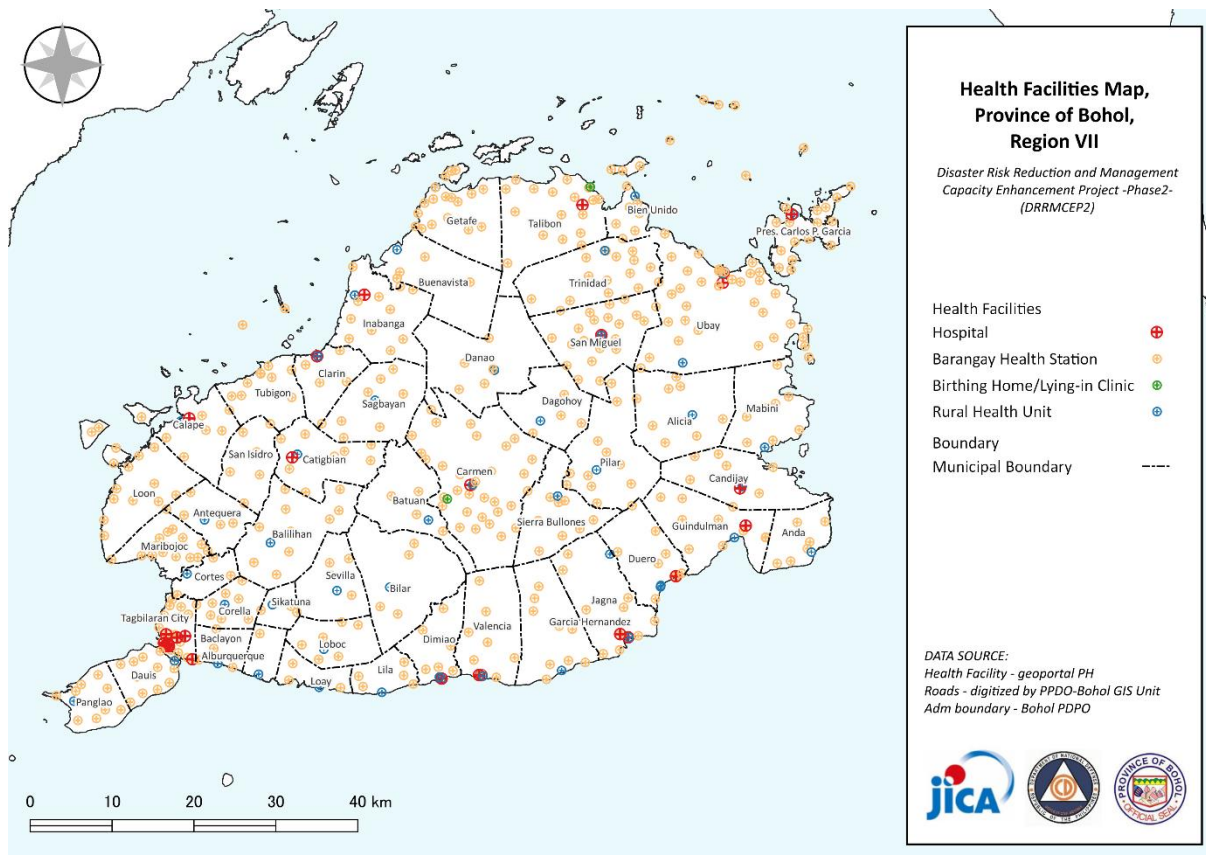


Figure 8: Health Facilities Map (Source: geoportal PH, DOH)

Educational Facilities and Services

As of 2022, there were 1,341 schools providing basic education to the school-age population. Almost 85% of these schools are owned and operated by the government as shown in Table 7.

Table 7: Number of Educational Facilities, Public and Private: SY 2022 Bohol Province

Level of Education	Ownership		Total
	Public	Private	
Bohol	1,146	195	1,341
Elementary Schools	950	78	1,028
▪ Bohol Division	933	58	991
▪ City Division	17	20	37
Secondary Schools	196	117	313
▪ Bohol Division	189	98	287
▪ City Division	7	19	26

Regarding higher education, there are 25 higher education institutions (HEIs), wherein three are universities, namely Bohol Island State University (BISU), Holy Name University and University of Bohol.

Housing

In 2020, a total of 259,520 occupied housing units were registered, with a ratio of 1.01 households or 4.8 persons per occupied housing unit. 33.9% of the occupied housing units had outer walls made of concrete, brick or stone, compared to 18.3% in 2010. In parallel to this trend, the proportion of housing units with outer walls made of wood has decreased from 26.3% in 2000 to 17.2% in 2010.

Regarding the roof material, the ratio of housing units with roofs made of galvanized iron or aluminum has increased from 73.2% in 2010 to 80.8% in 2020.

The built-up areas include residential, commercial, industrial and institutional areas as well as parks and open spaces. During the years prior to 2016 which is the base year of the Planning Period for the PGBH Shelter Plan, there was a dramatic growth in terms of catering to the housing needs of informal settlers, urban poor and the housing concerns of the higher income bracket households including the government employees of the Province.

Social Welfare

Social Protection

The government has worked towards converging and aligning its responses to poverty vis-à-vis the identified four Social Protection components, namely Social Welfare, Social Safety Nets, Social Insurance, and Labor Market Interventions. Social insurance programs cushion the risks associated with unemployment, ill health, disability, work-related injury and old age; social assistance and welfare service programs are for the vulnerable groups with inadequate means of support, including single mothers, the homeless, or physically or mentally challenged people; micro and area-based schemes address vulnerability at the community level, including crop/agricultural insurance, social funds and programs to manage natural disasters; and child protection program ensures the healthy and productive development of children. Most notable of the SP programs and interventions in this sector are on social health insurance and social welfare benefits.

Social Welfare Facilities

Government-run facilities found in the province include:

- ✓ Bohol Crisis Intervention Center for Women and Children in Tagbilaran City and 2 Satellite VAW Centers located in Tubigon and Ubay providing residential care to abused women and children
- ✓ 5 Stimulation and Therapeutic Centers found in Tagbilaran City, Batuan, Jagna, Tubigon and Ubay providing rehabilitation services and non-formal training to poor children with different disabilities
- ✓ Sunshine Home in Tagbilaran City providing residential care to abandoned, neglected and orphaned children sponsored by the Catholic Women's League (CWL) and subsidized by the Provincial Government
- ✓ Bohol Therapeutic Massage Clinic in Tagbilaran City, a livelihood center for persons with different disabilities
- ✓ 3 Model Senior Citizens Centers situated in Tagbilaran City, Loon and Ubay and 8 Day Centers for the Elderly/ Municipal Senior Citizens Centers in the municipalities of Alburquerque, Calape, Dagohoy, Jagna, Garcia- Hernandez, Sagbayan, Talibon, and Tubigon. All municipalities have organized their Senior Citizens Association
- ✓ 1,257 Day Care Centers found in all barangays of Bohol
- ✓ Support counseling facility initiated by the Alburquerque LGU
- ✓ Temporary Shelters in Brgy. Tagbuane and East Poblacion both in the municipality of Alburquerque
- ✓ Therapeutic/Crisis Center in Brgy. Guinsularan (Duero) and Brgy. Baco (Anda)
- ✓ Resettlement Center for Rebel Returnees, Ubay, Carmen and Danao
- ✓ Privately-run and accredited by the DSWD such as: Arms of Love in Brgy. Lourdes, Cortes; Trinity Angels Home in Wepo, Alburquerque; Shepherd's Arms in Dao, Dauis

Economy

Agriculture

Land Utilization

The land available for agricultural use is 273,950 hectares, which is approximately 66% of the total area of the province. The land area of major crops planted or harvested is 148,673 hectares which represents 54% of the total agricultural land. These are mostly planted with palay, corn, coconut, vegetables, fruits, root crops and other crops.

About 42% of the provincial population is dependent or working in the agricultural sector.

Crops Development

According to the PSA's statistics data of 2021, 67,907 hectares of land were harvested with palay, of which 39,506 hectares are irrigated producing 132,849 metric tons while 28,401 hectares are rainfed or a production of 77,735 metric tons.

In 2021, there were about 10,256 hectares of land harvested with corn. Farmers engaged in corn production have limited farm size with land holdings between 0.5 hectares to 1.5 hectares. Farmers planting yellow corn produced 8,298 metric tons while the yellow corn produced 4,362 metric tons. There are about 19 municipalities identified as key production areas for corn in Bohol.

Livestock And Poultry Development and Fish Production

The largest government production center in the country is the Ubay Stock Farm, where livestock production management, breed preservation, technical services and researches are offered, demonstrated and showcased. Organized active network of volunteers such as Barangay Livestock Aides "BALA" and village-based AI Technicians "VBAIT" are active and

provide immediate services in terms of livestock-related needs of farmers or raisers even in the far-most communities.

On livestock, the biggest inventory for Bohol is swine with 334,358 heads or 57% of the total inventory, followed by goat with 99,185 heads of 17%, carabao with 80,165 heads or 13% and cattle 74,582 heads still at 13%.

Bohol has enough supply of chicken with 3,830,427 heads or 98% of the poultry inventory with duck completing the 2% or 66,633 heads.

Regarding fishery, the production was around 56,316.82 metric tons for the four (4) subsectors - aquaculture, municipal, commercial and inland. Top five (5) aquaculture species are seaweeds 87.99%, milkfish 6.21%, vannamei 3.83%, oyster 0.87%, tiger prawn 0.66% and all other species compose the 0.44%. Top five (5) producing municipal species are squid with 1,352.09 metric tons, siganid 1,075.58 MT, big-eyed scad 985.27 MT, anchovies 763.27 MT and Bali sardinella 721.79MT.

Tourism, Culture, Arts, and Heritage

The pandemic had deeply impacted the tourism of Bohol. Bohol only recorded 177,341 tourist arrivals in 2020, not even 10% from the 1,581,904 arrivals in 2019. By year 2021, tourist arrival was expected to increase following the opening of domestic borders and the distribution of vaccines. As the Province opened its door to visitors, local tourism stakeholders, both public and private, have been working together to promote Bohol as one of the safest, most attractive and convenient ecotourism destinations in the country. Bohol recorded a total of 179,781 with domestic tourists getting 99.37% share from the total arrivals.

The Bohol Province has 20 churches, 4 watchtowers and lighthouses, 2 architectural bridges, 6 ancestral houses, 5 old buildings, and 2 plazas declared as cultural properties. This also includes the old cemetery in Panglao built during the Spanish colonial period, the Blood Compact Monument in Tagbilaran City by National Artist Napoleon Abueva, and the Lamanoc Archaeological Complex in Anda.

Tarsier and Chocolate Hills are important protected natural heritage, and Chocolate Hills was declared as a geological monument by the National Commission on Geological Science on 18 June 1988.

Four historical markers in Dauis and Maribojoc towns were installed in May 2009 by the National Historical Institute (NHI), in addition to the Baclayon Church, Clarin Ancestral House and Loboc Church. The unveiling of the markers of Dimiao, Panglao, Maribojoc, Loon, Dauis, and Baclayon Church complexes as national cultural treasures including the Punta Cruz watchtower of Maribojoc was done in July 2012. Furthermore, the Bohol Capitol Building and old Escuela de Niño Building were declared as Important Cultural Properties by the National Museum. Many of Bohol's artifacts, antiques and other cultural or heritage treasures are housed at the National Museum.

Manufacturing and MSMEs

The manufacturing sector is composed of small-scale, home-based enterprises with assets below Php 3 Million. Majority of these businesses are involved in hand weaving and food processing. Bohol is well-known as the weaving capital of Central Visayas. There are not any large-scale factories operating in the province. The Philippine Mining Service Corporation in Garcia-Hernandez generates quarried limestone which is shipped to the PhiViDec Industrial Estate in Mindanao for sintering.

The MSME sector is considered as a critical driver in the province's economic growth. According to the Department of Trade and Industry (DTI), there is a total of 38,362 business name registration as of October 2022. From this figure, a total of 32,554 are new business registrations while only 5,808 are renewal. A total of 10,160,820,840 investment was generated from MSMEs from 2017 up to the present.

2. Risk Profile

Past Disasters Timeline and Impacts

The Province of Bohol is prone to a wide range of natural and also human-induced hazards. The following tables show the historical timeline of past natural disasters in the province.

Table 8: Summary of Disaster Incidents in the Province of Bohol

Date/Year	Nature of Event (natural/man-made)	No. of Occurrences	Location	Cost of Damage (million pesos) (Php)
October 2004	Flash Flood	1	Jagna	0.100
January to Dec. 2005	Heavy rains, landslide, fire incidents, typhoon, earthquake	7	Jagna, Getafe, Calape, Tagbilaran City	15.048
January to Dec. 2006	Disease outbreak (diarrhea), lightning incidence, landslide, sea mishap, capsized vessel, tidal waves, land cracks, typhoons	18	Loon, Pilar, Tubigon, Ubay, Valencia, Loay, Panglao, Jagna, Candijay, Bien Unido, Getafe, Cortes, Alicia, Sierra Bullones, Batuan	16.450
January to Dec. 2007	Landslide, fire incidents, whirlwind (alimpus), lightning incidents, poisoning, drowning, earthquake, capsized motor banca, typhoon	18	Tagbilaran City, Jagna, Pres. Garcia, Talibon, Getafe, Trinidad, Pilar, Tubigon, Valencia, Ubay, Loon, Loboc, Loay, Candijay	6.547
January to Dec. 2008	Flash Flood, fire incident, landslide, typhoon, capsized vessel/fishing boat, airplane crash	28	Clarín, Tubigon, Tagbilaran City, Cortes, Buenavista, Panglao, Balilihan, Pilar, Talibon, Loon, Lila, Getafe, Dimiao, Loboc, Pres. CPG, Guindulman, Inabanga	30.828
March 2010-October 2013	Earthquake	6	17 hardest municipalities: North and south-western part of Bohol; Maribojoc, Loon, Tubigon, Calape, Clarín Inabanga, Buenavista, Danao, Sagbayan, Catigbian, San Isidro, Antequera, Balilihan and Cortes; Southern municipalities of Loboc, Carmen, Lila, Guindulman, Duero, Jagna, G-Hernandez, Valencia, Loay Albuquerque, Baclayon and Tagbilaran City	7.8 Billion

Date/Year	Nature of Event (natural/man-made)	No. of Occurrences	Location	Cost of Damage (million pesos) (Php)
October 2014 -December 2014	Tropical Cyclones Queenie, Ruby and Seniang caused flooding events		Eastern and interior parts of Bohol	1,499.468 B
December 16, 2021	Typhoon Odette with torrential rains, violent winds, landslides and storm surges	1	Entire province of Bohol mostly damaging the northern towns of Bohol	41.642 Billion
April 27, 2022	Collapse of old steel Clarin Bridge in Loay causing 4 deaths and submerging 10 vehicles	1	Poblacion Ubos, Loay	
Total		78		7.949 B

Table 9: Matrix for Past Storm Surges/Big Waves Events in Bohol

Date/Year	POPULATION/AREAS AFFECTED	IMPACTS
December 16, 2021 Typhoon Odette	Provincewide	Total damage: 41.642 Billion
Nov. 27, 2014 TS Queenie; Dec. 6, 2014 TS Ruby and Dec. 29, 2014 TS Seniang	Provincewide	Total Damage: 1,499,468.00 Eastern and interior towns of Bohol
June 25, 2008 Typhoon "Frank"	Talibon, Loon, Lila, Getafe, Dimiao, Guindulman	Total Damages – P3.2M Talibon – P1M Loon – P1.5M Lila – P0.1M Getafe – P0.3M Dimiao – P0.2M Guindulman – P0.1M
May 12, 2008 Low Pressure Area	Province wide	No data
May 8, 2008 TD "Butchoy"	Province wide	No data
April 14, 2008 TD "Ambo"	Province wide	No data
Nov. 11-12, 2007 TS "Lando"	Pres. Carlos P. Garcia Bien Unido Zamora, Talibon Buenavista Getafe Trinidad	Total Damages – P1.387M Pres. Garcia – P0.472M Bien Unido/Getafe – No data Zamora, Talibon – P0.76M Buenavista – No data Trinidad – P0.055M
November 19, 2007 Whirlwind "Alimpus"	Pres. Carlos P. Garcia	Damaged houses – P1M
June 16, 2007 Whirlwind "Alimpus"	Loon	No data

Table 10: Matrix for Past Earthquake Events in Bohol

DESCRIPTION	POPULATION/AREAS AFFECTED	IMPACTS
October 15, 2013	17 hardest municipalities: North and south-western part of Bohol; Maribojoc, Loon, Tubigon, Calape, Clarin Inabanga, Buenavista, Danao, Sagbayan, Catigbian, San Isidro, Antequera, Ballilhan and Cortes; Southern municipalities of Loboc, Carmen, Lila, Valencia, Loay Albuquerque, Baclayon and Tagbilaran City	Intensity 7.2 211 dead persons 877 injured and 8 missing persons Php 7.4 Billion damaged to major infrastructures, houses, government buildings, tourism facilities, properties and other businesses
July 18, 2011 Earthquake	09.64°N, 124.58°E - 17 km "S 36° E of Guindulman (Bohol) 03:10 PM	Intensity II No damage
	09.61°N, 124.53°E - 17 km "S 15° E of Guindulman (Bohol) 05:02 PM	No damage
June 11, 2011 Earthquake Magnitude 3.3 hits in the Province of Bohol	Loboc, Bohol Tagbilaran City Cortes, Bohol	Intensity III Intensity II No Damage
August 28, 2010 Earthquake	Brgy. Tabahan, Brgy. Bulawan, Guindulman, Bohol	No damage
June 21, 2010 Earthquake	Daus, Bohol	No damage
May 7, 2010 Earthquake	Jagna Garcia-Hernandez Duero Tagbilaran City	Intensity - III Intensity – III Intensity – II No Damage
March 26, 2010 Earthquake	Tagbilaran, Daus, Corella	No data
January 8, 2009 Earthquake	Anda, Bohol	No damage

Natural Hazard Characterization and Exposure Analysis

Hydrometeorological Hazards

Outline of hydrometeorological hazards in Bohol Province

Bohol's climate as classified by PAGASA belongs to Corona's 4th Type, characterized by rainfall more or less evenly distributed throughout the year. Intensification of the southwest monsoon usually occurs during the months of July to October. The rainfall varies from about 1,200 mm/yr around the coast to slightly more than 2,200 mm per year in the mountainous areas in the province. Based on the climatological records of Tagbilaran City weather station, the province has an annual average of 161 rainy days. Average rainfall and trend have illustrated a declining trend of 250 mm over a period of 35 years of about 7mm a year due likely to climatic change in the Southeast Asian Region. The coastal area of the province is warm in contrast with the interior part, which is colder especially during the night. Mean temperature is at 27.40 degrees Celsius.

Flooding

Definition

Flood-prone areas in Bohol include the influence areas of the eleven major rivers namely: Inabanga, Loboc, Abatan (Maribojoc), Moalong (Loon), Ipil (Trinidad), Soom (Trinidad), Carood (Mabini), Lumbay (Pilar), Alejawan (Duero), Manaba (Garcia) and Panangatan (Dimiao) Rivers. Aside from the areas where the rivers are located, the following towns were sites of flooding in 2011, namely: Jagna, Valencia, Guindulman, Alicia, Bien Unido, Clarin,

Sagbayan, and Antequera. These areas adjacent to the rivers have been the subject of seasonal destructive flash flooding which caused substantial damage to agricultural land and crops, infrastructure, dwelling and occasional loss of lives. The primary factor which contributes to the occurrence of these hazards is the denudation of the forest cover in the upper watershed areas and river tributaries. This causes heavy siltation resulting in the incapability of the river waterways to handle heavy flash flood water flow from the rain catchment area (PDPFP 2016-2028).

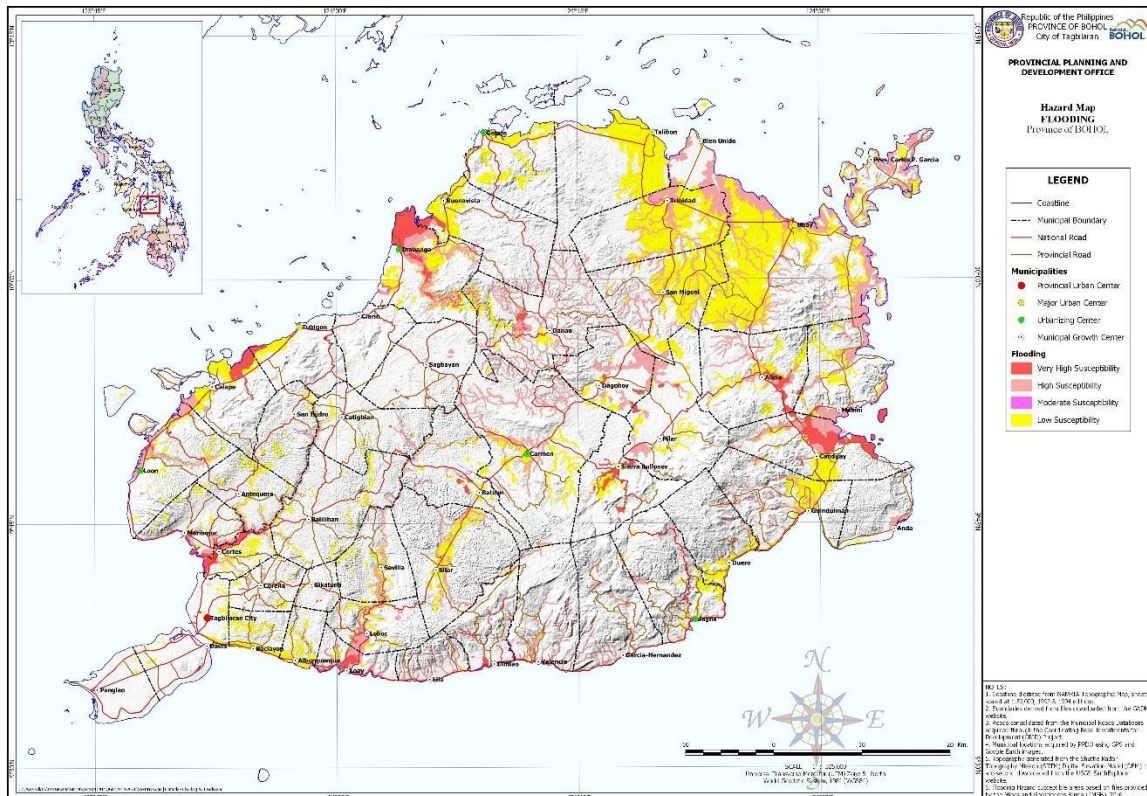


Figure 9: Flood Susceptibility Map (PPDO Bohol)

Previous Impacts

Bohol as an island is frequently affected by flash floods during the typhoon and the monsoon season. Based on data gathered by the province, for the years 2004-2011, there were 20 municipalities with 112 barangays affected by flood. The total estimated cost of damage to agriculture and infrastructure was P112,274,000.00 damaging about 623 hectares of rice fields (PDPFP 2016-2028). Prior to Typhoon Odette 2021, the province was affected by Typhoon Seniang in 2015. The population affected were in the municipalities of Loboc, Inabanga, Clarin, San Isidro, Tubigon, Alicia, Garcia-Hernandez, Valencia, and Duero. The estimated total damage cost is at Php 1.0 billion (PDPFP 2016-2028).

The recent Typhoon Odette in 2021, Bohol province is one of the hardest hit. This is evident in Table 11. Majority of the municipalities in all 3 districts were affected.

Table 11: Summary of Damage and Losses in Bohol (Typhoon Odette 2021)

Sector	Damage (in millions) Php	Losses (in millions) Php	Total (in millions) Php
Roads and Bridges	4,372.9575		4,372.957
Ports	283.614		
Power Sector	959.82	1,816	2,755.82
Flood Control	266		266
Water Supply and Distribution Systems	335.94		335.94
Irrigation	102.62	38.7	40.62
Telecommunications	55.78	15.16	70.94
Housing	31,036.29	1,157.01	4,565.92
Education (total of Tagbilaran City and whole province)	2,007.13	352.80	1,359.93
Health	431.94	7.10	439.04
MSMEs	1,061.46	1,533.49	2,594.95
Tourism	475.74		475.74
Agriculture	264.40	1,780.84	2,045.24

Source: Bohol Post-Odette Rehabilitation and Recovery Plan 2022, PPDO Bohol

Elements-at-Risk

Based on the disaster risk analysis data as of 2020, the top twenty-four (24) municipalities with a high exposed population are at risk as shown in Table 12. Among the listed municipalities, Candijay, Guindulman, Inabanga, and Loboc and are the most priority LGUs based on the observation and discussions, highlighted in orange. Likewise, the municipalities of Antequera, Duero, Garcia-Hernandez, and Lila have high populations at risk. Based on the PDPFP 2016-2028, the municipality of Inabanga has the highest number of barangays, totaling to 21, and Dagohoy with 11 barangays (PDPFP 2016-2028).

Table 12: Flooding - Population at Risk

Municipality	TOTAL EXPOSED POPULATION	POPULATION (Percentage)
Ubay	46,252	56.544%
Talibon	20,361	28.569%
Inabanga	18,523	38.165%
Trinidad	18,482	52.626%
San Miguel	11,471	45.241%
Pres. Carlos P. Garcia	10,492	44.409%
Candijay	9,384	31.155%
Calape	7,230	21.856%
Bien Unido	6,789	25.458%
Mabini	6,509	22.677%
Tagbilaran City	6,329	6.029%
Loay	5,541	31.034%
Guindulman	5,265	15.439%
Loon	4,937	11.163%
Cortes	4,902	26.722%
Getafe	4,861	14.545%
Carmen	4,704	9.564%

Municipality	TOTAL EXPOSED POPULATION	POPULATION (Percentage)
Buenavista	4,410	14.842%
Baclayon	4,300	19.144%
Tubigon	4,047	8.451%
Dagohoy	3,707	18.651%
Alicia	3,548	14.558%
Pilar	2,850	9.932%
Loboc	2,829	16.241%

Based on data presented in Table 13 and actual experience, the municipalities with agriculture at risk to flooding are determined, such as Candijay, Alicia, Pilar, Batuan, and Mabini in terms of Agri-fisheries while Buenavista, Mabini, and Sevilla for fisheries alone, and they are considered as priority LGUs. Livestock at risk are mostly in Alicia, Candijay, Guindulman, and Mabini.

Table 13: Flooding – Agriculture at Risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Ubay	11,096.678	67.415%
Trinidad	5,411.727	65.833%
San Miguel	5,012.776	49.897%
Talibon	3,389.494	42.766%
Inabanga	2,632.355	35.042%
Carmen	1,837.874	10.992%
Candijay	1,786.797	36.316%
Alicia	1,370.390	18.612%
Guindulman	1,292.682	23.386%
Dagohoy	1,238.307	25.072%
Bilar	1,212.613	36.468%
Pres. Carlos P. Garcia	1,181.460	41.003%
Pilar	1,100.490	10.943%
Calape	1,073.911	19.853%
Mabini	1,059.535	26.778%
Danao	977.923	15.089%
Buenavista	885.427	14.963%
Getafe	865.966	18.016%
Loboc	725.759	24.221%
Loon	637.524	11.304%
Duero	627.241	19.735%
Sierra Bullones	616.133	9.301%
Bien Unido	556.065	23.026%
Sevilla	545.232	14.357%
Jagna	535.298	9.439%
Valencia	454.977	8.289%
Loay	371.347	18.400%
Tubigon	345.086	6.421%
Batuan	281.512	8.606%

Storm Surge Definition

PAGASA defines a storm surge as **the abnormal rise in sea level that occurs during tropical cyclones**. It is caused by strong winds and low atmospheric pressures produced by tropical cyclones. Most of the storm surge-prone areas are located in the southeastern, southwestern, northern and western portions of Bohol. The inundation coverage is estimated based on geomorphologic analysis and observation in the areas during interviews/surveys. The surge heights are computed using the data gathered during surveys in reference to the significant tropical cyclone occurrences and from storm surge model results. Sources of data are the Hazard Maps from Philippine Institute of Volcanology and Seismology (PHIVOLCS-DOST) 2008, Administrative boundary from the National Statistics Office (NSO) 2000 and the Topographic Map 1:50,000 scale from NAMRIA

Previous impacts

On June 25, 2008, six municipalities in Bohol, namely: Talibon, Loon, Lila, Getafe, Dimiao and Guindulman experienced Typhoon “Frank” with a total damage of P3.2M. On Nov. 11-12, 2007, Tropical Storm “Lando” affected the municipalities of Pres. Garcia, Bien Unido, Talibon, Buenavista, Getafe and Trinidad with a total damage cost of P1.387M. Whirlwind “Alimpus” on November 19, 2007 brought P1M worth of damaged houses in Pres. Garcia. The whole province of Bohol was affected by a low-pressure area on May 12, 2008, Tropical Depression “Butchoy” on May 8, 2008 and Tropical Depression “Ambo” on April 14, 2008 but there was no data available on the damages and cost (PDPFP 20116-2028).

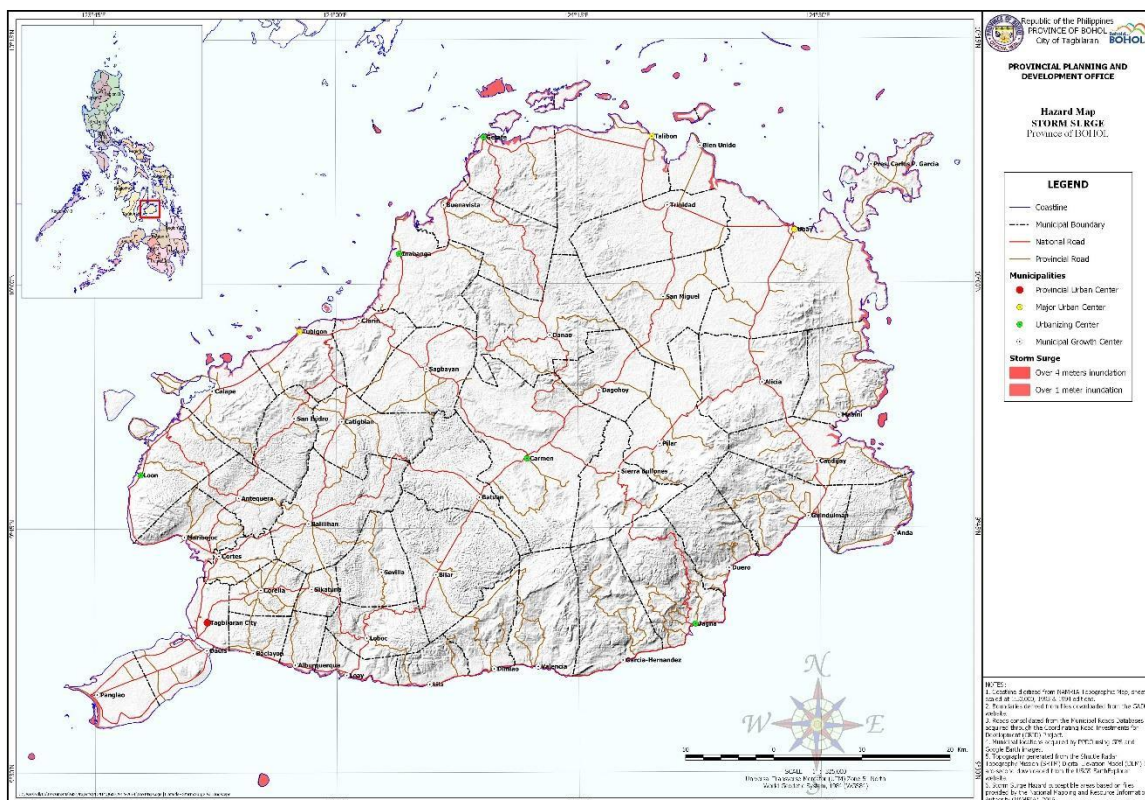


Figure 10: Storm Surge Hazard Map (Source: PPD Bohol)

Elements-at-Risk to Storm Surges

The 30 coastal LGUs (Tagbilaran City, Dauis, Panglao, Baclayon, Alburquerque, Loay, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guindulman, Anda, Candijay, Mabini, Ubay, Trinidad, Pres. Carlos P. Garcia, Bien Unido, Talibon, Getafe, Buenavista, Inabanga, Clarin, Tubigon, Calape, Loon, Maribojoc, Cortes) with island barangays are prone to storm surge if aggravated by strong typhoons (PDPFP 2016-2028). Among the listed municipalities, Getafe, Panglao, Talibon, Calape, Tubigon, Inabanga, Candijay, Ubay, Loon and Tagbilaran city are the notably with high population at risk based on observations and discussions, highlighted in orange, shown in Table 14.

Table 14: Storm Surge – Population at risk

Municipality	TOTAL EXPOSED AREA	TOTAL (Percentage)
Bien Unido	3,100	11.625%
Pres. Carlos P. Garcia	2,059	8.713%
Getafe	2,881	8.619%
Panglao	2,229	5.596%
Baclayon	1,141	5.078%
Talibon	3,481	4.884%
Mabini	1,382	4.816%
Calape	1,416	4.280%
Loay	605	3.388%
Anda	555	3.120%
Alburquerque	319	2.840%
Tubigon	1,105	2.307%
Inabanga	1,087	2.240%
Candijay	672	2.230%
Ubay	1,724	2.107%
Loon	721	1.631%
Maribojoc	343	1.546%
Buenavista	399	1.342%
Lila	149	1.221%
Tagbilaran City	1,119	1.066%
Cortes	191	1.039%
Clarin	217	1.024%
Dimiao	111	0.747%
Guindulman	246	0.723%
Garcia-Hernandez	146	0.598%
Valencia	153	0.539%
Jagna	170	0.474%
Duero	89	0.470%
Dauis	67	0.128%
Trinidad	4	0.010%

Based on data presented in Table 15, the 30 coastal LGUs are under high risk in agricultural areas. The highlighted municipalities with agriculture at risk of storm surge are Talibon, Bien Unido, Ubay, Pres. Carlos P Garcia, Panglao, Baclayon, Getafe, Anda, Mabini and Guindulman based on observation and discussions. Fish cages and seaweeds production areas are mostly affected.

Table 15: Storm Surge – Agriculture at Risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Talibon	194.852	2.459%
Bien Unido	170.844	7.075%
Ubay	169.545	1.030%
Pres. Carlos P. Garcia	114.806	3.984%
Panglao	107.039	12.806%
Baclayon	59.419	5.188%
Getafe	56.702	1.180%
Anda	50.734	2.221%
Mabini	48.372	1.223%
Guindulman	43.259	0.783%
Loon	38.324	0.680%
Candijay	23.048	0.468%
Garcia-Hernandez	15.428	0.314%
Maribojoc	15.423	0.541%
Calape	14.503	0.268%
Buenavista	11.667	0.197%
Valencia	10.225	0.186%
Duero	10.001	0.315%
Dimiao	9.842	0.269%
Loay	9.513	0.471%
Inabanga	9.022	0.120%
Lila	8.651	0.633%
Jagna	8.431	0.149%
Alburquerque	7.865	0.429%
Tubigon	1.326	0.025%
Clarín	0.281	0.006%
Dauis	0.227	0.020%
Tagbilaran City	0.099	0.021%
Alicia	0.000	0.000%
Antequera	0.000	0.000%

In terms of critical lifelines, the national roads along the all 30 coastal LGUs; LGUs with island barangays are considered high risk. Furthermore, national roads located along Tagbilaran east road such as Panglao, Dauis, Baclayon, Alburquerque, Loay, Lila, Dimiao, Valencia, Garcia-Hernandez, Jagna and Duero are considered high risk. The Tagbilaran north road and Loon as well as provincial roads along Calape, Loon, Carlos P Garcia, including Calape and Loon that are connected by bridge are in high-risk areas.

Rain-Induced Landslide

Definition

The Philippine Institute of Volcanology and Seismology (PHIVOLCS) defines landslides as *the mass movement of rock, soil, and debris down a slope due to gravity*. It occurs when the driving force is greater than the resisting force. Landslides triggered by intense rainfall are called Rain-Induced Landslides (RIL).

Figure 11 shows the general hazard information of Bohol Province in terms of rain-induced landslides.

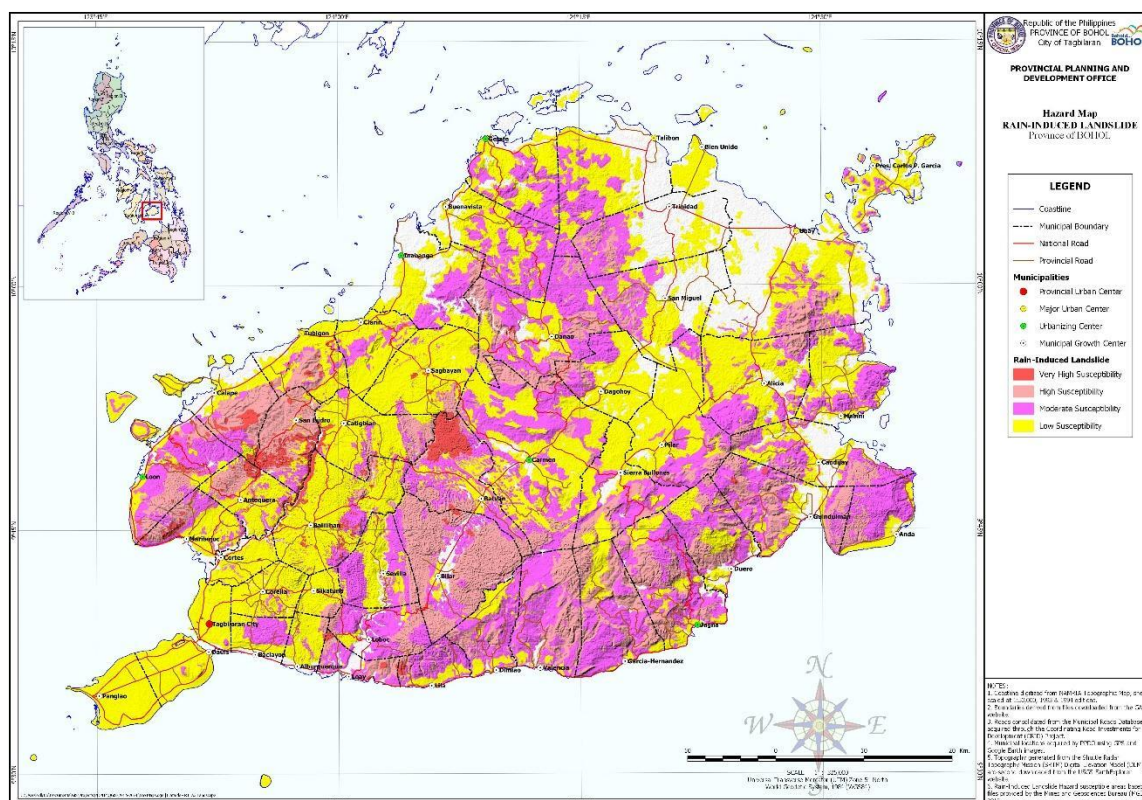


Figure 11: Rain-Induced Landslide Susceptibility Map (Source: PPDO Bohol)

Previous Impacts of Rain-Induced Landslide (RIL)

From July 1997 to July 2011, there were 14 municipalities and 23 barangays that were hit by landslides. At least 85 hectares of rice fields were damaged, 30 families and 416 persons affected although these figures could go higher as most of the incidents have no available data. Bohol suffered the worst rain-induced landslides in March 2011 that affected the municipalities of Bilar, Jagna, Tubigon, Talibon, Buenavista, and Sierra Bullones. Mostly affected or damaged are the roads but there was no data available on the cost of damages. Barangay Mayana of Jagna, Bohol suffered from landslides thrice in 2006 (March, August, September) and in July 2005.

Elements-at-Risk

As shown in Table 16, almost all LGUs are overlapping with landslide susceptibility areas in Bohol province. Seven (7) municipalities are determined to be the priority LGUs considering frequent landslide occurrence and their severity, which are Jagna, Valencia, Sagbayan, Sierra Bullones, Garcia-Hernandez, Dimiao and San Isidro. In addition to this, the municipalities of

Duero, Bilar, Loboc and Sevilla are also considered to be more exposed than the risk analysis data and considered the priority LGUs as well.

Table 16: RIL – Population at risk

Municipality	TOTAL EXPOSED POPULATION	TOTAL (Percentage)
Tagbilaran City	97,986	93.341%
Dauis	50,963	97.087%
Carmen	44,430	90.322%
Talibon	43,889	61.579%
Tubigon	43,272	90.365%
Panglao	39,220	98.446%
Loon	38,373	86.770%
Ubay	34,821	42.569%
Jagna	33,295	92.920%
Inabanga	28,705	59.144%
Guindulman	28,571	83.777%
Valencia	26,218	92.343%
Pilar	25,704	89.581%
Calape	25,195	76.166%
Buenavista	25,076	84.399%
Sagbayan	24,335	100.000%
Sierra Bullones	24,024	92.063%
Garcia-Hernandez	23,434	95.923%
Getafe	23,257	69.585%
Catigbian	23,051	96.834%
Mabini	21,984	76.595%
Clarin	21,022	99.359%
Alicia	20,826	85.442%
Candijay	20,550	68.230%
Maribojoc	19,465	87.768%
Baclayon	18,106	80.609%
Bien Unido	18,012	67.546%
Balilihan	17,864	95.560%
Danao	17,542	86.649%
Anda	16,956	95.379%
Duero	16,843	89.303%
Trinidad	16,528	47.064%
Bilar	16,186	87.434%
Dagohoy	16,167	81.347%
Loboc	14,580	83.704%
Dimiao	14,055	94.399%
San Miguel	13,881	54.746%
Antequera	13,693	91.345%
Cortes	13,422	73.169%
Batuan	13,042	94.202%
Pres. Carlos P. Garcia	12,448	52.692%
Loay	12,063	67.559%
Lila	10,981	89.718%
Sevilla	10,191	89.580%
San Isidro	9,551	96.391%

The agriculture at risk to RIL is highly observed in Sagbayan, S. Bullones, Jagna, Garcia-Hernandez and Duero based on experience. A total of 176,775 hectares are potentially affected by rain-induced landslides in Bohol Province. Figure 12 shows the susceptible municipalities with agricultural land prone to RIL.

Table 17: RIL – Agriculture at risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Carmen	14,865.517	88.910%
Pilar	8,919.666	88.697%
Sagbayan	7,184.710	99.166%
Sierra Bullones	5,999.862	90.569%
Alicia	5,992.564	81.387%
Catigbian	5,543.200	97.923%
Danao	5,499.681	84.856%
Ubay	5,341.770	32.452%
Jagna	5,134.079	90.530%
San Miguel	5,032.150	50.090%
Buenavista	5,024.417	84.908%
Tubigon	5,023.465	93.467%
Valencia	5,009.492	91.269%
Loon	4,970.219	88.129%
Clarin	4,681.354	99.468%
Inabanga	4,672.503	62.201%
Garcia-Hernandez	4,667.113	94.903%
Calape	4,329.202	80.034%
Guindulman	4,209.619	76.157%
Talibon	4,026.857	50.808%
Dagohoy	3,700.769	74.928%
Getafe	3,562.365	74.115%
Dimiao	3,466.192	94.634%
San Isidro	3,289.731	97.073%
Sevilla	3,244.695	85.440%
Candijay	3,127.382	63.563%
Batuan	2,989.352	91.391%
Antequera	2,974.630	91.924%
Mabini	2,895.981	73.192%
Trinidad	2,801.341	34.078%
Maribojoc	2,665.621	93.472%
Duero	2,539.033	79.885%

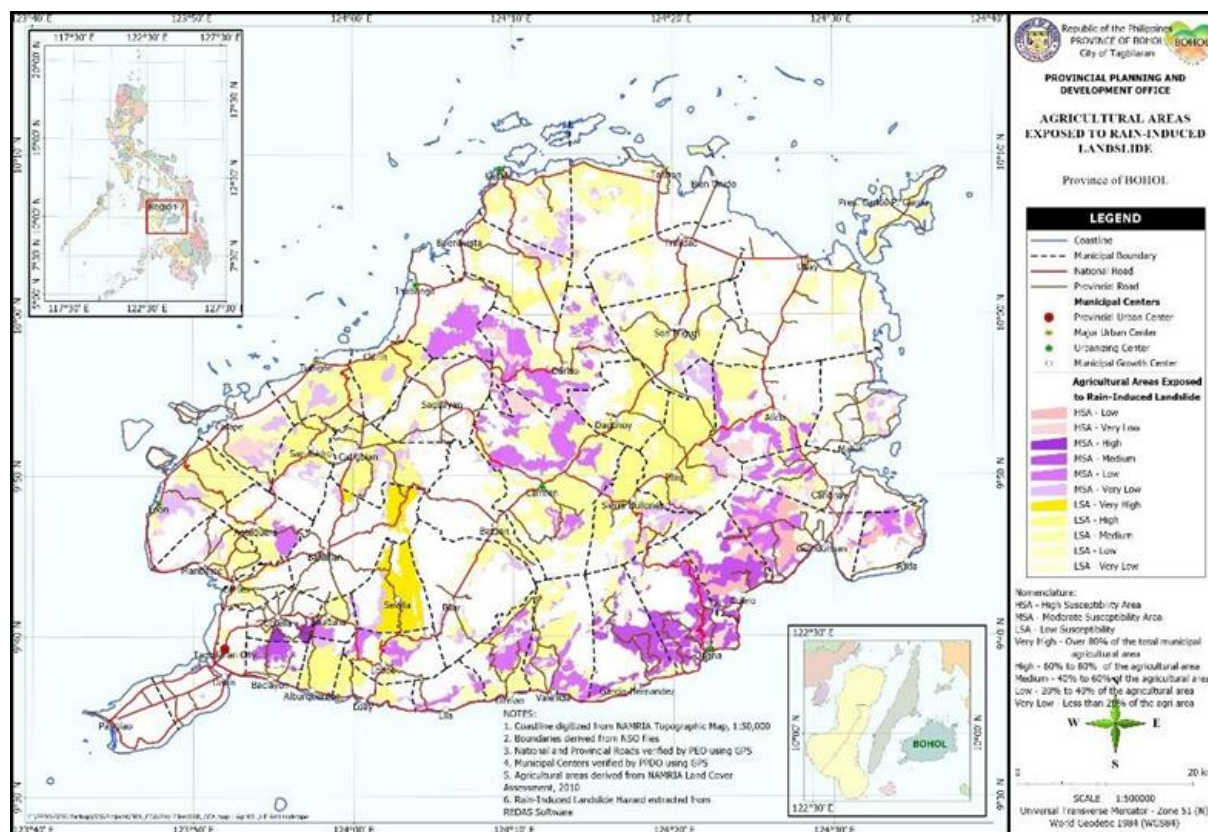


Figure 12: Agricultural Exposure Map to RIL (Source: PDPFP 2016-2028)

On one hand, the critical lifelines such as national and provincial roads along Jagna, S. Bullones, San Isidro, Garcia- Hernandez, Antequera, Sikatuna, Catigbian, Cortes, Duero, Danao, Sagbayan, Valencia, Loboc, Bilar, Dimiao, and Tubigon. Figure 12 illustrates the different road classification susceptible to RIL. An estimated total of 11.77 km or 1.62% of national road and 45.11 km or 5.22% of provincial roads are at risk to RIL (PDPFP 2016-2028; p.162). Meanwhile, the PDNA Typhoon Odette 2021 report indicated that the municipalities of San Isidro, Dagohoy, Sevilla, Duero, Inabanga, Corella, Maribojoc, Balilihan, Catigbian, Candijay, and Valencia were mostly affected.

Drought/El Niño

Definition

The projected increase in temperature will result in drought and drought-like conditions in the municipality. According to PAGASA, droughts in the Philippines are usually influenced by the El Niño Southern Oscillation or ENSO, a phenomenon associated with an increased chance of drier conditions, in contrast to the La Niña event which is associated with an increased chance of wetter conditions. It is caused by the abnormal warming of the sea surface temperature in the equatorial Pacific Ocean and is characterized by below normal rainfall. PAGASA classifies the impact of El Niño into three:

- ✓ **Dry conditions** occur when two (2) consecutive months of below normal (21%-60% reduction from average) rainfall conditions are experienced.
- ✓ **Dry spell** takes place when three (3) consecutive months of below normal (21%-60% reduction from average) rainfall conditions or two (2) consecutive months of way below normal (more than 60% reduction from average) rainfall conditions occur.

- ✓ **Drought** happens when three (3) consecutive months of way below normal (>60% reduction from average); or five (5) consecutive months of below normal (21%-60% reduction from average) rainfall conditions take place.

Current and Future Impact of Drought/ El Niño

The expected increase in temperature is likely to lead to frequent and longer episodes of El Niño. An El Niño-induced drought will result in insufficient water supply for irrigation, especially for rainfed farming. As a result, crops that will survive will be retarded, the harvest will be minimal, livestock may die or be emaciated, and the income of farmers will suffer. At the same time, the rising temperature also provides a conducive environment for pests (grasshoppers, locusts, aphids, etc.) to multiply and further destroy crops. With little income, families dependent on farming may face food deprivation, malnutrition, and long-term health consequences. On a larger scale, the lack of food and water may result in public health issues (e.g., water-borne and vector diseases), food security issues, and increase in the prices of agricultural products. Moreover, it could also cause forest fires, which could destroy the remaining carbon sink and wildlife habitat in the municipality.

El Niño could also cause disruption in potable water supply as well which could lead to insufficient water supply for households and establishments (restaurants, hotels). As a consequence, higher expenses on water consumption will be incurred by the households and establishments. Moreover, it could lead to hygiene and sanitation issues that could cause health problems (e.g., diarrhea, heat stroke, and hypertension). These could lead to increase in demand for health services and request for financial assistance from indigents (crisis intervention).

Elements-at-Risk to Drought/ El Niño

Drought is projected to have a high impact on the municipalities with mostly agriculture and fisheries. Water shortages may also be experienced in highly-dense populations or urbanized areas.

Geological Hazards

Outline of geological hazards in Bohol Province

Geological hazards result from geologic processes acting on or beneath the earth's surface. These include earthquake, earthquake-induced hazards (ground shaking, ground rupture, earthquake-induced landslide, liquefaction, and tsunami), and volcanic hazards.

Bohol is prone to geologic hazards like ground shaking, liquefaction, earthquake-induced landslide and tsunami because of the presence of East Bohol Fault and another fault located in the Bohol Sea going to Mindanao Sea facing the southern part of Bohol. The presence of Negros Trench and PFZ Central Leyte Fault may also contribute to the generation of earthquake. Geologic hazards result from geologic processes acting on or beneath the earth's surface. These include movement of plates in the earth's crust or from local concentration of heat and are a source of hazards to people and their natural and built-up environment on the earth's surface.

Minor and major fault lines are evident on the island as shown by terraced encampments occurring in its southern and central parts. The terraced escarpments in the Ilihan Formation as well as the graben at the Anda Peninsula are manifestations of these faults. Steep escarpments notably in Loon, Tagbilaran and in Anda Peninsula further prove vertical upliftment caused by tectonics. Earthquakes have been felt in Bohol but only an average of one perceptible shock is reported each year. PHIVOLCS reported that the M7.2 Bohol Earthquake was generated on the north-western sector of Bohol island by a NE-SW trending reverse fault (hereto named as North Bohol Fault (NBF), which had no previous surface

manifestation. The NBF is categorized as a thrust fault or a (reverse) fault wherein the blocks move upward and downward relative to each other (PDPFP 2016-2028). Figure 13 shows the active faults in the province.

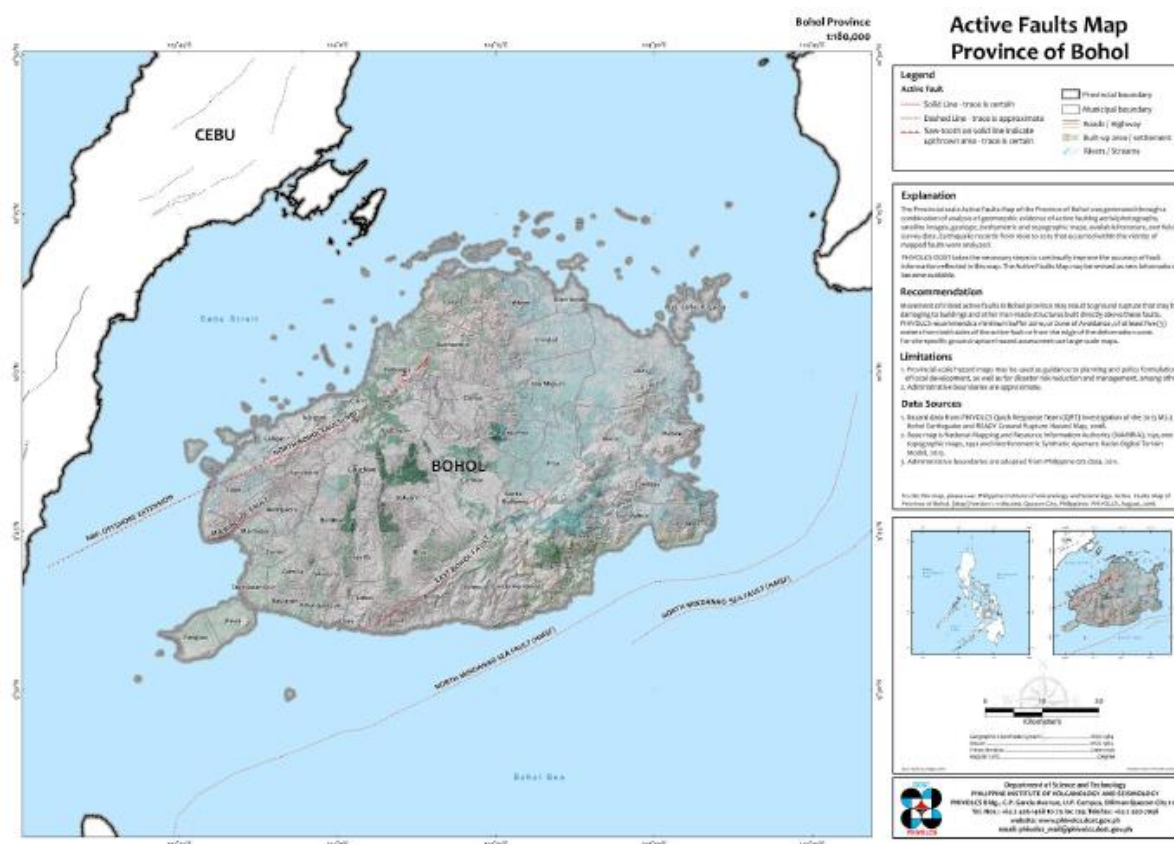


Figure 13: Active Fault Map of Bohol Province (Source: PHIVOLCS)

Ground Shaking

Definition

The immediate effect of an earthquake is ground shaking. PHIVOLCS describes ground shaking as the *disruptive up, down and sideways vibration of the ground during an earthquake*.

Impact of Ground Shaking

Ground shaking could lead to *damage or collapse of structure; may consequently cause hazards such as liquefaction and landslide*. Such could lead to death and injury, loss of dwellings, destruction of production areas and key facilities, and interruption of basic services. Consequently, people and establishments will lose their income; and health issues would rise due to lack of water and shelter, as well as due to mental and emotional stress.

Elements-at-Risk

The Ground Shaking Hazard Map (Figure 14) was generated under the READY Project using available hazard data from the PHIVOLCS-DOST, NSO and NAMRIA. The sources of data came from the Hazard Data generated by the Philippine Institute of Volcanology and Seismology (PHIVOLCS-DOST) in 2008, the National Statistics Office (NSO) in 2000 for the administrative boundary and the NAMRIA for the Topographic Map 1:50,000 scale (PDPFP 2016-2028). All the 47 municipalities and 1-city are highly susceptible to ground shaking with Intensity 8 and 7. A number of 950,718 or 75.74% and 258,048 or 20.55% Boholanos are highly exposed to ground shaking with intensity 8 and 7 respectively (DRVA Report 2014).

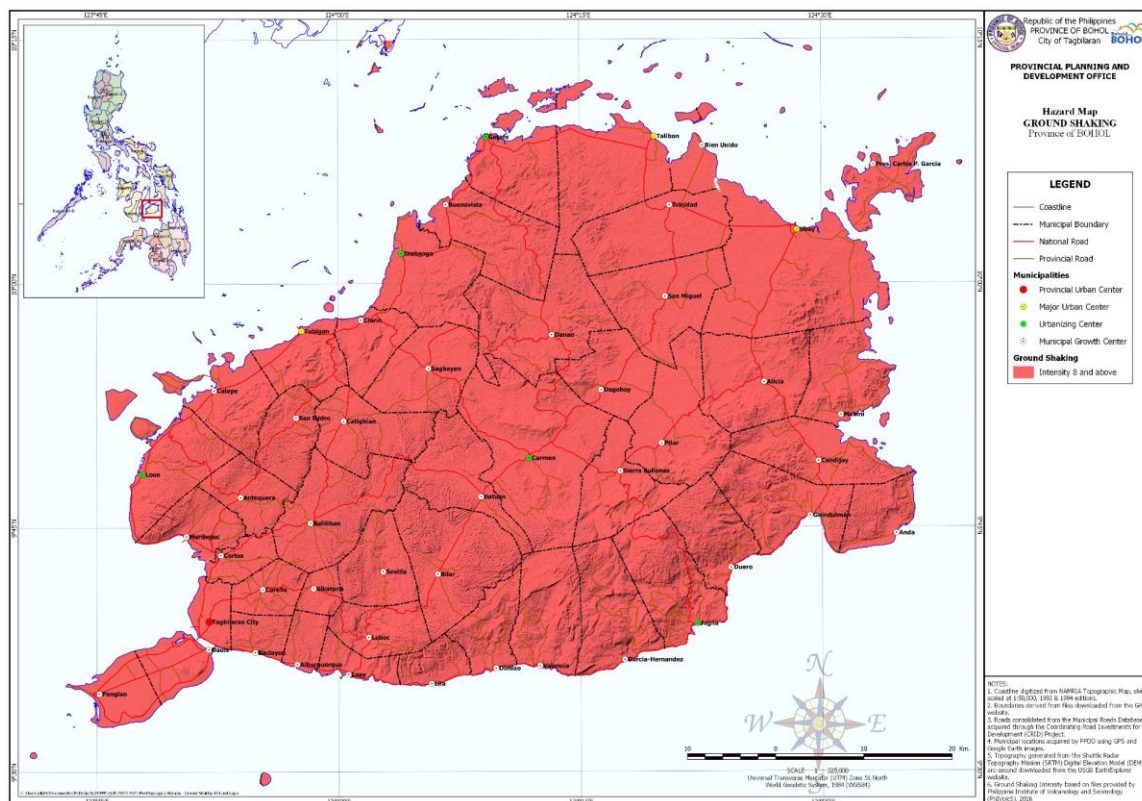


Figure 14: Ground Shaking Hazard Map of Bohol (Source: PDPFP 2016-2028)

As shown in Figure 15, the majority of the provincial agricultural lands are highly exposed to ground shaking with a total exposed agricultural area of about 168,307 hectares or 70% of the total agricultural land area is within the very high to high exposure area. At very high risk are the 36 municipalities and 1 city of the province of Bohol with its agricultural areas exposed to ground shaking. Out of those towns, the 27 municipalities and 1 city have its whole total agricultural area highly exposed to ground shaking. At risk are the municipalities of Carmen, Ubay, Pilar, San Miguel, Alicia, Guindulman, Trinidad, Sierra Bullones, Candijay, Dagohoy, Garcia Hernandez, Jagna and Valencia having more than 10,000 hectares of its agricultural area highly exposed to ground shaking (PDPFP 2016-2028).

Of the 47 municipalities and 1-city, about 7,739.84 hectares or 89.64% of the total built-up allocation in the province (8,633.98 hectares) are exposed to ground shaking with Intensity 8. Tagbilaran City has the biggest areas (1,742 hectares or 99.72%) are exposed to ground shaking and it is followed by Panglao (975.73 or 97.05%) and Dauis (939.14 or 89.97%).

In terms of critical lifelines, all roads and bridges will be affected as presented in Figure 14.

Local Disaster Risk Reduction and Management Plan
Province of Bohol

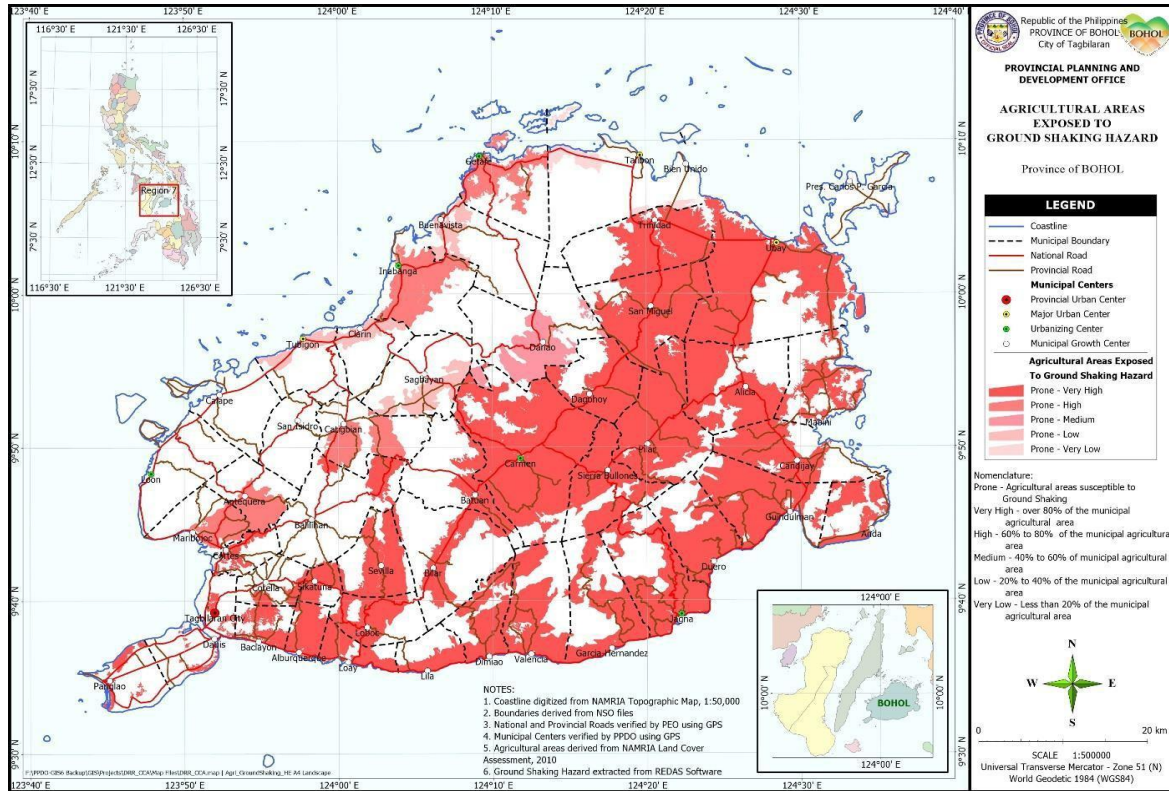


Figure 15: Agricultural Exposure Map to Ground Shaking (Source: PDPFP 2016-2028)

Projected Damage

The REDAS Team of PHIVOLCS calculated the estimated direct damage cost at over PhP1.3 Billion. The assumed hazard is Magnitude 7.2 Earthquake which occurred in Bohol in 2013. The impact results are shown in Figure 16.

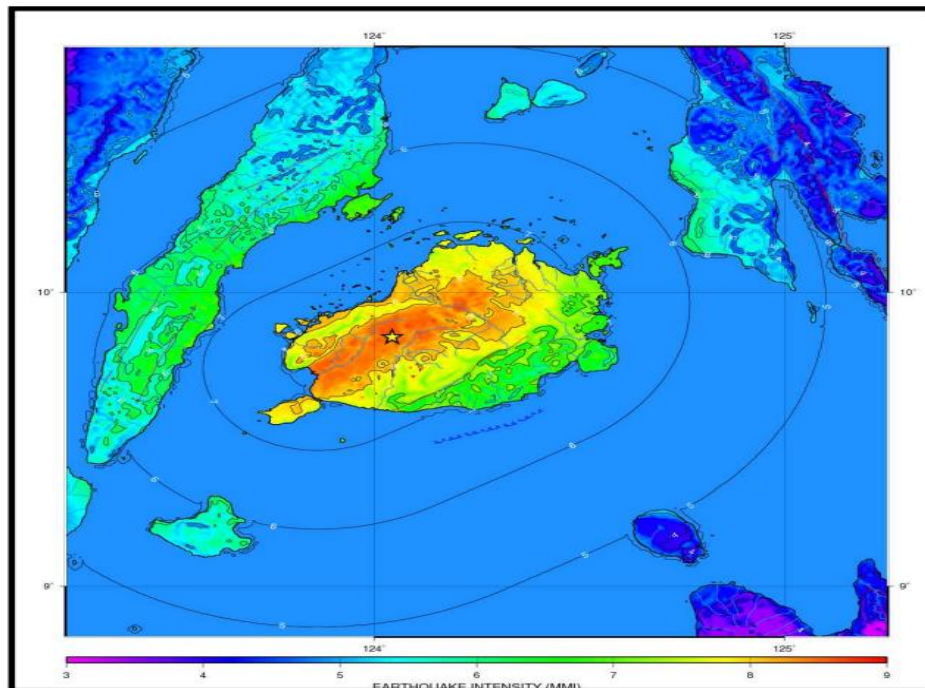


Figure 16: Modified Mercalli Intensity Scale Map of 2013 Oct. 15 7.2 Magnitude Earthquake in Bohol (Source: REDAS from DOST-PHIVOLCS)

REDAS Shake provides the calculated several types of affected people, slight injuries, non-life-threatening injuries, life threatening injuries and fatalities. From the results, the 20 most affected LGUs in terms of population injuries are shown in Table 18. This result is not only considering the distance between populated LGUs and epicenter, but also, vulnerability of housing in the LGUs and the topographical features.

Table 18: Earthquakes – Population at risk

Municipality	TOTAL EXPOSED POPULATION	TOTAL (Percentage)
Tagbilaran City	2,995	2.853%
Dauis	778	1.482%
Carmen	743	1.510%
Tubigon	742	1.550%
Talibon	737	1.034%
Catigbian	700	2.941%
Inabanga	693	1.428%
Ubay	607	0.742%
Loon	564	1.275%
Sagbayan	544	2.235%
Trinidad	543	1.546%
Cortes	530	2.889%
Balilihan	520	2.782%
Calape	510	1.542%
Panglao	498	1.250%
Maribojoc	495	2.232%
San Miguel	484	1.909%
Danao	438	2.163%
Antequera	436	2.909%
Dagohoy	428	2.154%

Ground Rupture

Definition and Impacts of Ground Rupture

Earthquakes could also result in ground rupture, which is the *deformation on the ground that marks the intersection of the fault with the earth's surface*. When ground rupture takes place, fissuring, displacement of the ground due to movement of the fault happens.

Liquefaction

Definition and Impacts of Liquefaction

Liquefaction is the phenomenon wherein sediments, especially near bodies of water, behave like liquid similar to a quicksand. Such could lead to sinking and/ or tilting of structure above it; sand boils; and fissures.

Elements-at-Risk to Liquefaction

Figure 17 and Table 19 show that all coastal municipalities and 1 city, including island barangays of Bohol are highly susceptible to liquefaction. Ubay, Bien Unido, Panglao and Pres. Carlos P. Garcia is observed to be highly affected by liquefaction based on data and discussions. The moderately susceptible areas are some barangays located in the different

municipalities of Ubay, Trinidad, San Miguel, Talibon, Candijay, Duero, Jetafe, Buena Vista, Tubigon, Calape, Panglao, Daus and Cortes. The coastal municipalities located in the southeastern, northeastern and northwestern portions of Bohol have more areas exposed to the liquefaction hazard compared to those situated in southern Bohol. Municipalities with low exceedance liquefaction are portions of Ubay, Alizia, Pilar, Dagohoy, Carment, Batuan and Bilar. The worst scenario is when there is high excess liquefaction which would affect the Central Business District (CBD) and urban barangays of coastal municipalities (PDPFP, 2016-2028).

Table 19: Liquefaction – Population at risk

Municipality	TOTAL EXPOSED POPULATION	TOTAL (Percentage)
Ubay	47,928	58.592%
Bien Unido	24,983	93.688%
Tagbilaran City	24,671	23.501%
Panglao	21,469	53.889%
Talibon	21,002	29.467%
Pres. Carlos P. Garcia	18,458	78.128%
Tubigon	14,390	30.052%
Calape	14,122	42.692%
Inabanga	13,917	28.675%
Trinidad	12,086	34.415%
Candijay	10,772	35.765%
Daus	9,404	17.915%
Pilar	8,969	31.259%
Getafe	8,891	26.603%
Loon	8,373	18.932%
Mabini	7,430	25.888%
Dagohoy	5,911	29.744%
Loay	5,707	31.964%
Guindulman	4,659	13.660%
Buenavista	4,647	15.640%

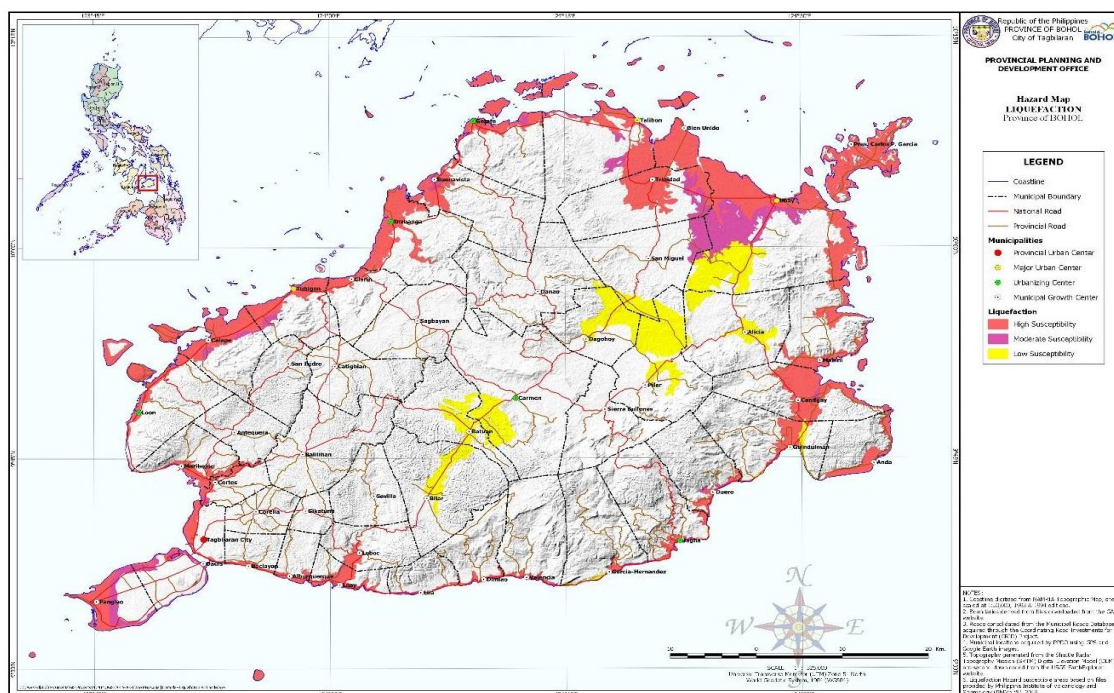


Figure 17: Liquefaction Hazard Map of Bohol Province (Source: PPDO Bohol)

The agricultural areas at risk to liquefaction are along coastal municipalities as well. Based on the available data, the municipalities of Ubay, Pres. C.P. Garcia, Bien-Unido and Panglao have 95.67%, 86.67%, 70.32%, and 59.64% of its agricultural area exposed to liquefaction respectively, as shown in Table 20. In terms of road exposure to liquefaction, all coastal municipalities are susceptible.

Table 20: Liquefaction – Agriculture at risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Ubay	11,574.979	70.321%
Pilar	3,717.980	36.972%
Trinidad	3,427.498	41.695%
Talibon	2,987.651	37.696%
Pres. Carlos P. Garcia	2,497.300	86.670%
Bien Unido	2,310.440	95.674%
Dagohoy	2,015.520	40.808%
Candijay	1,978.209	40.206%
Calape	1,960.927	36.252%
San Miguel	1,822.588	18.142%
Carmen	1,636.232	9.786%
Alicia	1,471.272	19.982%
Tubigon	1,365.555	25.408%
Inabanga	1,319.197	17.561%
Getafe	1,258.587	26.185%
Mabini	1,203.703	30.422%
Guindulman	1,119.960	20.261%
Bilar	1,075.322	32.339%
Batuan	1,015.655	31.051%
Buenavista	824.991	13.942%
Anda	766.647	33.562%
Loon	749.253	13.285%
Panglao	498.546	59.646%

Earthquake-Induced Landslide

Definition and Impacts of Earthquake-Induced Landslide

Earthquake-induced landslides are described by PHIVOLCS as the *down slope movement of rocks, solid, and other debris commonly triggered by strong shaking*. It causes erosion, as well as burial and blockage of roads and rivers. Similar to rain-induced landslides (RIL), an earthquake-induced landslide could destroy houses and cause injury or death to residents living near a slope. It could likewise damage vegetative cover and croplands, as well as access roads to agri-tourism, commercial, residential, and other key built-up areas.

Elements-at-Risk to Earthquakes Induced Landslide

Table 21 shows the municipalities with high susceptibility to earth-induced landslides. However, the municipalities of Lila, Dimiao, Valencia, Loboc (man-forest), Bilar (east-side), Garcia-Hernandez, Sierra Bullones, Duero, Jagna, Sevilla, Loay, and Candijay are observed to be with the highest susceptibility based on data and experience.

Table 21: Earthquake Induced Landslide – Population at risk

Municipality	TOTAL EXPOSED POPULATION	TOTAL (Percentage)
Lila	7,805	63.767%
Dimiao	7,857	52.772%
Valencia	14,485	51.017%
Loboc	8,726	50.099%
Bilar	8,707	47.035%
Garcia-Hernandez	10,183	41.680%
Sierra Bullones	10,403	39.866%
Duero	6,501	34.466%
Batuan	4,427	31.975%
Guindulman	10,182	29.856%
Jagna	10,628	29.661%
Sevilla	3,112	27.357%
Loay	4,693	26.282%
Pilar	6,003	20.921%
Sikatuna	1,416	20.498%
Alicia	4,754	19.506%
Balilihan	3,634	19.441%
Candijay	5,615	18.644%

The agricultural areas of except the fisheries are at risk to EIL in Dimiao, Loboc, Valencia, Sierra Bullones, Garcia-Hernandez, Guindulman, Jagna, Pilar, Alicia and Carmen, as shown in Table 22. In relation to this, the top municipalities such as Dimiao, Lila, and Loboc have an estimated 47%, 43%, and 37% of agricultural land areas that are susceptible to EIL respectively. Furthermore, the agricultural areas of Loon, Calape, Tubigon, Indangan, Clarin, Buenavista, Valencia, Pilar, Bilar, Guindulman, Candijay, S. Bullones, Carmen are at risk to EIL.

Table 22: Earthquake Induced Landslide – Agriculture at risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Dimiao	1,732.567	47.302%
Lila	594.905	43.527%
Loboc	1,129.150	37.683%
Valencia	2,037.347	37.119%
Sierra Bullones	2,053.765	31.002%
Loay	554.487	27.474%
Garcia-Hernandez	1,349.514	27.442%
Guindulman	1,415.859	25.615%
Duero	646.969	20.355%
Jagna	1,123.290	19.807%
Sevilla	668.583	17.605%
Batuan	535.229	16.363%
Bilar	479.319	14.415%
Pilar	1,418.655	14.107%
Alburquerque	235.714	12.845%

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Candijay	586.215	11.915%
Alicia	857.679	11.648%
Carmen	1,831.516	10.954%
San Isidro	369.801	10.912%
Danao	704.038	10.863%

The Figure 18 shows the exposed roads to EIL by classification. The exposed critical roads are located in the municipalities of Loon, Calape, Tubigon, Indangan, Clarin, Buenavista, Lila, Valencia, G. Hernandez, Duero, Pilar, Bilar, Guindulman, Candijay, S. Bullones, Jagna, Carmen, Sagbangan, and Dumiao are considered more susceptible to EIL.

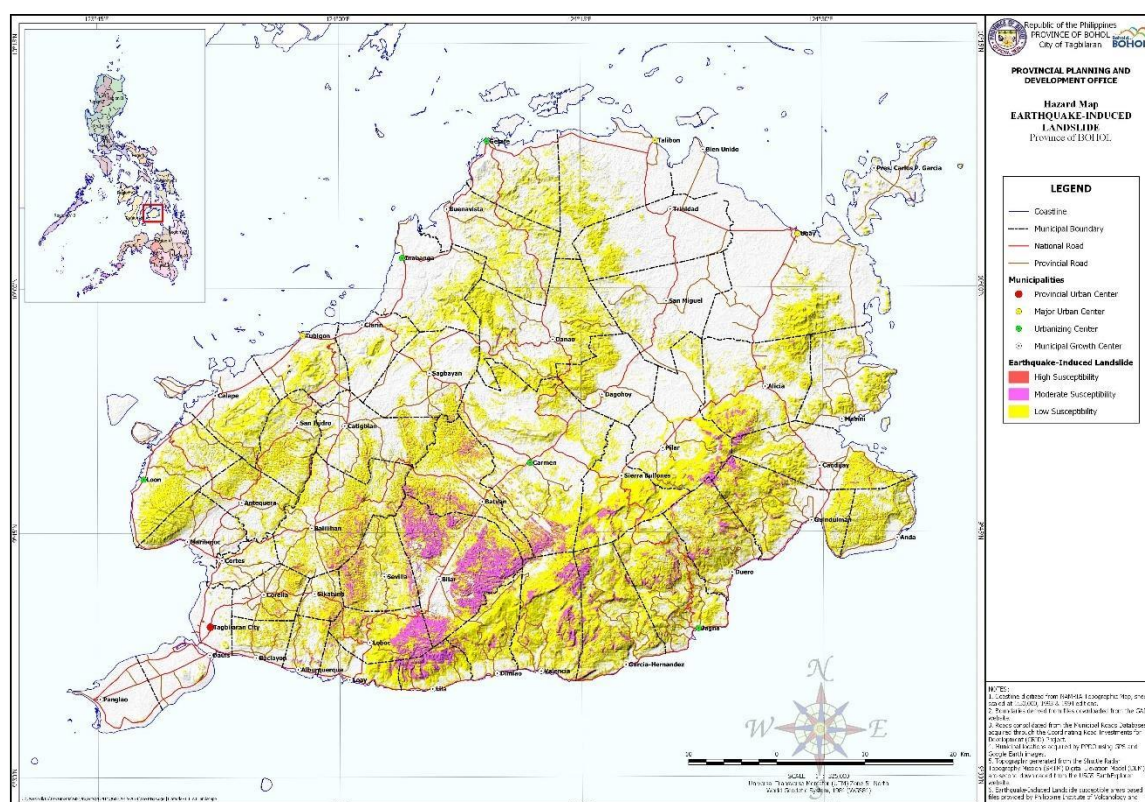


Figure 18: Earthquake-Induced Landslide Hazard Map (Source: PPDO Bohol)

Tsunami

Definition and Impact of Tsunami

Tsunami refers to the *series of waves caused commonly by an earthquake under the sea*. It causes flooding, coastal erosion, drowning of people, and damage to properties.

Figure 19 reveals that all coastal municipalities are highly susceptible to tsunami. The Tsunami Hazard Map was generated using available tsunami programs, earthquake and tectonic data, and topographic and bathymetric maps. Limitation of the Map (PDPFP 2016-2028):

1. The extent of tsunami inundation is based on current physical conditions of the study area.
2. The map does not reflect the hazard that could be generated by a far-field tsunami.

3. Earthquake-induced submarine landslides that could also generate tsunamis are not covered by this map.
4. Significant erosion or deposition along the shore in the future could affect the level of tsunami hazard and may need hazard reassessment.

Elements-at-Risk

The population, agriculture, including fisheries at risk to tsunamis are located in Coastal 30 LGUs, as shown in Table 23 and 24. All roads along the coastline are high-susceptible. Inundation of rivers, caused by pressure from tsunamis may affect the municipalities of Inabanga, Pres. G. Hernandez, Candijay, Loay, Loon, Anda, Maribojoc, Cortes, Duero and Loboc, hence they are considered as priority LGUs.

Table 23: Tsunami – Population at risk

Municipality	TOTAL EXPOSED POPULATION	TOTAL (Percentage)
Talibon	11,643	16.336%
Ubay	10,717	13.102%
Bien Unido	10,325	38.719%
Inabanga	8,699	17.924%
Pres. Carlos P. Garcia	8,410	35.598%
Calape	6,567	19.852%
Getafe	6,484	19.401%
Candijay	5,156	17.119%
Panglao	4,419	11.093%
Tubigon	4,261	8.898%
Mabini	3,688	12.848%
Tagbilaran City	3,078	2.932%
Loay	2,826	15.828%
Loon	2,706	6.118%
Anda	2,251	12.664%
Buenavista	1,863	6.270%
Maribojoc	1,731	7.805%
Dausi	1,472	2.803%
Guindulman	1,460	4.281%
Cortes	1,344	7.326%
Baclayon	1,324	5.893%
Trinidad	856	2.438%
Jagna	701	1.955%
Clarín	509	2.404%
Alburquerque	455	4.044%
Duero	372	1.974%
Garcia-Hernandez	322	1.318%
Valencia	258	0.909%
Dimiao	235	1.579%
Loboc	180	1.031%
Lila	160	1.308%

Table 24: Tsunami – Agriculture at risk

Municipality	TOTAL EXPOSED AREA (Ha)	TOTAL (Percentage)
Ubay	1,861.033	11.306%
Talibon	1,340.283	16.911%
Pres. Carlos P. Garcia	830.200	28.813%
Bien Unido	803.453	33.270%
Getafe	703.826	14.643%
Candijay	488.074	9.920%
Inabanga	447.201	5.953%
Calape	416.869	7.707%
Anda	374.660	16.402%
Mabini	347.896	8.793%
Guindulman	318.755	5.767%
Tubigon	247.774	4.610%
Panglao	177.924	21.287%
Trinidad	168.626	2.051%
Buenavista	154.282	2.607%
Loon	150.224	2.664%
Jagna	85.297	1.504%
Duero	75.910	2.388%
Baclayon	59.714	5.214%
Garcia-Hernandez	49.045	0.997%
Loay	48.361	2.396%
Maribojoc	47.603	1.669%
Dimiao	46.604	1.272%
Alburquerque	34.594	1.885%
Loboc	24.493	0.817%
Valencia	24.039	0.438%
Lila	11.497	0.841%
Clarin	6.654	0.141%
Daus	5.142	0.444%
Cortes	4.028	0.456%
Tagbilaran City	0.305	0.064%

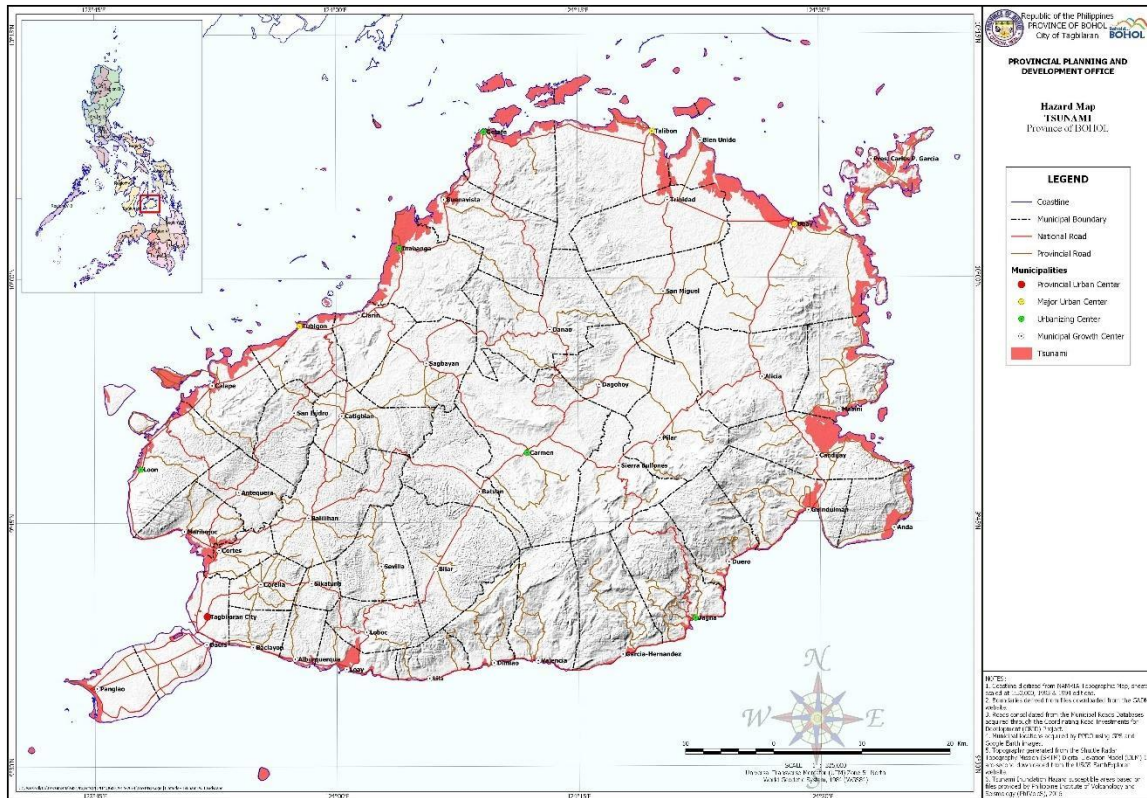


Figure 19: Tsunami Hazard Map of Bohol Province (Source: PPDO Bohol)

Health Pandemic

The spread of CoronaVirus Diseases 2019 (Covid-19) in early 2020 heightened the awareness of Tubigon and many other LGUs of the importance of installing DRRM measures to prevent, prepare for, respond to, and recover from the impact of a pandemic. At the same time, there is a need to install and/or integrate health pandemic preventive measures in the existing and future DRRM mechanisms. In Evacuation Camp Management for instance, systems have to be re-adjusted to accommodate the need for social distancing and other public health protocols.

3. Situational Analysis

Future Changes and Development

The spatial development map summarizes the major projects of the province of Bohol across all sectors. Important infrastructure projects, especially those that require financial resources, can be undertaken through public-private-partnership arrangements, allowing the private sector to directly participate in the provision of facilities and services to the public, while recouping their investments in appropriate time. This strategy would allow the government to use its limited resources to other equally important socio-economic programs and projects (PDPFP, 2016-2028).

Consistent with its overarching development framework, Bohol shall move towards these development aspirations by adhering to the principles of sustainable development, giving premium to the protection and preservation of its natural environment, managing capacities of not just institutions, but more importantly its people and the environment (PDPFP, 2016-2028).

Meanwhile, Bohol province is expected to increase its development in the municipalities of Panglao, Tubigon, Ubay and Talibon due to increasing urbanization and economic activity. The direction of agro-tourism is also on the rise in the province. With the expected development, there should be DRRM measures in place to protect the future assets and development of the province.

Vulnerabilities and Capacities

This section discusses the vulnerabilities and capacities of Bohol province that affect the management and reduction of risks in the municipality. These are based on the results of the assessment of Bohol Province' contributions to the outcomes found in the National Disaster Risk Reduction and Management Plan (NDRRMP); review of Bohol's current plans; and situational analysis through the identification of the municipality's strengths, weaknesses, opportunities, and challenges (SWOC).

Republic Act 10121 refers to vulnerability as the *characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Vulnerability may arise from various physical, social, economic, and environmental factors such as poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management.*

On the other hand, capacity is defined as *a combination of all strengths and resources available within a community, society or organization that can reduce the level of risk, or effects of a disaster. Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity may also be described as capability.*

Please refer to Form-1A for Bohol's assessment of its contribution to the NDRRMP target outcome; Form-1B for the province's assessment of its current plans; and Form-1D for its detailed SWOC Analysis.

The vulnerabilities and capacities are classified according to the four thematic areas under RA 10121:

Disaster Prevention and Mitigation refers to structural or non-structural measures meant to avoid (prevention) or limit/minimize (mitigation) the adverse effects of hazards.

Disaster Preparedness is the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent, or current hazard events or conditions.

Disaster Response and Early Recovery is the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of people affected.

Disaster Rehabilitation and Recovery refers to measures taken after a disaster to restore or improve the pre-disaster living conditions of a stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Vulnerabilities

Across All Thematic Areas

Weak Implementation of DRRM Related Laws

- Implementation of zoning policies (particularly the "NO BUILD ZONE) is not strictly followed as such there are still many families living along the riverbanks/waterways
- Weak enforcement of road easement by the MLGUs
- Encroachment of building structures within the shorelines and riverbanks -
- Weak implementation of existing ordinances and laws e.g., Water Code of the Philippines (40m for timberland, 20m for agriculture, 3m for urban areas; 20m for salvage zones in coastal areas) National Building and among others

Planning and Policy Development and Implementation

- DRR and CCA are not yet fully integrated into local development plans and policies, as well as environmental plans, policies, and programs

Information Technology

- Occurrence of Internet connectivity failures due to Service Provider faults
- Very few workstations have power backup systems, and if any, are way past their serviceable life and failing

Housing Settlements and Social Protection

- Some municipalities have no shelter plans for families that will be relocated from the high-risk areas
- Increasing urban population also demands high protection level
- Continued growth of informal households and settlements: more settlements are seen occupying danger areas such as along riverbanks, creeks, road-right-of-way, shorelines, and waterways.
- High cost of land in urban and urbanizing areas: insufficient basic infrastructures, inappropriate urban planning, and the appearance/in-flux of slum-like settlements especially along its coastal and river systems and in some parts of Bohol's protected areas

Impact of COVID-19

- The pandemic has left many challenges in terms of the implementation of DRRM measures. Capacity building for communities were temporarily stopped. Evacuation management has to consider pandemic protocols to prevent spread of COVID-19.

Prevention and Mitigation

Limitations in Local Risk Assessment and Early Warning Systems

- Need to capacitate the staff (Provincial/City/Municipal) in the updating of hazard maps and database management (vulnerability and exposure) including age-gender disaggregation of the population at risk.
- Technical Capacity of MDRRM Staff needs further enhancement/improvement (ex. REDAS, GIS)
- Lack of capacity to assess natural hazards in terms of frequency, intensity, and impact and analyze risk
- No scientific tools and technology in monitoring and projecting the impact of hazards
- Unavailability of technical experts for the conduct of vulnerability assessment

Limitations in Infrastructure and Preventing Future Risks and Adapting to Climate Change

- Poor siting and design cause failure in the construction of critical and lifeline facilities (power and water distribution lines)
- Some roads in the province are exposed to different hazards like the ground shaking, liquefaction, rain, and earthquake-induced landslide and tsunami
- Retrofitting of buildings and other structures is not properly practiced and implemented
- Absence of drainage and sewerage system

Low Food Security

- Low agriculture and fishery productivity
- Depletion of soil fertility due to excessive inorganic farming practices
- Decreased area for agricultural use due to exposure to hazards

Enforcement of Environmental Policies

- Presence of a mining area near the watershed area that may cause potential risks in river basins, upland communities, and low-lying areas

High Exposure of Cultural Heritage

- Bohol is known for cultural heritage such as historical churches and sites. Some of the structures were badly affected by the 2013 Bohol Earthquake. Moreover, high exposure to climate-related hazards may affect the structural conditions of these heritages.

Preparedness

Challenge in Paradigm Shift

- Lack of family preparedness knowledge

Response and Early Recovery

Emergency Response

- Medical and veterinary personnel during disaster response are not enough
- Delayed procurement of supplies, medical equipment, and medicines
- Lack of capacity to respond to subsequent disasters

Rehabilitation and Recovery

Housing and Settlements

- Limited funding for housing programs
- Need to come up with comprehensive housing projects for displaced families

Limited Infrastructure Support

- Limited support to rehabilitate the degraded ecosystems

Capacities

Across All Thematic Areas

Organizational

- Active participation PDRRMC members chaired by the Governor
- Very supportive Local Chief Executive and Legislative Members in providing a regular budget for the PDRRMO operation

Additional Source of Funds

- Implementation of Mandanas-Garcia Law
- Convergence from NGAs (DPWH, DSWD, DOST, DOT, DILG, etc.) for technical and financial support

Prevention and Mitigation

Risk Assessment and Data Management

- Availability/Updated hazard maps with a database on vulnerability, exposure, and capacity
- MGB conducted an assessment of the areas heavily affected during the 7.2 M earthquake using GPR and findings and recommendations were turnover to the Provincial Government

Early Warning Technology/Equipment

- Functional and presence of Early Warning Systems (EWS) (e.g., development of Early Warning System for Landslides (DYNASLOPE of DOST)
- Flood forecasting located in Loboc and Inabangga Rivers – TOCONET Korea
- Existing Automated Rain Gauges (ARG) in Bilar, Dauis, Mabini, Talibon, and Balilihan
- Partnered with A2D (Alternative to Development) to install 15 ARGs in Inabangga, Candijay, Loboc, G. Hernandez, Anda, Albur, Cortes, Tubigon, Batuan, Ubay, Antequera, Sevilla, Loon, San Miguel, Pilar) and 4 automated weather stations in Tagbilaran, Carmen, Talibon, Pres. CP Garcia
- Crustal Deformation Survey (GPS Survey) yearly to detect direction of the ground and displacement to 5 Benchmark sites: Ubay, Alicia, Lila, Tagbilaran (continues 24/7; all-year round), Inabanga
- Operational DOPPLER in Albuquerque
- Existing Unmanned Seismic Station – G. Hernandez and Talibon
- Existing and functional Strong Motion Sensor – Clarin, Loboc, and Jagna
- Existing and functional Automatic Intensity Meter – Talibon and Tagbilaran

Presence of Infrastructure Projects and Policies across Bohol Province

- On-going construction of dikes, seawalls, and among others
- Flood diversion channels
- Development of small water impounding affordable to the LGU (e.g., covering 2-3 hectares); especially on the rice lands
- Convergence projects; DA-WB-PGBH PRDP projects (roads, bridges, water desalination, livelihood/enterprise, seaweeds production and facilities, marine protection, slaughterhouse, Bohol dairy, virgin coconut oil facility); CMGP KALSADA; DAR-DPWH bridge projects; Bohol Earthquake Assistance (BEA) projects; Provincial Roads and Tourism Highway Development
- Completed School Buildings implemented by the Provincial Government, DepEd, and the DPWH
- Establish road embankment protection
- Existing Water Desalination Plants in Pamilacan Island in Baclayon, Pandanon Island in Getafe, Cuaming Island in Inabangga, Cabilao Island in Loon
- Private operated sewerage plant in Dauis
- Imposition of hazard-resistant building design regulation for areas prone to hazard
- Compliance with the standard design with hazard resistance, specification, and other requirements for roads, bridges, buildings, and ports
- Upgrading transport systems and facilities with hazard-resistant design

Environmental Protection/Management

- River bank stabilization through greenbelts or planting of ornamental plants and deep-rooted trees
- Implementation of Reforestation program, Mangrove Tree Planting
- Local monitoring of groundwater extraction
- Municipalities adopting it (cisterns, roofing, solar-powered buildings)

Livelihood and Business Protection

- Implementation of Small and medium-scale enterprises including capitalization to start up the business
- Regular monitoring of the business enterprise and facilities to ensure the safety
- Bohol Economic Development and Investment Code in the New Normal

Protection of Cultural Heritage

- Bohol Arts and Culture Heritage (BACH) Code
- BACH Council (Provincial Ordinance No. 2001-017)
- Center For Culture and Arts Development (CCAD) Office within the Provincial Government of Bohol (Provincial Ordinance No. 2000-031)

Implementation of Social Protection

- Most of the LGUs have identified relocation/resettlement sites in the approved CLUP
- Safe relocation and resettlement for populations living in high-risk areas

Food Security

- Financial services and micro-insurance for farmers, fishers, livestock producers
- Urban agriculture and natural farming system (backyard farming, Use of natural farming methods, promotion of organic farming practices)
- Bohol Organic Agriculture Technology Center

Preparedness

Continuous Capacity Development

- Conduct drills, and training on disaster preparedness
- Some of the barangays had provided orientation and training to BDRRMCs
- Well-trained PDDRMO personnel with high-tech equipment and facilities with international standards
- Capable to conduct training in the use of QGIS software
- Visayan/Boholano version of DRR-CCA Training modules

Information Technology

- PPDO Website established for general information and data sharing
- Has geographic Information System
- Personnel trained and able to operate basic GIS
- Free Open-Source Software (QGIS) is available and installed in every PPDO computer

Operations

- Upgrading of evacuations centers with complete sanitation/hygiene facilities, standby power, water, and food packs
- Regular maintenance of rescue facilities and equipment
- Very efficient and effective TARSIER 117 with sub-office to other municipalities
- Presence of PDRRMO inter-cluster coordination
- Readily available frontliners/responders services (Health, PDRRMO, DSWD, OPSWD, PNP, BFP, etc.)

DRRM in Education

- Disaster Risk Reduction Management is mainstreamed in the public school's curriculum

Response and Early Recovery

Logistics

- Presence of Irrigation Projects (NIS, SRIP, CIS)
- Water Development Program
- Port Development
- Water harvesting tanks

Emergency Response

- Organized and trained responder teams (medical, rescue and evacuation, and relief)
- Provision of incentives for volunteers and responders
- Availability of LDRRMC Standard Operating Procedures on disaster response

Rehabilitation and Recovery

Livelihood and Business Development

- Skill training for alternative sources of livelihood
- Access to financial services and micro-insurance for MSMEs to affected families

Rehabilitation and Recovery Plan

- Support from NGAs to expedite rehabilitation and recovery programs
- Approved Bohol Earthquake Assistance (BEA) Plan with funding from the national agencies

Chapter 2: DRRM Roadmap and Strategies

Bohol's Vision and Mission

Vision

Bohol is a prime eco-cultural tourism destination and a strong, balanced agri-industrial province, with a well-educated, God-loving and law-abiding citizenry, proud of their cultural heritage, enjoying a state of well-being and committed to sound environmental management.

Mission

To enrich Bohol's social, economic, cultural, political, and environmental resources through good governance and effective partnerships with stakeholders for increased global competitiveness.

Strategic Governance Roadmap

The Bohol Local DRRM Plan is aligned to Bohol's Vision and Mission which can be achieved through the following strategies identified by the Members of the Executive Management Board and the Sangguniang Panlalawigan in a Strategic Planning Workshop conducted last July 2022.

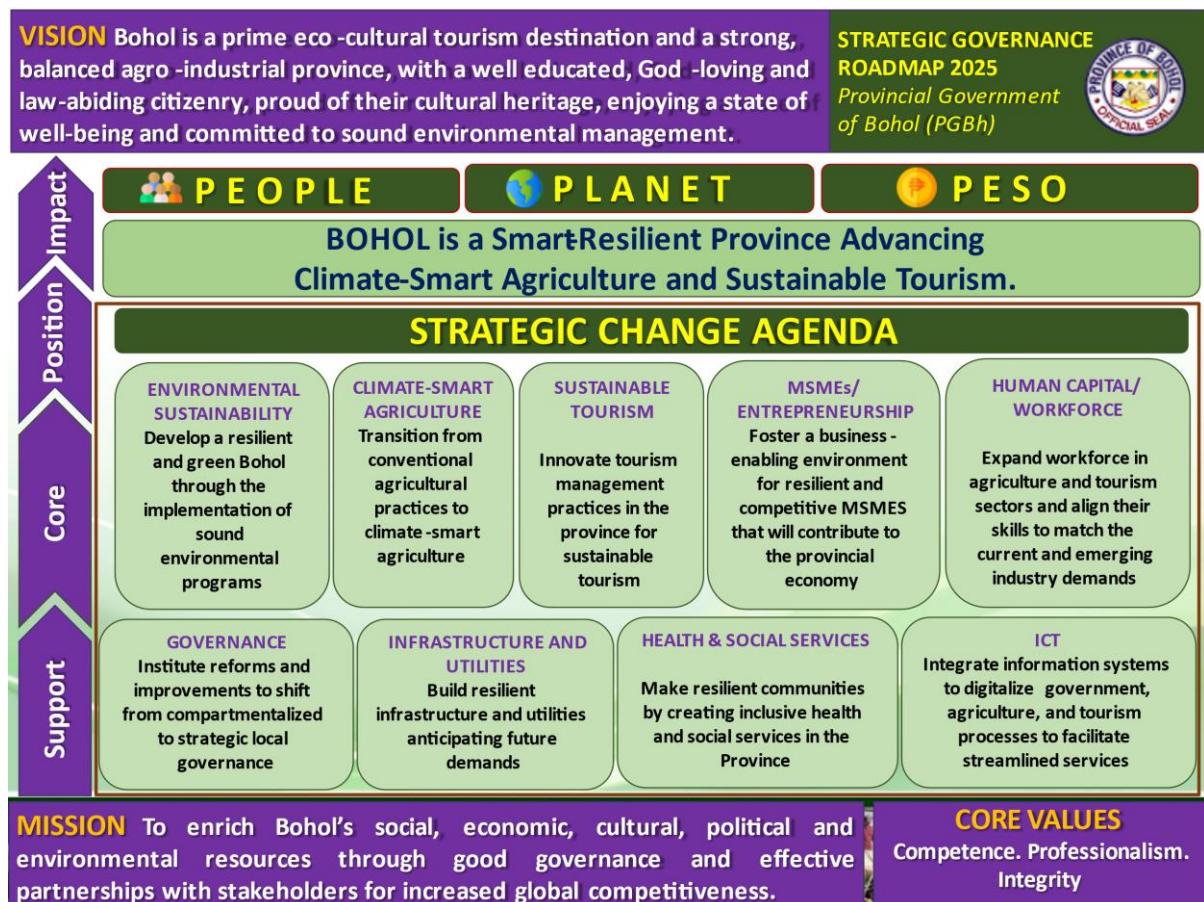


Figure 21: Bohol's Vision, Mission and Strategic Change Agenda

The DRRM endeavors of Bohol Province are guided by its vision of:

Vision

A disaster-resilient, climate change adaptive and safe Boholano community with a strong spirit of stakeholder commitment guided by effective local governance ensuring social protection, economic security and socially-inclusive disaster management towards sustainable development.

Goals and Outcomes³

All the DRRM programs, projects, activities (PPAs) and policies of Bohol Province are intended to contribute to the realization of the following goals and outcomes.

The detailed Bohol Province' Assessment of its contribution to the NDRRMP Target Outcomes are shown in the Form-1A and was used to conduct the situational analysis, especially the SWOC analysis.

Table 25: National DRRM Goals and Outcomes

Goal	Outcomes
Prevention and Mitigation	
Address current and reduce future risks of communities and government through mainstreaming integrated risk management into science, policy and practice.	<ol style="list-style-type: none"> 1. Improved access, understanding and use of updated risk information and research; 2. Implemented risk-centered national, sub-national, and sectoral policies, plans, and budgets; 3. Increased structural integrity of housing, building, and critical infrastructure; 4. Institutionalized timely, responsive, context- and culture-specific early warning systems reaching the last mile; 5. Communities have access to effective, responsive and inclusive social protection, risk financing and insurance mechanisms; 6. Natural resources and ecosystem integrity are improved and sustained; 7. Disaster-resilient livelihoods and businesses; 8. Disaster-resilient human settlements.
Preparedness	
Establish and strengthen capacities of governments, communities, CSOs, and private sector to anticipate, cope, and recover from the adverse impacts of hazards and potential cascading disasters, and minimize losses and disruption of daily life.	<ol style="list-style-type: none"> 9. Enhanced risk awareness and risk-informed decisions and actions of governments and communities; 10. Increased institutional capacities of National and Local DRRM Councils and Offices; 11. Strengthened partnership and coordination among all key actors and stakeholders; 12. Implemented comprehensive and mutually-reinforcing national and local preparedness and response plans, policies, and systems.
Response and Early Recovery	
Provide risk-based, timely and anticipatory response actions to address basic, life preservation and immediate needs of communities and government. Also, affected communities/populations are able to continue life with dignity and	<ol style="list-style-type: none"> 13. Well-established disaster response operations with well-equipped workforce and volunteers; 14. Accurate, reliable and timely information management; 15. Appropriate early actions are provided to communities;

³ Goals and outcomes indicated in the 2021 to 2030 National Disaster Risk Reduction and Management Plan (NDRRMP)

Goal	Outcomes
prevent or minimize exacerbation of emergency situations.	16. Affected communities are provided with gender and conflict-sensitive basic necessities and services; 17. Implemented an integrated system for early recovery.
Recovery and Rehabilitation	
Speed up recovery from disaster losses through rehabilitation and recovery programs that are aligned to sustainable development and “build back better” principle	18. Clear policy directions for rehabilitation and recovery; 19. Sustainable and socially inclusive income sources for households are made available and stability of economic activities restored; 20. Agricultural production is restored or increased and support services for farmers, fisher folks, and laborers are made accessible; 21. Affected families or individuals have access to: (a) affordable disaster-resilient housing that are located in safe zones where social services and public facilities are available; or, (b) financial assistance to rebuild houses in areas that are declared safe zones; 22. Affected individuals, families, and communities have access to responsive, appropriate and adequate education, health, and social protection services; 23. Disaster resilient standards in infrastructure are observed during rehabilitation and recovery.

DRRM Targets: 2023 to 2031 of Bohol Province LDRRM Plan

To reduce and manage the disaster risks discussed in the disaster risk profile, as well as to contribute to the foregoing goals and achieve the corresponding outcomes, Bohol Province will seek to achieve the foregoing targets in the next nine years:



Table 26: Flooding, Typhoon, and Severe Wind

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population		77,894 (32% of total exposed population) Short-Term 29,219 (12%) Medium-Term 32,463 (13%) Long-Term 16,167 (7%)	Reduction of Affected population	Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Albuquerque	Guindulman, Duero, Jagna, Loboc, Balilihan, Catigbian, Batuan, San Isidro, Sikatuna, Calape, Sierra Bullones, Loay, Albuquerque, Inabanga	Loboc, Inabanga, Sierra Bullones, Loay
	With Island Barangays	102,039 (42% of total exposed population)		Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon	Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon	Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon
Agriculture	Agricultural areas	11,500 (22% of total exposed agriculture area)	Reduction of affected agricultural areas	Candijay (AF), Alicia, Guindulman (AF), Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-Hernandez, Jagna, Sierra Bullones, Danao		
	Nipa Plantation	All plantations in 5 LGUs	Reduction of affected Nipa Plantation	Cortes (nipa), Maribojoc (nipa), Loboc, Inabanga, Loay		
	Fisheries	All fisheries in 30 LGUs	Reduction of affected fisheries	Mabini, Sevilla, Buenavista, Ubay, Bein Unido, Calape, Clarin, Talibon, Pres. CPG, Tubigon, Lila, Loon, Inabanga	All 30 coastal LGUs	
Livestock	Livestock and Poultry	All livestock and poultry in 12 LGUs	Reduction of affected Livestock and Poultry	Mabini, Guindulman, Candijay, Alicia, S. Bullones, Loboc, Sikatuna, Pilar, Ubay, Calape, Loon, Cortes		



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Infrastructure and Utilities	Roads and Bridges	All roads, bridges, and other utilities located in flood-prone areas	Reduction of affected Roads and Bridges	1st District Abatan Bridge in Cortes, Camayaan Bridge in Cortes 2nd District Inabanga, Buenavista, Clarin, Malitbog in Dagohoy 3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay, Loboc (Agape Bridge and Roads)	1st District Abatan Bridge in Cortes, Camayaan Bridge in Cortes, Loboc (Agape Bridge and Roads) 2nd District Inabanga, Buenavista, Clarin, Malitbog in Dagohoy 3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay	1st District Abatan Bridge in Cortes, Camayaan Bridge in Cortes, Loboc (Agape Bridge and Roads) 2nd District Inabanga, Buenavista, Clarin, Malitbog in Dagohoy 3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay
	Seawall	All seawall located in coastal areas	Reduction of affected Roads and Bridges	1st District Baclayon (for repair) 3rd District Guindulman, Duero, Jagna, Garcia Hernandez, Valencia, Dimiao, Lila (ongoing), Loay	3rd District Guindulman, Duero, Jagna, Garcia Hernandez, Valencia, Dimiao, Lila (ongoing), Loay	
Built-up Areas		914.482 ha (34% of total exposed area)	Reduction of affected built-up areas	Tagbilaran City; Urbanized Municipalities: Tubigon, Talibon, Ubay, Panglao, Dauis, Jagna, Loon	Tagbilaran City; Urbanized Municipalities: Tubigon, Talibon, Ubay, Panglao, Dauis, Jagna, Loon	Tagbilaran City; Urbanized Municipalities: Tubigon, Talibon, Ubay, Panglao, Dauis, Jagna, Loon
Environmental areas	16 Protected Areas: (Rajah Sikatuna Protected Landscape;	3 LGUs that comprise the Rajah Sikatuna Protected Landscape	Reduction of affected key environmental areas	Municipalities that are part of the Rajah Sikatuna Protected Landscape (Sierra Bullones, Bilar, Batuan)		
	Talibon Group of Islands Protected Landscape and Seascape	7 LGUs under this protected landscape		Getafe, Bien Unido, Talibon, Ubay, CPG, Tubigon, Loon	Getafe, Bien Unido, Talibon, Ubay, CPG, Tubigon, Loon	Getafe, Bien Unido, Talibon, Ubay, CPG, Tubigon, Loon



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Chocolate Hills Natural Monument	4 LGUs that are part of the natural monument		Carmen, Sagbayan, Batuan, Bilar	Carmen, Sagbayan, Batuan, Bilar	Carmen, Sagbayan, Batuan, Bilar
	Albuquerque-Loay-Loboc Protected Landscape / Seascape	3 LGUs comprising the protected landscape/seascape		Albuquerque, Loay, Loboc	Albuquerque, Loay, Loboc	
	Panglao Island Protected Seascape	2 LGUs that are part of the Panglao Island Protected seascape		Panglao, Dauis	Panglao, Dauis	
	Loboc Watershed Forest Reserve	2 LGUs comprising the Loboc Watershed Forest Reserve		Loboc, Bilar	Loboc, Bilar	
	Alejawan-Cansuhay-Anibongan River Watershed Forest Reserve	2 LGUs comprising the watershed forest reserve		Jagna, Duero	Jagna, Duero	Jagna, Duero
	Tubigon Group of Islands Mangrove Swamp Forest Reserve / Wilderness Area	70% of the total area of mangrove swamp forest reserve/wilderness area		Tubigon	Tubigon	
	Clarin Group of Islands Wilderness Area	50% of the total area of Clarin Island Wilderness		Clarin	Clarin	
	Calape Group of Islands Mangrove Swamp Forest Reserve and Wilderness Area; Cabilao Sandingan Islands, Mangrove	2 LGUs comprising the mangrove swamp reserve forest		Calape Loon	Calape	Calape



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Swamp Forest Reserve					
	Candijay-Anda-Mabini Mangrove Swamp Forest Reserve and Wilderness Area	3 LGUs comprising the mangrove swamp/wilderness area		Candijay, Anda, Mabini		
	Inabanga Wilderness Area and Mangrove Swamp Forest Reserve	80% of the total area of the Inabanga wilderness/swamp area		Inabanga	Inabanga	
	President Carlos P. Garcia Mangrove Swamp Forest Reserve	70% of the total mangrove swamp forest		Pres. CPG	Pres. CPG	
	Getafe Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area; and	80% of the total area of the Getafe wilderness/swamp area		Getafe	Getafe	
	Ubay Mangrove Swamp Forest Reserve	70% of the total mangrove swamp forest		Ubay		
Heritage areas and tourism sites		All national heritages in 19 LGUs	Reduction of affected heritage areas and tourism sites	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Daus, Inabanga, Danao, Jagna, Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Loboc, Sierra Bullones, Pilar, Guindulman, Duero, Daus, Maribojoc, Panglao	Loboc, Sierra Bullones, Pilar, Guindulman, Duero, Daus, Maribojoc, Panglao



Image of DRRM targets for Flooding, Typhoon, and Severe Wind (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)

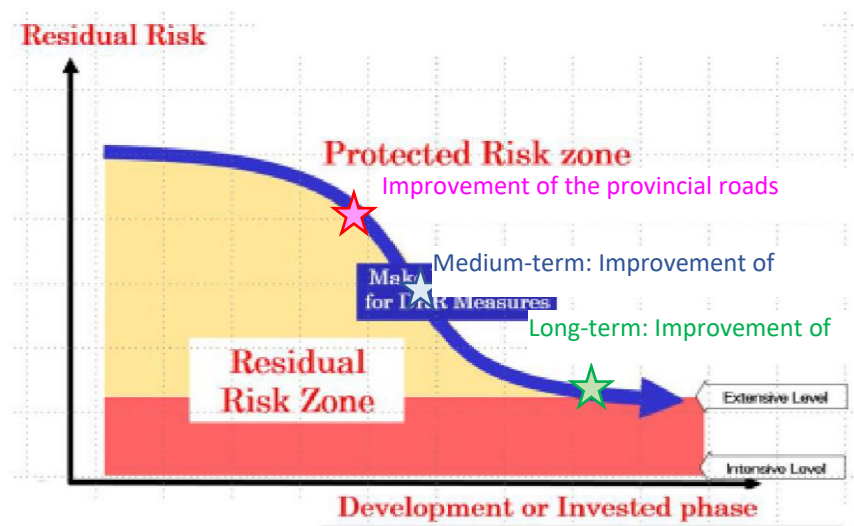




Table 27: Drought

Exposure Analysis			DRRM Targets			
Elements-at-Risk	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Critical Facilities	Water Source	All affected water sources in 10 LGUs	Reduction of affected water sources	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy Existing PPA: 1M / municipality, 100K / barangay water system improvement	Corella, Cortes, Balilihan	Corella, Cortes, Balilihan,
	Ongoing construction / Proposed Water Development Projects	All on going water infrastructure in 8 LGUs Short-Term 2 LGUs Medium-Term 6 LGUs	Reduction of affected ongoing water infrastructure development	Dimiao, Mabini	Pilar, Duero, Danao, San Miguel, Valencia	
Agricultural areas	Agricultural areas	All Agricultural Towns in 45 LGUs	Reduction of affected agricultural areas	45 LGUs		
	Dams, Irrigation facilities	All towns with Dams, Irrigation facilities in 7 LGUs Short-Term 4 LGUs Medium-Term 3 LGUs	Reduction of affected dams, irrigation, facilities	Ubay, San Miguel, Pilar, Talibon (2)	Buenavista, Calape, Alicia	
Environmental areas	Watershed	11 Watershed areas Short-Term 7 watersheds Medium-Term 4 watersheds	Reduction of affected key environmental areas	7 Watershed Areas	4 Watershed Areas	



Exposure Analysis			DRRM Targets			
Elements-at-Risk	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Forest / Grass (fires)	All forest and grass in 22 LGUs		Guindulman, Candijay, Alicia, Ubay, Pilar, Danao, Mabini, San Miguel, Dagohoy, Inabanga, Talibon, Getafe, Buenavista, S-Bullones, Trinidad, Jagna, Carmen, Duero, CPG, Lila, Dimiao.		



Image of DRRM targets for Drought (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)





Table 28: Rain Induced Landslide

Exposure Analysis			DRRM Targets			
Elements-at-Risk	Sub-categorization	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population		282,096 (25% of total exposed population) Short-Term 158,828 Medium-Term 61,634 Long-Term 61,634		Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian , Inabanga, Balilihan, Antequera, San Miguel	Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar	Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (no too severe)
Agriculture areas	Agriculture areas	49,678 (28% of total exposed area) Short-Term 32,662 ha Medium-Term 8,508 ha Long-Term 8,508 ha	Reduction of affected agriculture areas	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Danao, Loboc, Candijay, Buenavista, Getafe, Inabanga	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna
	Fisheries	All fisheries in 4 LGUs Short-Terms 1 LGUs Medium-Terms 3 LGUs	Reduction of affected fisheries	Danao	Lila, Loay, Danao	
	Poultry and Livestock	All LGUs traversed by fault lines		all LGUs traversed by fault lines	all LGUs traversed by fault lines	all LGUs traversed by fault lines
Critical facilities and lifelines	Roads and Bridges	3,772 km (100% of total exposed roads)	Reduction of affected roads and bridges	Loboc, Bilar, (all LGUs traversed by fault lines)		
	Schools	All schools in 8 LGUs	Reduction of affected schools	Duero, Balilihan, Dagohoy, Carmen, Sevilla, Danao, Garcia Hernandez		
	Evacuation centers	All evacuation center in Loboc	Reduction of affected evacuation centers	Loboc Evacuation Center		



Image of DRRM targets for Rain-Induced Landslide (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)





Table 29: Storm Surge

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	Indigenous settlements (Badjao)	All indigenous settlements in 3 LGUs Short-Term 1 LGUs Medium-Term 1 LGUs Long-Term 1 LGUs	Reduction of affected population	Getafe	Panglao	Ubay
	Informal Settlers	All informal settlers in 24 LGUs Short-Term 8 LGUs Medium-Term 8 LGUs Long-Term 8 LGUs	Reduction of affected informal settlers	Bien Unido, Pres. CPG, Talibon, Loay, Duero, Lila, Garcia-Hernandez, Jagna	Baclayon, Mabini, Calape, Anda, Albuquerque. Tubigon, Inabanga, Candijay	Loon, Maribojoc, Buenavista Tagbilaran, Dimiao, Valencia Guindulman, Clarin
Critical facilities and lifelines	Roads and Bridges	42.433 km (53% of total exposed roads) Short-Term 8.422 km (10%) Medium-Term 19.606 km (24%) Long-Term 14.405 km (18%)	Reduction of affected roads and bridges	Dauis, Baclayon, Albuquerque, Lila	Loay, Jagna, Dimiao, Garcia-Hernandez	Valencia, Anda, Duero, Ubay
	Water	All water facilities in 9 LGUs Short-Term 4 LGUs Medium-Term 3 LGUs Long-Term 3 LGUs	Reduction of affected of water facilities	Pres. CPG, Bien Unido, Trinidad	Calape, Loon, Talibon	Tubigon, Getafe, Inabanga
	Power	All powers in 10 LGUs Short-Term 3 LGUs Medium-Term 3 LGUs Long-Term 3 LGUs	Reduction of affected power facilities	Pres. CPG, Ubay, Bien Unido	Mabini, Anda, Guindulman	Jagna, Baclayon, Garcia-Hernandez
	Municipal Halls	All municipal halls in 30 coastal LGUs	Reduction of affected municipal halls	Guindulman, Anda, Garcia-Hernandez, Jagna, Lila, and other coastal LGUs	Baclayon, Valencia, Inabanga, and other coastal LGUs	Loay, Alburquerque, Bien Unido, and other coastal LGUs
	Schools	All schools in 30 coastal LGUs	Reduction of affected schools	Baclayon, Loay, Dimiao, Valencia, Pres. CPG, Loon, and other coastal LGUs	Lila, Inabanga, Tubigon, Calape, Ubay, and other coastal LGUs	Buenavista, Getafe, Bien Unido, Talibon, and other coastal LGUs



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Churches	All churches in 30 coastal LGUs	Reduction of affected churches	Anda, Baclayon, Bien Unido, and other coastal LGUs	Dauis, Panglao, and other coastal LGUs	Dimiao, and other coastal LGUs
	Evacuation centers	All evacuation centers in 30 coastal LGUs	Reduction of affected evacuation centers	Garcia-Hernandez, Jagna, Guindulman, and other 30 coastal LGUs		
	Seaports	All seaports in 11 LGUs Short-Term 4 LGUs Medium-Term 4 LGUs Long-Term 3 LGUs	Reduction of affected seaports	Tagbilaran City, Loon, Alburquerque, Maribojoc	Jagna, Getafe, Ubay, Pres CPG	Clarin, Talibon, Tubigon
Agriculture areas	Fisheries	All fisheries in 11 LGUs Short-Term 4 LGUs Medium-Term 4 LGUs Long-Term 3 LGUs	Reduction of affected fisheries	Mabini, Talibon, Bien Unido, Pres. CPG	Candijay, Anda, Inabanga, Panglao	Calape, Loon, Tubigon
Built-up Areas	Microbusinesses, MSMEs, Remittance Center	6,243 ha (76% of total exposed area) Short-Term 1,724 ha (21%) Medium-Term 1,259 ha (15%) Long-Term 3,261 ha (40%)	Reduction of affected built-up areas	Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. Carlos P. Garcia, Valencia, Garcia-Hernandez Ubay, Dimiao	Duero, Lila, Getafe, Guindulman, Inabanga, Buenavista, Loay, Calape, Loon, Anda	Tubigon, Tagbilaran City, Alburquerque, Maribojoc Mabini, Candijay, Clarin, Cortes, Dauis
Environmental areas	River basins / Watershed	All watersheds in 6 LGUs Short-Term 2 LGUs Medium-Term 2 LGUs Long-Term 2 LGUs	Reduction of affected key watershed	Inabanga Trinidad	Candijay Duero	Loon Cortes
	Mangroves	All mangrove area in 15 LGUs Short-Term 6 LGUs Medium-Term 9 LGUs	Reduction of affected mangroves	Tubigon, Getafe, Clarin, Calape Loon, Maribojoc	Albuquerque Baclayon, Loay Panglao, Buenavista, Inabanga, Anda, Mabini, Candijay	



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Heritage areas and tourism sites	Centennial Churches	All churches in 9 LGUs Short-Term 7 LGUs Medium-Term 6 LGUs Long-Term 2 LGUs	Reduction of affected heritage areas and tourism sites	Panglao, Loon, Anda, Cortes, Baclayon, Loay, Maribojoc	Panglao, Baclayon, Loay, Lila, Anda, Dimiao	Panglao, Anda



Image of DRRM targets for Storm Surge (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)

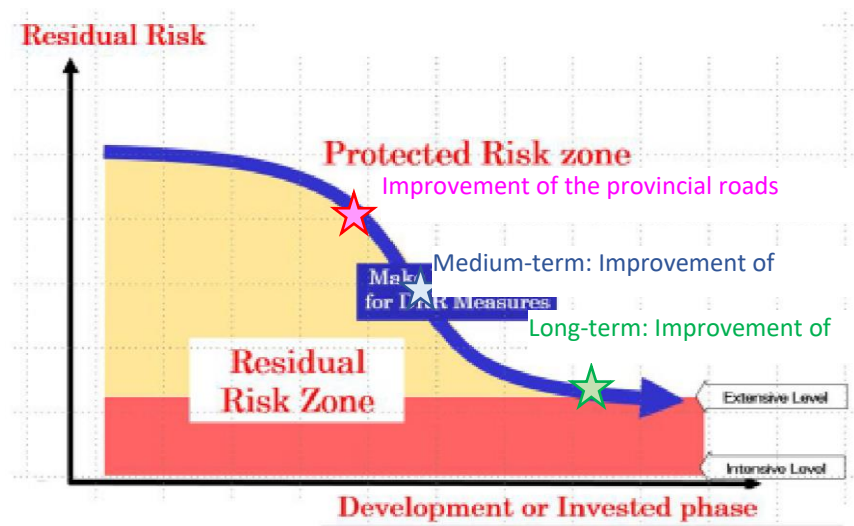




Table 30: Tsunami

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	Indigenous settlements (Badjao)	All indigenous settlements in 4 LGUs Short-Term 2 LGUs Medium-Term 1 LGUs Long-Term 1 LGUs	Reduction of affected population	Dauis, Getafe	Panglao	Ubay
	Informal Settlers	-	Reduction of affected informal settlers			
Critical facilities and lifelines	Roads and Bridges	141 km (49% of total exposed roads) Short-Term 46 km (16%) Medium-Term 47 km (16%) Long-Term 48 km (17%)	Reduction of affected roads and bridges	Dauis, Baclayon, Albuquerque, Lila, Guindulman, Anda, Duero	Loay, Jagna, Dlmiao, Garcia-Hernandez,	Valencia, Anda, Duero, Ubay,
	Water systems	All water systems in 10 LGUs Short-Term 4 LGUs Medium-Term 3 LGUs Long-Term 4 LGUs	Reduction of affected of water facilities	Pres. CPG, Bien Unido, Trinidad	Calape, Loon, Talibon	Tubigon, Getafe, Inabanga, Ubay
	Power	All power facilities in 12 LGUs	Reduction of affected power facilities	Pres. CPG, Bien Unido, Ubay, Loon, Maribojoc,	Mabini, Anda, Guindulman, Loon, Maribojoc,	Jagna, Baclayon, Garcia, Loon, Hernandez, Tubigon, Maribojoc,
	Municipal Halls	All municipal hall (30) in 30 coastal LGUs	Reduction of affected municipal halls	Maribojoc, All 30 coastal LGUs	Clarín, All 30 coastal LGUs	Getafe, All 30 coastal LGUs
	Schools	All schools in 30 coastal LGUs	Reduction of affected schools	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Churches	All churches in 30 coastal LGUs	Reduction of affected churches	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Evacuation centers	All evacuation centers in 30 coastal LGUs	Reduction of affected evacuation centers	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Hospitals	All hospital in 30 coastal LGUs	Reduction of affected seaports	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Gas Station	All Gas Station in 30 coastal LGUs	Reduction of affected gas stations	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Barangays Halls	All barangay halls in 30 coastal LGUs	Reduction of affected of Barangay halls	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	RHU	All RHU in 30 coastal LGUs	Reduction of affected RHUs	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Fire Stations	All fire station in 30 coastal LGUs	Reduction of affected fire stations	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
	Lying-in Clinic/Centers	All lying-in clinic centers in 30 LGUs	Reduction of affected lying-in clinic/centers	All 30 coastal LGUs	All 30 coastal LGUs	All 30 coastal LGUs
Agriculture areas	Coastal Towns	8,524 ha (91% of total exposed agri-area) Short-Term 1,933 ha (20%) Medium-Term 1,667 ha (18%) Long-Term 4,924 ha (53%)	Reduction of affected coastal towns	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao, Daus, Mabini, Ubay	Tubigon, Clarin, Inabanga, Mabini, Anda, Guindulman, Garcia-Hernandez, Valencia, Loboc	Buenavista, Getafe, Talibon; Ubay, Bien Unido, Duero, Jagna, CPG
	Fisheries	All fisheries in 17 LGUs Short-Term 8 LGUs Medium-Term 5 LGUs Long-Term 4 LGUs	Reduction of affected fisheries	Mabini, Ubay, Talibon, Bien Unido, Pres. CPG, Calape, Candijay	Candijay, Getafe, Anda, Inabanga, Panglao	Calape, Clarin, Loon, Tubigon
	Poultry and Livestock	All poultry and livestock in 28 LGUs	Reduction of affected	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon,	Tubigon, Clarin, Inabanga, Mabini, Anda, Guindulman, Garcia-Hernandez, Valencia	Buenavista, Getafe, Talibon, Trinidad, Ubay, Bien Unido, Duero, Jagna, CPG



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
				Panglao, Daus		
Built-up Areas		1,623 ha (95% of total exposed built-up area) Short-Term 833 ha (49%) Medium-Term 631 ha (37%) Long-Term 159 ha (9%)	Reduction of affected built-up areas	Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. CPG, Valencia, Garcia-Hernandez, Ubay	Duero, Lila, Getafe, Guindulan, Inabanga, Buenavista, Loay, Calape, Loon, Anda	Tagbilaran City, Albuquerque, Maribijoc, Mabini, Candijay, Clarin, Cortes, Daus
	Microbusinesses, MSMEs, Remittance Center	All affected Microbusinesses, MSMEs, Remittance Center in 30 LGUs Short-Term 11 LGUs Medium-Term 10 LGUs Long-Term 9 LGUs	Reduction of affected Microbusinesses, MSMEs, Remittance Center	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Alburquerque, Baclayon, Panglao, Daus	Tubigon, Clarin, Inabanga, Mabini, Anda, Guindulman, Garcia-Hernandez, Valencia, Loboc, Tagbilaran City	Buenavista, Getafe, Talibon, Trinidad, Ubay, Bien Unido, Duero, Jagna, CPG
Environmental areas	River basins / Watershed/ Mangrove/ Coastline	All affected key environmental area in 15 LGUs Short-Term 5 LGUs Medium-Term 5 LGUs Long-Term 5 LGUs	Reduction of affected key River basins / Watershed/ Mangrove/ Coastline	Cortes, Maribojoc, Loon, Calape, Dimiao	Tubigon, Clarin, Inabanga, Mabini, Anda	Buenavista, Getafe, Talibon, Trinidad, Ubay
Heritage areas and tourism sites	Centennial Churches	All heritage sites in 16 LGUs Short-Term 7 LGUs Medium-Term 6 LGUs Long-Term 5 LGUs	Reduction of affected heritage areas and tourism sites	Lila, Loay, Alburquerque, Baclayon, Panglao, Daus, Anda, and all protected seascapes	Guindulman, Garcia Hernandez, Valencia, Loboc, Tagbilaran City, Anda, and all protected seascapes	Bien Unido, Duero, Jagna, CPG, Anda, and all protected seascapes



Image of DRRM targets for Tsunami (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)

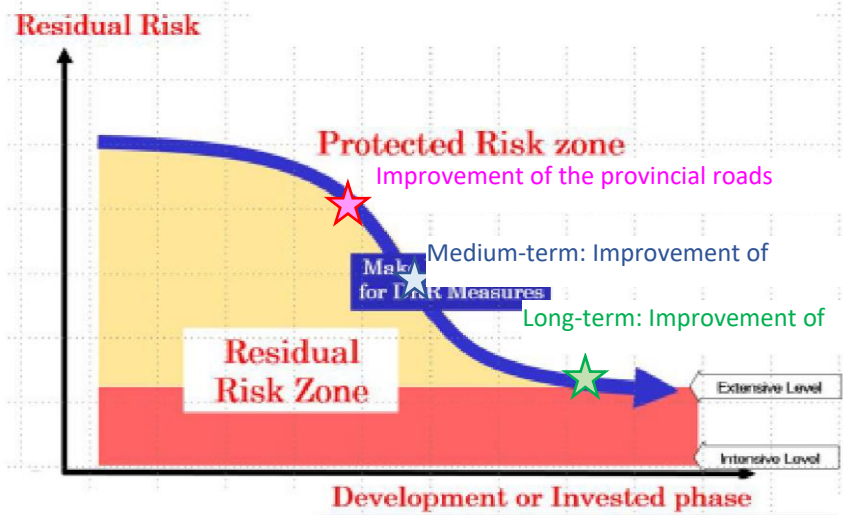




Table 31: Liquefaction / Ground Shaking

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	LGUs near East Bohol Fault (epicenter at Jagna, SW propagation), and South Offshore Fault	212,421 (65% of total exposed population) Short-Term 79,329 (24%) Medium-Term 80,836 (25%) Long-Term 52,256 (16%)	Reduction of affected population	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San Isidro, Sevilla, Antequera, Cortes, Maribojoc, Calape, Sikatuna, Loboc, Corella	Lila, Dimiao, Mabini, Alicia, Ubay, Talibon	Baclayon, Alburquerque, Loay, Garcia-Hernandez, Tubigon, Getafe, Buenavista, Inabanga
Critical facilities and lifelines	Roads and Bridges	183km (12% of total roads)	Reduction of affected roads and bridges	Loay, Valencia, Lila, Dimiao, Jagna, Garcia-Hernandez, Tagbilaran City		
	Dam (reservoir)	All dams in 8 LGUs	Reduction of affected dams	Garcia-Hernandez, Pilar, San Miguel, Ubay, Talibon, Tubigon, Candijay		
	Power	All power facilities in 2 LGUs	Reduction of affected power facilities	Jagna (BOHECO II), Ubay		
	Municipal Halls	All municipal halls	Reduction of affected municipal halls	Jagna, Tagbilaran, All cell sites		
	Schools	All schools in 11 LGUs Short-Term 5 LGUs Medium-Term 2 LGUs Long-Term 4 LGUs	Reduction of affected schools	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Interior and South Municipalities	Lila, Dimiao,	Baclayon, Alburquerque, Loay, Garcia-Hernandez,
	Evacuation centers	All evacuation centers in Tagbilaran Cirt	Reduction of affected evacuation centers	Tagbilaran City		
	Hospitals	All hospitals in 10 LGUs Short-Term 4 LGUs	Reduction of affected hospitals	Jagna, Tagbilaran City, Valencia, Panglao	Lila, Dimiao,	Baclayon, Alburquerque, Loay, Garcia-Hernandez,



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
		Medium-Term 2 LGUs Long-Term 4 LGUs				
	Ports	All seaports in 3 LGUs	Reduction of affected seaports	Valencia, Tagbilaran City, Jagna		
Agriculture areas	Agriculture areas	1,126 ha (2% of total area)	Reduction of affected agriculture areas	Garcia-Hernandez, Loay, Jagna, Alburquerque, Tagbilaran City	-	
	Fisheries	All affected fisheries in 2 LGUs	Reduction of affected fisheries		Lila, Loay	
	Poultry and Livestock	All poultry and livestock in all LGUs	Reduction of affected poultry and livestock		all LGUs traversed by fault lines	
Environmental areas	River basins / Watershed	All water systems area in 6 LGUs Short-Term 2 LGUs Medium-Term 2 LGUs Long-Term 2 LGUs	Reduction of affected key water systems areas	Inabanga, Trinidad	Candijay, Duero	Loon, Cortes
	Mangrove Cover	All Mangrove area in 15 LGUs Short-Term 6 LGUs Medium-Term 9 LGUs	Reduction of affected key environmental areas	Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Alburquerque, Baclayon, Loay, Panglao, Buenavista, Inabanga, Anda, Mabini, Candijay	
Heritage areas and tourism sites	Centennial Churches	All affected heritage areas in 22 LGUs	Reduction of affected heritage areas and tourism sites	Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Alburquerque, Loay, Garcia-Hernandez, Cortes, Maribojoc, Loon, Calape, Balilihan, Alburquerque, Jagna, Tagbilaran City, Valencia, Dauis, Panglao	Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Alburquerque, Loay, Garcia-Hernandez, Lila, Dimiao,	Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Alburquerque, Loay, Garcia-Hernandez, Baclayon, Alburquerque, Loay, Garcia-Hernandez,



Image of DRRM targets for Liquefaction/ Ground Shaking (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)

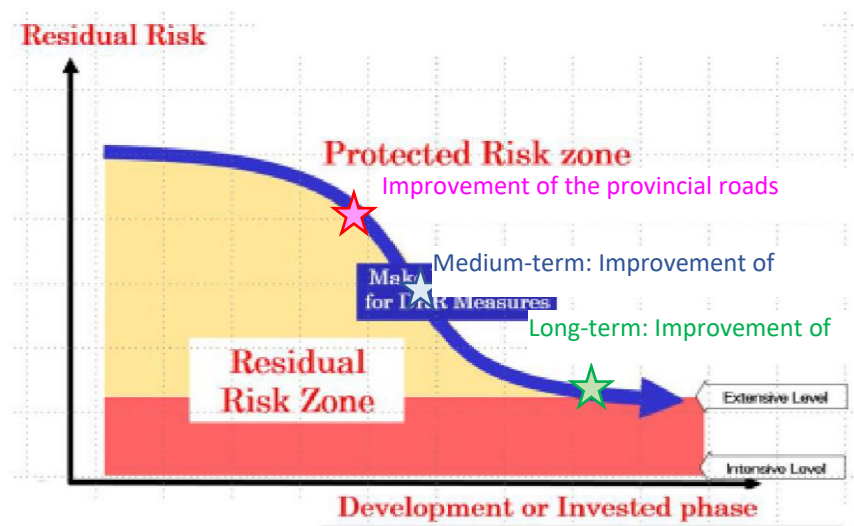




Table 32: Sinkholes

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	LGUs validated	Majority of population in 16 LGUs Portion of population in 7 LGUs	Reduction of affected population	(Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra Bullones, San Isidro, Tubigon, Catigbian, Antequera, Calape, Cortes (Portions) Panglao, Balilihan, Garcia-Hernandez, Sagbayan, Carmen, Tagbilaran, Maribojoc	(Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra Bullones, San Isidro, Tubigon, Catigbian, Antequera, Calape, Cortes (Portions) Panglao, Balilihan, Garcia-Hernandez, Sagbayan, Carmen, Tagbilaran, Maribojoc	(Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra Bullones, San Isidro, Tubigon, Catigbian, Antequera, Calape, Cortes (Portions) Panglao, Balilihan, Garcia-Hernandez, Sagbayan, Carmen, Tagbilaran, Maribojoc
Built-up areas	Planned urbanization	Majority of population in all affected LGUs	Reduction of affected built-up areas	Tubigon, Talibon Jagna, Carmen, Loon, Tagbilaran, Cortes, Maribojoc, Trinidad, Calape, Candijay, Daus	(Majority of LGUs based on the MGB hazard map)	(Majority of LGUs based on the MGB hazard map)



Image of DRRM targets for Sinkholes (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)

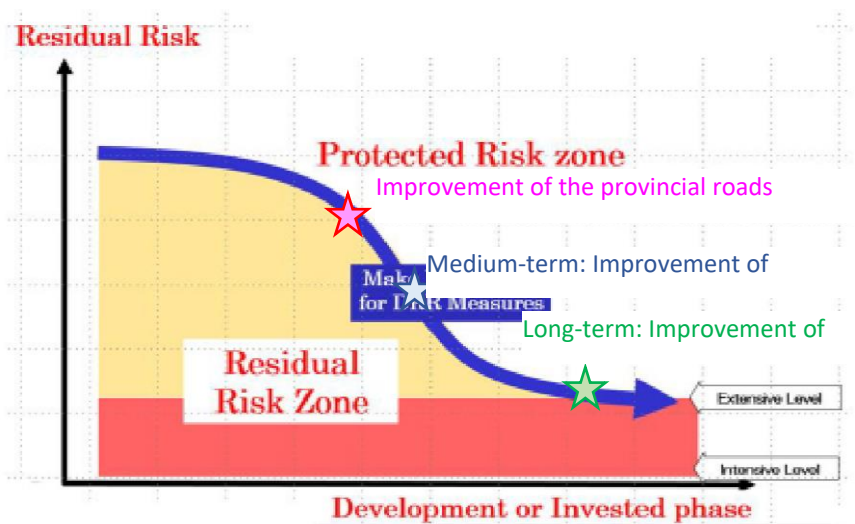




Table 33: Earthquake-Induced Landslides

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	LGUs traversing/ near East Bohol Fault	98,551 (54% of total exposed population) Short-Term 31,837 (17%) Medium-Term 33,857 (18%) Long-Term 33,857 (18%)	Reduction of affected population	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan LGUs traversing/ near East Bohol Fault	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Calape, Alicia, Sikatuna, Batuan
	Other affected LGUs	27,877 (12% of total population)		Calape, Bilar, Loboc, Dimiao	Candijay (Cambane), Calape, Bilar, Loboc	Calape, Bilar, Loboc
Critical facilities and lifelines	Roads and Bridges	All roads in affected LGUs	Reduction of affected roads and bridges	Loboc, Bilar, Loay, Catigbian, Balilihan LGUs traversing/ near East Bohol Fault; LGUs extending to north west of Bohol	all LGUs traversed by fault lines	
	Schools	All schools in affected LGUs	Reduction of affected schools	Duero, Balilihan, Dagohoy LGUs traversing/ near East Bohol Fault; LGUs extending to north north west of Bohol	all LGUs traversed by fault lines, Calape	all LGUs traversed by fault lines
	Evacuation centers	All evacuation center in affected LGUs	Reduction of affected evacuation centers	LGUs traversing/ near East Bohol Fault; LGUs extending to north west of Bohol	all LGUs traversed by fault lines	all LGUs traversed by fault lines
Agriculture areas	Fisheries	All fisheries in 2 LGUs	Reduction of affected fisheries		Lila, Loay	



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Poultry and Livestock	All poultry and livestock in affected LGUs	Reduction of poultry and livestock		all LGUs traversed by fault lines	
Built-up Areas	Slope Protection	All affected slope protection in 8 LGUs	Reduction of affected slope protection	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape, Bilar, Batuan	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape



Image of DRRM targets for Earthquake-Induced Landslide (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)





Table 34: Ground Rupture

Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
Population	East Bohol Fault and south Offshore fault	All population in 27 LGUs Short-Term 6 LGUs Medium-Term 17 LGUs Long-Term 4 LGUs	Reduction of affected population	Loboc, Lila, Loay, S. Bullones, Pilar, Alicia	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, Jagna	Baclayon, Sikatuna, Sevilla, Mabini
Critical facilities and lifelines	Roads and Bridges	All affected roads in 24 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 3 LGUs	Reduction of affected roads and bridges	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla,
	Power	All power facilities in Loboc	Reduction of affected power facilities	Loboc		
	Communications	All communication facilities in 24 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 3 LGUs	Reduction of affected communication facilities	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla,
	Municipal Halls	All municipal halls in 24 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 3 LGUs	Reduction of affected municipal halls	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla,
	Schools	All schools in 24 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 3 LGUs	Reduction of affected schools	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla,
	Evacuation centers	All evacuation centers in 24 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 3 GUs	Reduction of affected evacuation centers	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla



Elements-at-Risk	Exposure Analysis		DRRM Targets			
	Sub-category	Quantitative Description	Target	Short-Term (2023-2025)	Medium-Term (2025-2028)	Long-Term (2028-2031)
	Hospitals	All hospitals in 3 LGUs	Reduction of affected hospitals	Jagna, Valencia, Duero		
	Ports	All ports in Jagna	Reduction of affected ports	Jagna		
Agriculture areas	Agriculture	All agriculture area in 25 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 4 LGUs	Reduction of affected agriculture areas	Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla, Candijay,
Environmental areas	Mining	All mining area in Garcia Hernandez	Reduction of affected mining area	Garcia Hernandez		
Heritage areas and tourism sites		All heritage area in 25 LGUs Short-Term 14 LGUs Medium-Term 7 LGUs Long-Term 4 LGUs		Loboc, Lila, Dimiao, Valencia, Garcia Hernandez, Jagna, Duero, Guinduman, Albur, Bilar, S. Bullones, Pilar, Alicia, Jagna	Anda, Candijay, Mabini, Ubay, San Miguel, Dagohoy, Batuan	Baclayon, Sikatuna, Sevilla, Candijay,



Image of DRRM targets for Ground Rupture (how Disaster Risk are expected to be reduced if the DRRM targets are achieved)

Summary of the DRRM Targets (Provincial Assets)

	Number of elements-at-risk	Reduction of elements-at-risk per term		
		Short-Term (2023-2025)	Medium-Term (2026-2028)	Long-Term (2029-2031)

Critical infrastructures (provincial roads)





Chapter 3: Disaster Risk Reduction and Management Plan

To contribute to the national DRRM goals and outcomes and realize its disaster risk reduction targets, Bohol Province will produce the following outputs from 2023 to 2025. The detailed and yearly programs, projects, and activities (PPAs) out of which these outputs will be produced are found in Form-3A. The implementation of PPAs and corresponding enforcement of policies shall strive for equal participation of men and women, and participation of children/youth, persons with disability, older people, and other key sectors (farmers, fishers, informal settlers, etc.).

Prevention and Mitigation

Bohol Province will endeavor to accomplish the following disaster prevention and mitigation outputs from 2023 to 2025.

Table 35: Key Outputs for Disaster Prevention and Mitigation

Hazard	Key Outputs (2023 to 2025)	
	Structural	Non-Structural
Across all hazards		<ul style="list-style-type: none"> ○ Updated Risk assessment study of 48 LGUs ○ Integrated GIS in risk assessment and barangay profiling
Flooding/ Typhoon/ Severe Wind	<ul style="list-style-type: none"> ○ Formulated Initial Detailed Engineering plan and design for flood control ○ Completed Structural analysis as basis for repair and retrofitting of roads and bridges ○ Flood control measures implemented by LGU through the assistance of the Province and DPWH ○ Improved and rehabilitated Flood-Control Infrastructures ○ Completed, upgraded and safer roads, bridges, and seawall ○ Constructed 2 evacuation center in 2 prioritized C/MLGUs 	<ul style="list-style-type: none"> ○ Passed additional policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP ○ Developed a full-blown Project Proposal for the HDPE Cages, fiberglass boats ○ Purchased and delivered HDPE Cages, fiberglass boats C/MLGUs
Drought	<ul style="list-style-type: none"> ○ 2 water drilling installed per LGU ○ 6 units rainwater collector and reservoir established /LGU (48 LGU's) ○ 30 units of Small Farm Reservoir installed 	<ul style="list-style-type: none"> ○ 3 municipalities planted with Banyan Trees and Bamboo tree (200 seedlings) ○ Cloud seeding implemented in all Municipalities ○ Planted mangrove seedlings in all coastal towns ○ Adopted HVC to all 45 Agricultural Municipalities ○ 6 towns with soil and water conservation measures implemented ○ Farm field school established in all municipalities



Hazard	Key Outputs (2023 to 2025)	
	Structural	Non-Structural
		<ul style="list-style-type: none"> ○ Distributed drought resistant and varieties of crops in 6 towns implemented ○ All Agricultural Towns (45 Municipalities) with crop insurance ○ Completed the study and presented the proposal for possible funding of the construction of the Desalination of water facilities to the top LGU's identified ○ 10 municipalities planted with Banyan Trees and Bamboo tree (200 seedlings)
Storm Surge	<ul style="list-style-type: none"> ○ Upgraded and retrofitted structures ○ Constructed seawall in the identified C/MLGUs – Phase 2 ○ Compliant building structure ○ Constructed Flood Control Structure in the identified C/MLGUs – Phase 2 ○ Completed shoreline protection measures in C/MLGUs 	<ul style="list-style-type: none"> ○ Facilitate implementation of relocation plan ○ Technical assistance provided to C/MLGUs in the planting of mangroves and deployment of forest guards ○ Monitoring of hired skilled workers (for affected individuals) ○ Database of all critical infrastructures and lifelines at risk to Tsunami ○ Geo-tagging of critical infrastructures and lifelines ○ Evacuation centers compliant with standards ○ Approved crop insurance for farmers ○ Nurseries set-up in C/MLGUs ○ Database of all heritage areas and tourism sites
Rain- Induced Landslide	<ul style="list-style-type: none"> ○ Slope protection implemented in 18 MLGUs 	<ul style="list-style-type: none"> ○ Planted trees in the C/MLGUs ○ List of critical facilities with maps
Earthquake, Groundshaking, Liquefaction	<ul style="list-style-type: none"> ○ Provincial bridges retrofitted ○ 1 structure retrofitted in Baclayan ○ 1 slope protection structure constructed ○ 1 Completed slope protection in priority area 	<ul style="list-style-type: none"> ○ Oriented 47 municipalities and 1 city on the Bohol hazards and risk profile and impacts to structures ○ Surveys and validation completed; Presented the results and recommendations to PDRRMC ○ Geotechnical site survey and map of Tagbilaran City ○ Establish Continuous GPS Network for Crustal Deformation Studies ○ 30 sites installed with No Build Zone Site signages ○ Database of identified and assessed roads and bridges that are susceptible to EIL ○ List of identified and assessed resettlement sites & evacuation areas provincewide



Hazard	Key Outputs (2023 to 2025)	
	Structural	Non-Structural
Earthquake-Induced Landslide	<ul style="list-style-type: none"> ○ 1 slope protection structure constructed ○ Constructed slope protection on landslide prone areas along major roads, and communities 	<ul style="list-style-type: none"> ○ Database of identified and assessed roads and bridges that are susceptible to EIL ○ Database of identified and assessed schools that are susceptible to EIL ○ 10 sites installed with No Build Zone Site signages ○ List of identified and assessed resettlement sites & evacuation areas provincewide ○ 1 Completed slope protection in priority area
Sinkhole	<ul style="list-style-type: none"> ○ 1 slope protection structure constructed 	<ul style="list-style-type: none"> ○ Completed and approved Survey Report for Phase 3: Tagbilaran City, Tubigon, Calape, Sikatuna, Corella, Catigbian, San Isidro, Maribojoc, Balilihan ○ Karst Subsidence Hazard Assessment by MGB in 22 priority LGUs ○ 8 digitized hazard maps for identified C/MLGUs-Phase 3 ○ 10 sites installed with No Build Zone/Dumping Site signages
Infectious/Communicable Diseases		<ul style="list-style-type: none"> ○ 48 C/MLGUs with established MESU ○ WQM Team established with policy support in all C/MLGUs ○ 40% of all Barangays ZOD ○ Protocol on the allocation of Isolation beds during EREID Outbreaks (ordinance) ○ Policy Support for the establishment of 24/7 OpCen with budget appropriation (ordinance)
ASF		<ul style="list-style-type: none"> ○ Reviewed and approved on disease investigation and definition of disease cases ○ Operational quarantine service in all ports and airport ○ Enforced issued provincial policies on ASF ○ C/MLGUs aware of ASF ○ ASF council and task force established at the provincial and C/MLGU level ○ Clear ASF prevention program policies

Disaster Preparedness

Table 36: Key Outputs for Disaster Preparedness shows the outputs under disaster preparedness that Bohol Province will produce from 2023 to 2025.



Table 36: Key Outputs for Disaster Preparedness

Hazard	Key Outputs (2023 to 2025)
Across all hazards	<ul style="list-style-type: none"> ○ Increased knowledge on risk assessment in 1 City and 47 Municipalities ○ Produced and distributed IEC Materials to Provincial offices, 48 number of C/MLGUs ○ Conducted 48 number of fora on risk assessment on C/MLGUs ○ Conducted emergency drills quarterly in schools, C/MLGUs, Province level, etc. ○ 48 C/MLGUs, 1 Province ○ Approved and completed DRRM Plans for 48 C/MLGUs and Province
Flooding/ Typhoon/ Severe Wind	<ul style="list-style-type: none"> ○ Complete list of existing evacuation centers in 48 C/MLGUs ○ Developed appropriate, gender-sensitive, safe, and inclusive design for evacuation center ○ Acquired modern and state-of-the-art DRRM-related Equipment (Boom Trucks, Rescue Vehicles & Satellite /Handheld Radios) ○ Available stockpiles for a minimum of 200 families ○ Trained PDRRMC members with ICS and EOC ○ Trained C/MLGUs with ICS, EOC, and Technical Search and Rescue Trainings ○ Initiated creation of Quick/Emergency Response Units in 48 C/MLGUs
Drought	<ul style="list-style-type: none"> ○ 4 units water trucks available and accessible ○ Increased knowledge and awareness in 48 LGU ○ Trained resort, boat operators and guide on CCA and DRR
Storm Surge	<ul style="list-style-type: none"> ○ Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs ○ 100% of the C/MLGUs with comprehensive risk-based LDRRMP ○ Organized and capacitated ERT to 10 coastal LGUs ○ 100% of the responders and 10% of community volunteers insured ○ Updating and upgrading of trainings ○ 30 coastal MLGUs trained on MHPSS ○ number of drills participated by the Barangays ○ Available food and non-food items for a minimum of 200 HH/families ○ Yearly maintenance routine of wing van ○ Managed and maintained warehouse ○ Database/MIS set-up and operational in 48 LGUs ○ Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on emergency management training to 30 coastal MLGUs ○ Capacitated 100% of organized farmers association and livestock growers on the potential impacts of the hazard to 30 coastal MLGUs ○ Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs ○ Updated 5 protected area management plans ○ Capacitated the executive committee of the 16 protected area management board on emergency management of the hazard ○ 100% site managers with acquired skills on emergency management of the hazard in 30 coastal MLGUs
Rain- Induced Landslide	<ul style="list-style-type: none"> ○ Visible and clear early warning signages installed in strategic areas ○ LGUs with acquired knowledge on RIL ○ Available response equipment and PPEs
Earthquake, Groundshaking, Liquefaction	<ul style="list-style-type: none"> ○ 100 susceptible barangays conducted IEC increased awareness on the impacts of ground shaking, liquefaction ○ 5 schools, 5 offices and 2 hospitals participated in earthquake drills ○ 1 constructed evacuation center to cater affected communities



Hazard	Key Outputs (2023 to 2025)
Earthquake-Induced Landslide	<ul style="list-style-type: none"> ○ 3 trainings conducted on USAR and SAR ○ 2 CSSR training conducted for 10 personnel of TaRSIER 117 ○ 1 set of Response Equipment for SRR, EMS, CSSR
Sinkhole	<ul style="list-style-type: none"> ○ Increased awareness on DRRM-CCA to the barangay level or purok level ○ Laymanized IEC materials ○ DRRM Orientation on KARST Subsidence hazard ○ 3 trainings conducted on USAR and SAR ○ 1 training conducted on Risk Communication Training ○ 2 underwater robot and/ rescue drone purchased
EREID	<ul style="list-style-type: none"> ○ Trained 48 C/MLGUs/ All Hospitals on Donning and Doffing of PPEs ○ 48 C/MLGUs/ All Hospitals obtained knowledge and skills on infection prevention and control ○ 48 C/MLGUs/ All Hospitals obtained knowledge and skills on Integrated Disease Surveillance and Response ○ 48 C/MLGUs obtained knowledge on event-Based Surveillance System ○ 48 C/MLGUs obtained knowledge on Clinical Pathway Guidelines on Infectious Diseases ○ 2 Personnel (1 per HCPN) ○ To be determined ○ Constructed an OpCen space to monitor and respond EREID cases ○ 1 per LGU? ○ Representatives from LGUs with acquired knowledge and skills on BLS ○ 48 C/MLGUs ○ 48 LGUs with acquired knowledge and skills on BLS ○ 1 per LGU Representatives from LGUs with acquired knowledge and skills on SFA ○ 48 C/MLGUs ○ Representatives from LGUs Health Emergency with acquired knowledge and skills on Response Operation ○ 30 participants with acquired knowledge and skills on Mass Casualty Management ○ 48 C/MLGUs with acquired knowledge and skills on Mass Casualty Management ○ 48 C/MLGUs with acquired knowledge and skills on WASH in Emergencies ○ 48 C/MLGUs with acquired knowledge and skills on MHPSS ○ 48 C/MLGUs with acquired knowledge and skills on Nutrition in Emergencies ○ 48 C/MLGUs with acquired knowledge and skills on Surveillance on Post Extreme Emergencies and Disasters ○ 48 C/MLGUs with acquired knowledge and skills on Minimum Initial Service Package ○ 48 C/MLGUs with acquired knowledge and skills on Sub-PHEMAP ○ 48 C/MLGUs with acquired knowledge and skills on Health and Hygiene promotion ○ C/MLGUs and Province with obtained knowledge on PDNA for health ○ 48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary ○ mobile water purifier available and accessible to Province and C/MLGUs ○ 100% of all RHUs with Back-up power supply that is in good condition



Hazard	Key Outputs (2023 to 2025)
ASF	<ul style="list-style-type: none"> ○ Continue surveillance to ensure surveillance activities are properly carried out ○ continue master listing and registration of new backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers ○ Trained 48 C/MLGUs with management and elimination of risk of disease contamination ○ Continue master listing and registration of new backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers ○ Trained 48 C/MLGUs with management and elimination of risk of disease contamination

Response and Early Recovery

Bohol Province is also set to produce the following disaster response and early recovery outputs from 2023 to 2025.

Table 37: Key Outputs for Disaster Response and Early Recovery

Hazard	Key Outputs (2023 to 2025)
Across all hazards	<ul style="list-style-type: none"> ○ Delivered food and non-food items to affected areas ○ Accomplished RDNA ○ Tapped available and alternative source of water and power supply ○ Response teams conducted search and rescue to affected communities ○ Number of families with additional income through with cash for activities ○ Direct and systematic operations of Evacuation centers for affected families ○ ICS and evacuation management ○ Fully operational, as needed ○ Response teams conducted search and rescue to affected communities ○ SAR teams provided prompt assistance to affected areas ○ Assisted and treated affected individuals needing medical attention ○ Support to MLGU Emergency Response (Evacuation, Search & Rescue, Relief Operations)
Flooding/ Typhoon/ Severe Wind	<ul style="list-style-type: none"> ○ Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency
Drought	<ul style="list-style-type: none"> ○ Available water supply rationing in affected areas
Health Related	<ul style="list-style-type: none"> ○ MHPSS, WASH, Medical & NiE Teams provided immediate assistance to affected population, as needed ○ Hygiene activities are adopted in all evacuation centers as necessary ○ Mobile purifier available and accessible to affected population, as needed ○ Health emergency supplies are available to C/MLGUs to augment supply gap, ss needed
EREID	<ul style="list-style-type: none"> ○ Operational provincial isolation center, as needed ○ All hospitals compliant to EREID outbreak protocol, as needed
ASF	<ul style="list-style-type: none"> ○ Accomplished report on ASF outbreak in areas with confirmed cases, as needed ○ 1 – 7 – 10 protocols in place and monitored ○ Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals ○ Implemented test and destroy ○ Strictly implemented proper decontamination, disinfection ○ Available and distributed compensation fund to affected farmers



Hazard	Key Outputs (2023 to 2025)
	<ul style="list-style-type: none"> ○ continue master listing and registration of new backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers ○ Trained 48 C/MLGUs with management and elimination of risk of disease contamination

Disaster Rehabilitation and Recovery

For disaster rehabilitation and recovery, Bohol Province will aim to realize the following outputs from 2023 to 2025.

Table 38: Key Outputs for Disaster Rehabilitation and Recovery

Hazard	Key Outputs (2023 to 2025)
Across all hazards	<ul style="list-style-type: none"> ○ Accomplished RDNA and PDNA Report ○ Upgraded and safe infrastructures based on e PDNA Report ○ Number of shelters provides to affected LGUs
Health Related	<ul style="list-style-type: none"> ○ Post incident Evaluation (PIE) and documentation of best practices, lessons, problems encountered, challenges and recommendations, as necessary ○ all victims provided with psychosocial intervention base on medical assessment ○ Health conditions reported and assisted, as necessary as necessary ○ Health facilities upgraded based on standards as necessary ○ Available medical resources if necessary ○ Responders given recognition for saving lives (as necessary) ○ DRRM-H Plan approved for 2026-2028 ○ all responders provided with care and debrief as necessary
Flooding/ Typhoon/ Severe Wind	<ul style="list-style-type: none"> ○ Number of families with appropriate alternative livelihood ○ Delivered and distributed farm inputs to affected farmers and farmer association
Drought	<ul style="list-style-type: none"> ○ All damage water sources are rehabilitated ○ Allocated farm inputs to all affected farmers in MLGUs ○ All affected farmers provided with appropriate source of alternative livelihood
Storm Surge	<ul style="list-style-type: none"> ○ Shelter assistance extended to affected families ○ Affected families availed livelihood start-up kits ○ Individuals with additional livelihood skills to generate income ○ Accomplished assessment report of damages facilities and lifelines to be recommended for rehabilitation or retrofitted ○ Number of families with additional income through alternative livelihood/cash or food for work ○ Affected fisherfolks provided with 6-footer fiberglass reinforced non-motorized bancas to affected fisherfolks association ○ Number of families with additional income through alternative livelihood/cash or food for work ○ Damaged facilities repaired and upgraded



Hazard	Key Outputs (2023 to 2025)
ASF	<ul style="list-style-type: none"> ○ Accomplished report on ASF outbreak in areas with confirmed cases, as needed ○ 1 – 7 – 10 protocols in place and monitored ○ Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals ○ Implemented test and destroy ○ Strictly implemented proper decontamination, disinfection ○ Available and distributed compensation fund to affected farmers

Chapter 4: Three-Year LDRRMF Investment Plan

The LGU of Bohol Province needs to raise a total amount of PhP 4,767.2 Billion for its LDRRM Plan for 2023 to 2025. The amount needed for 2023 amounting to PhP 1,556.3 Billion; for 2024 amounting to PhP 1,532.4 Billion; and for 2025 amounting to PhP 1,678.5 Billion.

The amount of investment per thematic area and activity is detailed in Form-4A.

Table 39: Summary of the LDRRMFIP from 2023 to 2025

Thematic Area	Budget Required (In Million PhP)			Total Budget Required
	2023	2024	2025	
Prevention and Mitigation	916.3	842.9	857.1	2,616.3
Preparedness	116.4	100.0	149.5	365.9
Response and Early Recovery	154.0	183.8	217.4	555.2
Rehabilitation and Recovery	369.6	405.7	454.5	1,229.8
TOTAL	1,556.3	1,532.4	1,678.5	4,767.2



Chapter 5: Monitoring and Evaluation Plan

Monitoring and Evaluation (M&E) are complementary mechanisms that allow assessment of the progress and impact of the LDRRMP. Monitoring entails routine observation and assessment of progress focusing on the PPAs and targets, while Evaluation gauges the outcomes and changes in the municipality's DRRM efforts. The PDRRM Office is responsible for the overall monitoring of the DRRM plan. On the other hand, the office or department responsible for the accomplishment of each PPA or target is in charge of monitoring the PPAs/targets assigned to them.

To determine the progress of the outputs and targets identified in the previous sections, Tubigon will conduct the following monitoring activities:

- ✓ Weekly executive meeting where all Department Heads report the progress of their departments
- ✓ Monthly general meeting of all Councils where all councils report the accomplishments of their groups, as well as the planned activities for the next implementation period. These meetings are attended by barangay councils and national government agencies as well.
- ✓ Quarterly DRRM Council meeting (or as the need arises) which primarily involves reporting of what happened to the planned activities and what still needs to be done

The updates provided during the foregoing meetings will be based on field monitoring, post-activity reporting, inventory of households and supplies, attendance sheets, social media posts and sent SMS, logbooks, and/or distribution lists done/prepared by the individual departments concerned.

Meanwhile, Bohol Province will conduct the following evaluation activities to gauge the results and gains achieved from producing its expected outputs and targets:

- ✓ Strategic Planning and Budgeting Workshop conducted yearly where each department reports its accomplishments, what needs to be done for the following fiscal year, and how much budget is needed.
- ✓ Evaluation during updating of the LDRRMP to be held in 2025.

The Monitoring and Evaluation Plan is detailed in Form-5A.



Annexures



Annex 1: Bohol's Assessment of Its Contribution to the NDRRMP Target Outcomes

Thematic Area:		Disaster Prevention and Mitigation	Yes	No	REMARKS
Outcome 1: Improved access, understanding and use of updated risk information and research	1	Have the necessary human resource (with technical expertise) to handle data analytics (access, creation and analysis)	/		PPDO, BEMO, PEO, OPA, PDRRMO
	2	Have up-to-date gender and age-disaggregated disaster and climate hazard and risk information and understand how they (may) change in relation to development trajectories, demographic trends, urbanization and climate change	/		ONGOING WITH THE MLGU LEVEL (CDRA)
	3	Harmonize CBMS (under DILG) data with the integrated information management systems developed (Output 1.2.)	/		ONGOING WITH THE MLGU LEVEL
	4	Understand the timescales over which risks change and impacts occur	/		PPDO
	5	Have updated information and understanding of the main and secondary hazards including its impacts in your region, province, city/municipality and barangay and how they change over time and how multiple hazards may combine	/		
	6	Capacity building on the use of software's and applications such as REDAS and GeoRiskPH	/		
	7	Conduct climate and disaster risk assessment (CDRA)		/	falls under municipal level
	8	Consolidate up-to-date information about hazards, risk exposure, vulnerability, and coping capacities of people, assets and activities. Integrate scientific and lay knowledge (i.e., consider the latest available climate data and scenarios, seismic information, census data, etc. but also participatory mapping, enumerations, perception surveys, etc.)	/		ONGOING/UP DATING
	9	Community-risk assessments (including CDRA) complementing risk information produced and disseminated		/	ONLY AT MLGU LEVEL



	10	Have updated information of lifeline utilities, critical infrastructure and services, the potential impact of hazardous events and cascading effects (also have adequate and appropriate utilities and critical infra, not just update info as prevention and mitigation, and include these in local sectoral plans - e.g., infra)	/		PPDO, PGSO, PEO, DPWH, BOHECO 1,2,3, WATER UTILITIES AND LGU WATER WORKS
	11	Develop mechanisms to update data and to generate local disaster risk knowledge, enabling local actors to access and exchange risk-related information	/		
	12	Make sure that risk information is widely communicated and available to all stakeholders, in easy language and a usable format, aligned with the information needed by the OCD, so that risk information is factored in all decision-making processes	/		
Thematic Area:		Disaster Prevention and Mitigation	Yes	No	
Outcome 3: Increased structural integrity of housing, building and critical infrastructure Outcome 8: Disaster Resilient Human Settlements	13	Update existing zoning, land-use and building regulation integrating risk information as to avoid generation of new risks, reduce current ones and enhance resilience based on up-to-date local information	/		included in the CLUP updating
	14	Ensure suitable land for different urban needs (residential, commercial, industrial, recreational, etc.) and adequate housing (in terms of size, quality and location)	/		included in the CLUP updating
	15	Plan and make sure that different land uses receive appropriate infrastructure and services	/		included in the CLUP updating
	16	Manage urban development in risk-prone areas (e.g., floodplains, slopes and coastal areas) and enforce regulations with appropriate sectoral consultations and factoring in risk information	/		included in the CLUP updating
	17	Anticipate urban and environmental changes and plan for the short, medium and long-term	/		included in the CLUP updating



Thematic Area:		Disaster Prevention and Mitigation	Yes	No	
Outcome 6: Natural resources and ecosystem integrity are improved and sustained	18	Identify local ecosystems and understand their role in reducing disaster impacts (e.g., forest cover, slope stabilization, flood protection and enhancement of water quality, food supply stability, etc.) and their contribution to climate change mitigation (within city, municipality, and the surrounding region)	/		included in the LCCAP
	19	Capacitate LDCs, LDRRMCs in the integration of ecosystem management and restoration and environmental policies in crafting local development plans, budget and policies responding to the results of risk information produced	/		included in the LCCAP
	20	Support landscape-wide actions or inter-LGU alliances (e.g., WQMA, River Basin Alliances, Manila Bay Mandamus Agencies through OPMBCS) to formulate action plans, policies, and budget appropriately responding to risk information produced by Output 1.1 and LGUs & community-based risk assessments.	/		only Panglao is designated as WQMA
	21	• Have updated information on natural ecosystems and their current and potential uses. Consider multiple information sources	/		included in the CRM plans, watershed mgt plans, PDPFP
Thematic Area:		Disaster Prevention and Mitigation, Disaster Preparedness	Yes	No	
Outcome 2: Implemented risk-centered national, sub-national, and sectoral policies, plans, and budget Outcome 10: Increased institutional capacities of National and Local DRRM Councils and Offices Outcome 11: Strengthened partnership and coordination among	22	Ensure disaster risk governance is a key component of the LGU's vision and/ or strategic development plan of the P/M/C, recognizing the relevance of participatory and inclusive mechanisms for DRR and resilience	/		DRRM PLAN REVIEW EVERY YEAR
	23	Discuss and agree on the levels of disaster risk that are acceptable to your LGU. Revise them over time	/		
	24	Establish a single point of coordination (focal point/government office) which is accepted by all actors and with strong leadership, political support (e.g. from the highest elected	/		



all key actors and stakeholders		level) and resources (human and financial)			
	25	Ensure that all departments in the local government understand the importance of DRR and resilience and how they relate to their everyday work and to overall R/P/C/M/Barangay development goals	/		
	26	Define clear roles and responsibilities among LGU staff and decision makers, but also between civil society and the private sector, so that all stakeholders contribute to DRR and resilience	/		
	27	Build up alliances and collaboration processes horizontally (across sectors and actors within the LGU and with neighboring cities) and vertically (across different political-administrative levels)	/		
	28	Have a clear operational framework to make collaboration possible	/		
	29	Approve codes and ordinances or revise existing ones to integrate resilience attributes	/		
	30	Have in place reporting mechanisms for all stakeholders that collect/process/ consolidate key information	/		
Thematic Area:		Disaster Preparedness	Yes	No	
Outcome 10: Increased institutional capacities of National and Local DRRM Councils and Offices	31	Identify local capacities among different actors and agree on division of responsibilities. Secure effective communication so everyone knows "who does what"	/		PDRRMC, BALDRRMO
	32	Strengthen local capacities to better understand the relevance of integrated responses, linking DRRM to climate change and sustainable development	/		
	33	Develop capacities and local know-how via training activities and knowledge exchange (within your P/C/M, with other P/C/M, with the private sector, etc.)	/		
	34	Develop a portfolio of project proposals that address different issues in your LGU and which are	/		with JICA



		ready for submitting to different funding opportunities			
	35	Share information and knowledge; work towards guaranteeing access and interoperability	/		
Thematic Area:		Disaster Prevention and Mitigation and Disaster Preparedness	Yes	No	
Outcome 7: Disaster-resilient livelihoods and businesses Outcome 10: Increased institutional capacities of National and Local DRRM Councils and Offices Outcome 11: Strengthened partnership and coordination among all key actors and stakeholders	36	Work with local actors to take into account their views/opinions on different development alternatives	/		with BALDRRMO, PDRRMC
	37	Have secure mechanisms for participation in planning, implementation and monitoring and evaluation processes	/		
	38	Support the work of community-based organizations and local NGOs (e.g., from work on housing and water and sanitation to specific emergency response)	/		
	39	Target different groups and/or sectors, such as businesses and industries, schools, professional associations, CSOs, volunteers and responders, etc.	/		with MOA/MOU and letter of commitments from respective orgs
Thematic Area:		Disaster Prevention and Mitigation	Yes	No	
Outcome 6: Natural resources and ecosystem integrity are improved and sustained	40	Ensure appropriate legislation to safeguard ecosystems and their protective functions, including funding schemes for multiple uses and collaborative conservation	/		
	41	Develop programmes to ensure all citizens understand the protective role of ecosystems (among other services) (i.e., Bantay Dagat)	/		Coastal Law Enforcement Council (CLEC)
	42	Consider green and blue infrastructure or nature-based solutions to enhance local resilience (e.g., plant boxes, rainwater harvesting, urban canopy, green parking, land conservation, protection of wetlands, estero ways preservation, river-basin management, etc.)	/		
	43	Work in collaboration with neighboring LGU and broader administrative levels (e.g., region or basin) to safeguard ecosystems and their protective functions	/		island-wide
	44	Work in collaboration with CSOs to align their advocacies and the thrust of local governance in the safeguarding of ecosystems.	/		



	45	Ensure that activities of sectoral plans in communities enable environmental safeguards to reduce effects of climate change	/		
	46	In partnership with NGAs, CSOs, and guided by the risk information, ensure investments and actions in sectoral plans contribute to environmental protection and does not exacerbate the vulnerability of communities	/		embedded in the local plans of the MLGUs such as CDP, CLUP
Thematic Area:		Disaster Prevention and Mitigation	Yes	No	
Outcome 3: Increased structural integrity of housing, building and critical infrastructure	47	Assess if current infrastructure is adequately designed, built and maintained to respond to current and future risk scenarios	/		adherence to national bldg. code, no build zone, conducts infra-audit
	48	Invest on priority infrastructures	/		Build Back Better
	49	Implement risk-sensitive development-based on standard guidelines (e.g., building code, zoning ordinances, etc.)	/		
	50	Have processes in place to ensure operability of critical infrastructure in the event of acute shocks or stresses (e.g., earthquakes and disease outbreaks). Have spare capacity (e.g., redundancy) to cope with a combination of risks	/		conducts structural analysis for 2-storey and up bldgs., traffic analysis for roads/bridges, has Bohol Tripartite Agreement
	51	Ensure that service providers understand disaster risk and the role of infrastructure in reducing current and future risks	/		
Thematic Area:		Disaster Prevention and Mitigation	Yes	No	
Outcome 2: Implemented risk-centered national, sub-national, and sectoral policies, plans, and budget Outcome 5: Communities have access to effective, responsive and inclusive social protection, risk financing, and insurance	52	Work on financial planning and definition of priorities to ensure that actions to build resilience receive support	/		budget hearing, assessments
	53	Earmark an annual budget for DRR and resilience – it can be distributed between different offices/sectors	/		
	54	Develop an inventory of financing mechanisms and potential sources	/		
	55	Ensure adequate financial support to vulnerable groups (e.g., via FbF, social protection, microfinance, etc.)	/		



mechanisms	56	Ensure that funds invested in response and recovery also include 'building back better' and pursue sustainable development	/		
Thematic Area:		Disaster Prevention and Mitigation and Disaster Preparedness	Yes	No	
<p>Outcome 4: Institutionalized timely, responsive, context-and culture-specific early warning systems, reaching the last mile</p> <p>Outcome 9: Enhanced risk awareness and risk-informed decisions and actions of governments and communities</p> <p>Outcome 12: Implemented comprehensive and mutually-reinforcing national and local preparedness and response plans, policies, and system</p> <p>Outcome 13: Well-established disaster response operations with well-equipped workforce and volunteers</p> <p>Outcome 14: Appropriate early actions are provided to communities</p> <p>Outcome 15: Accurate, reliable and timely information management</p> <p>Outcome 16: Affected communities are provided with</p>	57	Map out location of stakeholders, focusing on GIDAs and vulnerable populations (e.g., living beside fault lines or regular typhoon paths)	/		
	58	Procurement, installation and maintenance of equipment and facilities for early warning systems (Technical Assistance from DOST-PAGASA, DOST-PHIVOLCS)	/		with TOCONET, DOST
	59	Have emergency plans/protocols in place with clearly defined roles and responsibilities for all local actors. Establish coordination mechanisms and assign resources where needed	/		DRRM PLANS, provincial and MLGU level
	60	Validate contingency plans/protocols with all local actors	/		updating; conduct of tabletop simulations
	61	Communicate emergency plans/protocols and test them periodically (e.g., design regular drills according to type of emergency and vulnerable sector) and update if necessary	/		National Simultaneous Earthquake Drill (NSED)
	62	Have early warning systems (EWS) broadcasted to all citizens for effective and quick response through the conduct of Pre-Disaster Risk Assessments	/		NDRRMC, TaRSIER 117 text blast and system check (water and dam levels)
	63	Ensure availability of equipment and supplies	/		
	64	Assess and evaluate response capacity to continuously improve it	/		
65	Maintain loss and damage database containing sex, disability, and age-disaggregated data	/		needs updating - Rapid Disaster Assessment and Needs Analysis (RDANA)	



gender-responsive, and conflict- and culturally-sensitive basic necessities and services Outcome 17: Implemented an integrated system for early recovery	66	Have policy on voluntary, pre-emptive and forced or mandatory evacuation	/		Provincial Ordinance No. 2021-014: Prescribing the Guidelines in the Implementation of Pre-emptive or forced evacuation in the province of Bohol as a resort when a threat or hazard that can cause disaster or emergency is about to occur and danger of loss of lives and property becomes imminent.
Thematic Area:		Disaster Recovery and Rehabilitation	Yes	No	
Outcome 18: Clear policy directions for rehabilitation and recovery Outcome 19: Sustainable and socially-inclusive income sources for households are made available and stability of economic activities is restored Outcome 20: Agricultural production is restored or increased and support services for farmers, fisher folks, and laborers are made accessible Outcome 21: Affected families and individuals have access to: (a) affordable disaster-resilient housing that are located in safe zones where social	67	With capacitated personnel at all levels (P/C/M/Barangay) in post-disaster damage and needs assessment and rehabilitation and recovery planning	/		Barangay Emergency Management Trainings (BEMT) conducted over 900 barangays out of 1109
	68	Have sex and age disaggregated data (exposure, damage and losses)	/		partial (from OPSWD and PHO); BHWs conduct quarterly surveys in puroks
	69	Have PDNA	/		underwent training but no actual PDNA conducted
	70	Conduct rehabilitation and recovery planning based on the post disaster needs assessment	/		done during the 2013 EQ
	71	Have a rehabilitation and recovery Plan based on PDNA with proposed budgetary requirements	/		have post EQ rehab & recovery plan with budgetary requirements but not based on PDNA



services and public facilities are available; or (b) financing assistance to rebuild their houses in areas that are declared as safe zones. Outcome 22: Affected individuals, families, and communities have access to responsive, appropriate and adequate education, health, and social protection services Outcome 23: Disaster resilient standards in infrastructure are observed during rehabilitation and recovery	72	Rehabilitation and recovery measures should reduce existing risk and prevent the creation of new risk	/		included in the policy measures at PDPFP and in DRRM Plan
	73	Consider green and blue infrastructure or nature-based solutions to enhance local resilience	/		found in the policy measures of the infra plan, PDPFP, CLUP



Annex 2: Bohol Province Ongoing, Planned Policies, and Activities

Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
LCCAP 2017-2023	ENERGY					
	individual households can make use of solar lamps, generators, and batteries as source of energies at home			X		
	Policy development in the promotion of renewable energy, solar energy					X
	WATER SUPPLY: Increasing number of households with access to potable water supply				X	X
	use of water tankers, bottled water, tapping ground water sources from the municipalities, i.e. Corella to Tagbilaran City and Panglao Island				x	
	capturing surface water from the seven major watersheds in the province (from Bohol Integrated Water Master Plan)					x
	Cloud seeding and rainwater harvesting			Cloud seeding every year, as needed, continuing; for long droughts; depends on agricultural	X	X



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
			assessment; status of dams NIA [Malinao, Zamora, Capayas, Talibon) Rainwater harvesting (existing rainwater collectors in island and coastal barangays			
	In case of disruption of drinking water supply, boiling/chlorination of surface water can be done		ongoing	x		
	The latest development in Bohol is to adapt the small water impounding initiatives (Small farm reservoir / SFR) to the farmers which can even provide water during drought with an area of 2 hectares or less depending on the size of the reservoir of impounding	•	<ul style="list-style-type: none"> • ongoing c/o OPA, for expansion • Existing 3 units of solar-powered potable water desalination systems + 5 units for procurement (there are many island barangays in need of 	x	x	x



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
			potable water) <ul style="list-style-type: none"> • Purchase of mobile water treatment units 			
	Establishment of model fields or farm in maximizing run-off water and catchment (proposed)					
	(Cistern-type) roof top water harvesting to be made mandatory to deal with water stress due to anticipated increasing temperatures and decreasing precipitation For PPAs: to include water harvesting for other municipal buildings; in Bohol recovery plan, state-of-the art ECs per municipality		Ongoing c/o DPWH, for all school buildings; existing units for some municipal buildings)	x		
	LAND (AGRICULTURE)					
	Interventions on natural farming methods (continuing, regular program) and with appropriate technology and integration of DRR-CCA plans thru capacity building and IEC on the use of organic farming system e.g provision of drought or flood and saline tolerant or resistant crops and seeds that could withstand La Nina and El Nino; mulching and used of organic inputs i.e vermi-culture/organic fertilizers and bio-pesticides			x	x	x



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	Promotion of organic aquaculture and use of high resistant freshwater species (continuing, regular program)			x	x	x
	Integration of agro-forestry to agricultural crops and livestock (continuing, regular program)			x	x	x
	Adopt crops and livestock insurance system (continuing, regular program)			x	x	x
	Adopt backyard farming for added household food security; urban agriculture (continuing, regular program)			x	x	x
Bohol Climate Emergency Response Roadmap 2021-2030 (to support small islands and coastal communities vulnerable to tidal floods and sea level rise)	PILLAR 1. ENHANCING ACCESSIBILITY					
	MEASURE 1. ENSURE SAFE SEA TRANSPORT FOR EMERGENCY AND REGULAR TRANSPORT SERVICES FOR THE PUBLIC					
	Provide life vests in every home or per vessel					
	Push for ordinance requiring wearing of life vest for all sea travel For PPAs: For consideration under Prevention and Mitigation			X		
	MEASURE 3. GIVE ACCESS TO COMMUNICATION GADGETS					



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	Request telecom companies to put up cell sites in strategic areas		ongoing			
	Equip all municipal LGUs with satellite phones, and barangays with other important communication gadgets (e.g., handheld radios) – funded by LGUs or external support, if funds are available			X	X	X
	PILLAR 2. HUMAN SECURITY					
	MEASURE 1. CAREFULLY CONSIDER THE CARRYING CAPACITY OF THE ISLAND AND OTHER BASELINES TO SERVE AS BASIS OF INTERVENTIONS, PARTICULARLY INFRASTRUCTURE DEVELOPMENT					
	Regulate infrastructure building on top of sinkhole areas		Ongoing – 2/3 of Bohol with vast sink hole areas; province to study, component LGU to regulate (zoning ordinance and enforcement)	X	X	X
	MEASURE 2. INCREASE COMMUNITY PREPAREDNESS AGAINST EVERY HAZARD					
	Designate an evacuation center for island dwellers within the island and on the mainland. Ensure that these are not located in hazard-prone areas		on-going among LGUs; resettlement is responsibility of city/municipal LGUs	X		



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	Establish hazard-based EWS in the island communities (c/o LGUs)			X	X	X
	Have contingency plans, including evacuation plans for island dwellers	done already; led by city/municipal LGUs				
	Research to determine potential impacts of sea-level rise	done already by Manila Observatory in Tubigon's island barangays, could be applied to other island barangays in other municipalities		X		
	Request MGB to conduct an evaluation of all island communities for a more detailed assessment (sinkholes)	Calape, Panggangan Island		X	X	
	Improve the design of all public schools to enhance resilience in allowable areas <i>Note: construction in island communities identified as no-build zones discouraged; there are LGUs with no resettlement sites concern: there are LGUs that do not enforce their zoning ordinance (PLGU could only guide)</i>					
	Construct multi-purpose covered courts and evacuation centers in "allowable areas"					
	MEASURE 3. PROVIDE BASIC COMMUNITY SERVICES					
	Provide basic medical supplies and services (medicines, medical equipment, etc.)			X	X	X



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	<i>Note: integrate DRRM-H in the LDRRMP (as advised by the DILG); take advantage of the Mandanas ruling to allot local funds for DRRM-H</i>					
	Provide sea emergency vessel (sea ambulance); ensure that mechanism for maintenance/repair is installed	DOH provided two units of sea ambulance but these were poorly maintained		X	X	
	Have food banks/food reserves ready for potential food relief (Continuing)			X	X	X
	MEASURE 4. ESTABLISH COMMUNITY-BASED EARLY WARNING SYSTEMS AND PROTOCOLS					
	Install early warning systems and monitoring devices (to be included in the LDRRMP); with existing PAGASA warning system based on data from radar, rain gauges (installed in Loboc and Inabangga)			X	X	
	Have contingency plans ready, organized by hazard, by island barangay (continuing for tsunami CP: Valencia and Duero)			X	X	
	Train communities on contingency plans (c/o C/MLGUs)					
	MEASURE 5. SET UP APPROPRIATE INFRASTRUCTURE AND NATURE-BASED SOLUTIONS BASED ON SOUND RESEARCH.					
	Construct seawalls, complete the existing ones (subject to feasibility) c/o DPWH			X	X	X



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	Plant more mangroves (subject to study)		ongoing	X	X	X
	Build evacuation centers. (Subject to study. Good design and water capture capability must be integrated in the design.)					
	Acquisition of renewable energy systems to power essential infrastructures: for water systems, ongoing rehabilitation of hydro-electric power plants in Sevilla, Balilihan, Loboc c/o NDRRMF For adoption in the LDRRMP)			X	X	X
	MEASURE 6. SET UP APPROPRIATE INFRASTRUCTURE AND NATURE-BASED SOLUTIONS BASED ON SOUND RESEARCH					
	Promotion of renewable energy use in the islands; with feasibility study in the southern part (Ubay-windmill and solar; Panglao-windmill, Jagna-windmill)					
	PILLAR 3. WATER SECURITY					
	MEASURE 1. IMPROVE ACCESS TO SAFE WATER					
	Build rainwater harvesting tanks and structures					
	Design community facilities with water storage capacities					
	Protect and inspect/test water wells (i.e. sealed, fenced) to ensure water does not become contaminated after a disaster (on-going)					
	MEASURE 3. ASSESS AND DESIGN ISLAND'S					



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	GROUNDWATER RESOURCES PROTECTION					
	Plan for groundwater protection from salt water intrusion With provincial ordinance, need to ensure full enforcement					
	PILLAR 4: FOOD SECURITY AND INCOMES					
	MEASURE 2. DEVELOP APPROPRIATE ALTERNATIVE LIVELIHOOD / ENTERPRISE DEVELOPMENT PLANS FOR ALL ISLAND BARANGAYS					
	For farm areas affected by saltwater intrusion, consider converting to fishponds (no data, no local study, for confirmation with DA and BFAR if they have a study)					
	Have a typhoon/storm surge early warning system/dissemination protocol for island livelihoods (e.g., fish cages, seaweed farming)					
	MEASURE 3. ESTABLISH SOCIAL PROTECTION MEASURES AGAINST LOSSES AND DAMAGES BROUGHT ABOUT BY CLIMATE HAZARDS.					
	Place insurance coverage of crops, animals, common facilities, fishing boats/gears, guso farms, and homes (ongoing)					
	Set up climate information services for agriculture and fisheries as early warning for the sector	PAGASA already has an existing information system; LGU could monitor				



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
		and disseminate information to farmers				
	-Prioritize islanders in cash transfers program		c/o DSWD/OPSWD – ongoing (after a disaster)			
	PILLAR 6. KNOWLEDGE MANAGEMENT					
	MEASURE 1. INTENSIFY IEC ON CLIMATE CHANGE, SEA LEVEL RISE, AND EARLY WARNING RISK INFORMATION.					
	Establish IEC on CC and risk management solutions	DENR, LGUs have published and distributed materials; DPWH has installed markers				
	Create IEC on nature-based solutions to CC, importance of biodiversity		DENR, BEMO does IEC for coastal communities			
	Gather and update age, disability, and sex-disaggregated data on the population impacted by climate change (ensure inclusion of vulnerable groups: senior citizens, children, pregnant women, persons with disability, solo parents, indigenous peoples, etc.)					
PDPFP	Policies and Plans					
	P&M: DRRM/CCA is one of the components of Bohol's overall development framework Three pillars of development					x



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P&M: Development, enactment, and implementation of Ecological Solid Waste Management (ESWM) Policy in 8 LGUs					x
	P&M: Development, enactment and implementation of DRRM-CCA ordinances (ordinance / policies for the reduction of emissions of greenhouse gases, reversion of abandoned fishponds back to mangroves, water conservation, incentives for use of reusable bags/ biodegradable bags, incentives for use of climate-smart technologies/ energy efficiency in buildings, agriculture, and industries, build up restrictions in hazard-prone areas, protection of critical facilities, etc.) (Continuing)			x	x	x
	P&M: Strict implementation and enforcement of laws, policies & Fire Safety Regulations; fire Safety Inspection among public and private establishments, institutions and buildings (Continuing)			x	x	x
	P&M: Review / updating of the all-hazard Contingency Plan for the Province of Bohol			for updating		
	P&M: Technical assistance in mainstreaming DRR-CC in the updating of CLUPs, CDPs of covered cities/municipalities (Updating)			for updating		



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P&M: Assistance to barangay and purok planning integrating DRRM-CCA strategies (c/o C/MLGUs)					
	P&M: Review and updating of the LDRRM and Contingency Plans of covered cities and municipalities	Done already				
	P&M: Contingency planning at the barangay level (municipal level only)					
	P&M: Formulation of a Disaster Response Operations Manual (DROM) (for inclusion in the LDRRMP)					
	Research, Risk Assessment, and Data Base Development/ Management (for inclusion in the LDRRMP)					
	P&M: Provincial-wide geohazard survey & assessment (Vulnerability Risk Assessment) (for updating)					
	P&M: Coastal geohazard & impact of climate change field mapping & survey (part of the updating)					
	P&M: Conduct of workshop for the updating of databases on hazard/risks in the LGUs or barangays (c/o C/MLGUs with the guidance of province)					



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P&M: Conduct feasibility study of the Bohol Comprehensive Integrated Flood and Drainage System Master Plan in province-wide (with DPWH)					
	P&M: Provincewide organization, strengthening and setting-up of Database for community disaster volunteers (for updating; for accreditation by OCD, with guidelines already)					
	Early Warning Systems (for flooding)			x		
	P&M: Establishment of early warning system in all municipalities of the Province		ongoing for flood, landslide not yet conducted			
	P&M: Development of Early warning System (EWS) in Loboc Basin, Inabanga Basin, Abatan River, and Tagbuani River	installed				
	P&M: Enhancement of Early Warning System for Livestock (Warning dissemination to livestock farmers only)					
	P&M: Installation of hazard warning signs Early warning system components: risk knowledge, monitoring and warning service, dissemination/communication, response capability					
	Structural Measures					



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P&M: Construction of resilient and standard-compliant evacuation centers in each of the 3 districts of Bohol	Ubay, Tagbilaran, Tubigon, Albur, Loay) - COPLETED				
	P&M: Improvement and retrofitting of existing government structures and facilities in Tagbilaran City	Provincial highways and bridges, national highways and bridges rehabilitated/retr ofitted; old capitol and churches retrofitted by the National Historical Institute, schools retrofitted by Provincial School Board/DepEd				
	P&M: Construction/Maintenance of Flood Mitigation Structures and Drainage Systems in District 2	done (Inabanga, Dagohoy, etc.)/ongoing (Ipil River, Buenavista)				
	P&M: Construction and maintenance of flood control/seawall protection in District 3	Loay, Garcia, Jagna constructed;	Lila ongoing			
	P&M: Construction of Bohol Northeast Basin Multi-Purpose Dam Project		Ongoing in Ubay			
	P&M: Enhancement of Malinao Dam and other Irrigation Facilities	done				



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P&M: Construction communal irrigation systems (CIS) and rehabilitation/ restoration of existing CIS	done				
	P&M: Construction of small reservoir impounding and irrigation projects (SRIP) in 8 municipalities:	Calape, Tubigon, Buenavista, Mabini completed				
	P&M: Construction/drilling of 2-deepwells at Tiptip and San Isidro c/o Tagbilaran City LGU					
	P&M: Establishment/use of rainwater collection					
	P&M: Construction or activation of Fire Stations in 17 municipalities	14 completed				
	P&M: Rehabilitation/ Upgrade of the Southwestern Sea Wall, (Bagongbanwa, Tubigon by 2016) -	completed				
	Measures Related to Environmental Protection and Management and Water and Food Security -					
	P&M: Mangrove planting		ongoing			
	P&M: Establishment management of new and existing Marine Protected Areas (MPA) in coastal municipalities)		ongoing (282 MPA			
	P&M: National Greening Program (rehab. of open and denuded forestland in Bohol) –		ongoing (PENRO)			
	P&M: Proposed Bohol Water and Sanitation Project (BWSP): • Bulk Water Supply Project • Water Distribution and Sanitation Project –		• with feasibility study; clustering of			



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
			water sources ongoing (8 clusters) <ul style="list-style-type: none"> ● private-led ● Coastal sewerage – with proposal 			
	P&M: Establishment of renewable energy sources as ancillary support for existing power requirements (Ubay: solar, Jagna: wind, Alicia:solar)					
	P&M: Promotion of backyard farming and urban agriculture -		ongoing			
	DRRM Institutional/Organizational Structure and Coordination					
	P: Provincewide provincial DRRM Office establishment, staffing and operation – ongoing		ongoing			
	P: Assistance to LGUs in establishing, organizing their respective emergency response units ongoing		ongoing			
	P: Establishment of Barangay/purok-based DRRM teams BDRRMC					
	P: Setting –up of Satellite TaRSIER 117 stations in various municipalities	completed				
	P: Establishment of BFP Emergency Medical Services and Special Rescue Unit Program - completed	completed				



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P: Organization of volunteer fire brigade – completed c/o LGUs	Completed c/o LGUs				
	P: Conduct of regular meetings of the PDRRMC - completed					
	P: Provincewide constant sharing of information among LDRRM offices and partners thru regular meetings, conferences, summits	BALDRRMO organized				
	P: Coordination activities with LGUs for the enactment of legislative measures promoting fire safety and prevention –	completed (yearly provincial fund allocation)				
	P: Development and implementation of hazard pay or insurance system for employees handling hazardous jobs –		lobbied for hazard pay but magna carta not yet enacted; with insurance for responders			
	Awareness Raising Initiatives					
	P: Provincewide information, education and communication (IEC)/DRRM Summit/ Fora -		ongoing			
	P: IEC on the different hazards and risks in the Barangays/ municipalities (as applicable) -		ongoing			
	P: IEC on laws governing DRRM-CCA, allocation and utilization of DRRM Fund					
	P: Conduct of information education campaign on fire prevention		ongoing			
	Community-Based Risk Assessment					
	P: Province-wide Community hazard, risk and vulnerability assessment not done					
	P: Province-wide community risk					



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	and hazard mapping not done					
	P: Preparation (by technical agencies)/updating and dissemination of risk and hazard maps at the community level updating needed			X		
	Development of a DRRM-CCA webpage within the provincial government website – to be included in the LDRRMP			X		
	P: Provincewide capacity development on DRRM		ongoing			
	P: Provincewide conduct of trainings, like Basic Life Support, Water Search and Rescue, Incident Command System, others		ongoing			
	P: Provincewide Strengthening of Bohol Association of LDRRMOs thru trainings, seminars, conferences		ongoing			
	P: Provincewide conduct of orientation and workshops on DRRM based on RA 10121 including climate change mitigation and adaptation to the different stakeholders, CSOs in DRRM		ongoing			
	P: Provincewide Forge agreements/Memorandum of Understanding or Agreements with the CSOs, LGUs, academe and other business sectors, to formalize their commitment for DRRM		ongoing			
	P: Provincewide orientations of LGUs on the activities and services provided by TaRSIER 117		ongoing			



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	P: Conduct community-based DRRM orientation/ training at the barangay/Purok/household level (Visayan version training modules)	completed; Phase 2 for inclusion in the LDRRMP				
	P: Conduct of DRRM preparedness/emergency management trainings, and drills, including training on CPR and introduction on the importance of survival kits in every household -		ongoing			
	P: Conduct of training for trainers for contingency planning –	completed with OCD as RP; ToT for province to be included in the LDRRMP				
	P: Conduct relevant trainings for the members of the Task Force Dagon – Task Group Luwas-Kinabuhi, disaster-response teams and other volunteer groups		ongoing			
	P: Trainings, seminars and workshops on DRRM to accommodation facilities and tourist land transport facilities -		ongoing			
	P: Trainings, seminars and workshops pertaining to the Principles of Carrying Capacity and Waste Management to facilities and tourist land transport facilities		Ongoing among the members of the tourism sector			
	P: Conduct of drills, simulation exercises		ongoing			
	P: Procurement of additional ambulances for the expanded TaRSIER 117 stations, hospitals and upgrading of other rescue equipment in 3 municipalities		ongoing			
	P: Acquisition of fire trucks					

Local Disaster Risk Reduction and Management Plan

Bohol Province



Plan	Output / Activities to reflect into LDRRMP	Completed	Ongoing	Short Term 2023-2025	Mid Term 2026-2028	Long Term 2029-2031
	not acquired; water trucks to be procured instead					



Annex 3: Bohol’s SWOC-PESTEL Analysis

Identification of Strengths, Weaknesses, Opportunities, and Challenges

Prevention and Mitigation

Table 1. Strengths, Weaknesses, Opportunities, and Challenges
in Prevention and Mitigation

Internal Environment	
Strengths	Weakness
<p><u>Organizational</u></p> <ul style="list-style-type: none"> • Active participation PDRRMC members chaired by the Governor • Very supportive Local Chief Executive and Legislative Members in providing a regular budget for the PDRRMO operation 	<p><u>Organizational</u></p> <ul style="list-style-type: none"> • Some PDRRMC Members lack DRRM related trainings
<p><u>Planning and Policy Development and Implementation</u></p> <ul style="list-style-type: none"> • All coastal municipalities have ICRM Plans and Ordinances and are integrated into the CLUP (30 coastal municipalities) • Presence of PDRRM and LCCAP Plans and mainstreamed to PDPFP • Bohol Island Power Development Plan (BIPDP) • Bohol Integrated Water Supply System Master Plan (BIWSSMP) • Updated Bohol Environment Code • PGBh website (governance transparency) • Presence of Provincial Development and Physical Framework Plan and other Development Plans • Updated Mandatory Local Codes (i.e., Revenue Code, Investment Code, Children’s Protection Code, Tourism-Environment Code, Bohol Arts, Heritage Code, etc.) • Operation of the Provincial Economic Enterprise Management Unit • Approved Provincial Local Road Network Development Plan • Existing African Swine Fever Ordinance • Amended EO on Bird Flu • Access to the Building Code in checking the structural integrity of buildings • Available funds for DRR/CCA policy enforcement and construction of Evacuation Centers as temporary relocation shelters for the displaced population 	<p><u>Planning and Policy Development and Implementation</u></p> <ul style="list-style-type: none"> • DRR and CCA are not yet fully integrated into local development plans and policies, as well as environmental plans, policies, and programs. • Zoning ordinances are not strictly enforced. The CLUP and CRM plans need updating • Not all municipalities have updated ICRM plans • For updating • Not all LGUs have approved the 10-yr EWS Plan: 13 LGUs



Internal Environment	
Strengths	Weakness
<p><u>Risk Assessment</u></p> <ul style="list-style-type: none"> • Availability/Updated hazard maps with a database on vulnerability, exposure, and capacity • MGB conducted an assessment of the areas heavily affected during the 7.2 M earthquake using GPR and findings and recommendations were turnover to the Provincial Government 	<p><u>Risk Assessment</u></p> <ul style="list-style-type: none"> • Need to capacitate the staff (Provincial/City/Municipal) in the updating of hazard maps and database management (vulnerability and exposure) including age-gender disaggregation of the population at risk. • Technical Capacity of PDRRM Staff needs further enhancement/improvement (ex. REDAS, GIS) • Lack of capacity to assess natural hazards in terms of frequency, intensity, and impact and analyze risk
<p><u>Linkage</u></p> <ul style="list-style-type: none"> • Established strong ties with the national agencies, private sector, and academe • PDRRM strong communication link with PAGASA, PHIVOLCS, MGB and MLGUs 	
<p><u>Early Warning Device/Technology</u></p> <ul style="list-style-type: none"> • Functional and presence of Early Warning Systems (EWS) – Development of Early Warning System for Landslides (DYNASLOPE of DOST – focus on landslides • TOCONET Korea (Loboc and Inabanga Rivers) – focus on flood forecasting • Existing Automated Rain Gauges (ARG) – Bilar, Dauis, Mabini, Talibon, and Balilihan • Partnered with A2D (Alternative to Development) – will install 15 ARGs (Inabanga, Candijay, Loboc, G. Hernandez, Anda, Albur, Cortes, Tubigon, Batuan, Ubay, Antequera, Sevilla, Loon, San Miguel, Pilar) and 4 automated weather stations (Tagbilaran, Carmen, Talibon, Pres. CP Garcia) • Conduct of Crustal Deformation Survey (GPS Survey) yearly – to detect the direction of the ground and displacement to 5 Benchmark sites: Ubay, Alicia, Lila, Tagbilaran (continues 24/7; all-year round), Inabanga • Available budget for Ground Penetrating Radar • Operational DOPPLER in Alburquerque • Existing Unmanned Seismic Station – G. Hernandez and Talibon • Existing and functional Strong Motion Sensor – Clarin, Loboc, and Jagna 	<p><u>Early Warning</u></p> <ul style="list-style-type: none"> • No scientific tools and technology in monitoring and projecting the impact of hazards



Internal Environment	
Strengths	Weakness
<ul style="list-style-type: none"> ● Existing and functional Automatic Intensity Meter – Talibon and Tagbilaran 	
<p><u>Infrastructure</u></p> <ul style="list-style-type: none"> ● On-going construction of dikes, seawalls, and among others ● Establish a protection zone to buffer the works during the construction stage ● Flood diversion channels ● Development of small water impounding affordable to the LGU (e.g., covering 2-3 hectares); especially on the rice lands ● The Provincial Government is fortunate to have many interventions on road governance reforms e.g., DOT-DPWH-PGBH ● Convergence projects; DA-WB-PGBH PRDP projects (roads, bridges, water desalination, livelihood/enterprise, seaweeds production and facilities, marine protection, slaughterhouse, Bohol dairy, virgin coconut oil facility); CMGP KALSADA; DAR-DPWH bridge projects; Bohol Earthquake Assistance (BEA) projects; Provincial Roads and Tourism Highway Development ● Completed School Buildings implemented by the Provincial Government, DepEd, and the DPWH ● Surface water development to increase water supply ● Establish road embankment protection ● Existing Water Desalination Plants in Pamilacan Island in Baclayon, Pandanon Island in Getafe, Cuaming Island in Inabanga, Cabilao Island in Loon ● Private operated sewerage plant in Dauis ● Imposition of hazard-resistant building design regulation for areas prone to hazard. ● Construct risk mitigation structures to protect important urban land use areas. ● Establish road embankment protection ● Compliance with the standard design with hazard resistance, specification, and other requirements for roads, bridges, buildings, and ports. ● Upgrading transport systems and facilities with hazard-resistant design 	<p><u>Infrastructure</u></p> <ul style="list-style-type: none"> ● Poor siting and design cause failure in the construction of critical and lifeline facilities (power and water distribution lines) ● Not properly following the policy on infrastructure which is embodied in the Municipal Zoning Ordinance ● Some roads in the province are exposed to different hazards like the ground shaking, liquefaction, rain, and earthquake-induced landslide and tsunami ● Lack of road safety devices causes a high rate of accidents on both national and local roads ● Need improvements of Drainage System of all National and Local Roads. ● Retrofitting of buildings and other structures is not properly practiced and implemented ● Encroachment of private properties such as residential houses, stores, and concrete fences in the Road-Right-Of-Way ● Weak enforcement of road easement by the MLGUs ● Absence of drainage and sewerage system
<p><u>Social Protection</u></p>	<p><u>Social Protection</u></p> <ul style="list-style-type: none"> ● Culture of the affected families are hesitant to occupy because they are not comfortable in the location due to its



Internal Environment	
Strengths	Weakness
<ul style="list-style-type: none"> • Most of the LGUs have identified relocation/resettlement sites in the approved CLUP • Safe relocation and resettlement for populations living in high-risk areas • Local enforcement of DRR/CCA measures and appropriating funds thereof • Existence of the following documents can guide in the planning of affected areas of the potential impact of climate changes and hazard risks for possible relocation and resettlement sites: a) Disaster Risk and Vulnerability Assessment for Bohol Province and b) Bohol/Municipal Hazard Maps 	<p>distance which is difficult for them to access livelihood opportunities</p> <ul style="list-style-type: none"> • Some municipalities have no shelter plans for families that will be relocated from the high-risk areas • Increasing urban population • Still high population growth rate with implications on settlement patterns and services provision • Continued growth of informal households and settlements: more settlements are seen occupying danger areas such as along riverbanks, creeks, road-right-of-way, shorelines, and waterways. • High cost of land in urban and urbanizing areas: insufficient basic infrastructures, inappropriate urban planning, and the appearance/in-flux of slum-like settlements especially along its coastal and river systems and in some parts of Bohol's protected areas • Possible displacement of the vulnerable population especially in hazardous/dangerous areas and as a consequence of the impact of climate change
<p><u>Livelihood and Business Protection</u></p> <ul style="list-style-type: none"> • Livelihood for populations living in the resettlement areas • Implementation of Small and medium-scale enterprises including capitalization to start up the business • Regular monitoring of the business enterprise and facilities to ensure the safety • Bohol Economic Development and Investment Code in the New Normal 	<p><u>Livelihood and Business Protection</u></p> <ul style="list-style-type: none"> • Low entrepreneurial mindset and skills • Less competitive business environment of some LGUs • Inadequacy of employment opportunities.
<p><u>Environmental Protection/Management</u></p> <ul style="list-style-type: none"> • Implemented Forest Management, coastal resource management, marine protected areas, and river protection • Green building structures to minimize the use of power – Municipalities adopting it (cisterns, roofing, solar-powered buildings,); some Church, Hotels, School Buildings, and Private Houses are adopting this also • River bank stabilization through greenbelts or planting of ornamental plants and deep-rooted trees • Reforestation program • Mangrove Tree Planting 	<p><u>Environmental Protection/Management</u></p> <ul style="list-style-type: none"> • Encroachment of building structures within the shorelines and riverbanks - • Weak implementation of existing ordinances and laws e.g. Water Code of the Philippines (40m for timberland, 20m for agriculture, 3m for urban areas; 20m for salvage zones in coastal areas) National Building and among others • Implementation of zoning policies (particularly the "NO BUILD ZONE") is not strictly followed as such there are still many families living along the riverbanks/waterways



Internal Environment	
Strengths	Weakness
<ul style="list-style-type: none"> ● Improve groundwater recharging system ● Local monitoring of groundwater extraction ● Ongoing efforts to obtain an ancestral domain and settlement land for Bohol's IPs 	<ul style="list-style-type: none"> ● Soil erosion in upland areas and river banks, forest denudation, siltation of river banks ● Recurrence of Red Tide ● Unregulated water use: no water permits in the extraction of groundwater
<p><u>Food Security</u></p> <ul style="list-style-type: none"> ● Presence of early warning systems for agriculture and fisheries ● Financial services and micro-insurance for farmers, fishers, livestock producers ● Promotion of urban agriculture and natural farming system ● ART 160 and ART 120 ● Backyard farming for added household food security insurance system ● Use of natural farming methods ● Promotion of Organic farming practices ● Bohol Organic Agriculture Technology Center ● Strict implementation of Provincial/ Municipal Ordinances (e.g. Non-burning of rice straws, Organic Code, Environment Code) 	<p><u>Food Security</u></p> <ul style="list-style-type: none"> ● Low agriculture and fishery productivity ● Depletion of soil fertility due to excessive inorganic farming practices ● Decreased area for agricultural use due to exposure to hazards
<p><u>Cultural Heritage</u></p> <ul style="list-style-type: none"> ● Bohol Arts and Culture Heritage (BACH) Code ● BACH Council (Provincial Ordinance No. 2001-017) ● Center For Culture and Arts Development (CCAD) Office within the Provincial Government of Bohol (Provincial Ordinance No. 2000-031): Among them are the following: <ul style="list-style-type: none"> > 9 Declared National Cultural Treasures > 5 Declared Important Cultural Properties > 6 Declared National Historical Landmarks > 2 Declared National Heritage Houses > 2 Declared Cultural Heritage Areas 	<p><u>Cultural Heritage</u></p> <ul style="list-style-type: none"> ● Cultural heritage is affected by primary risks, that is, direct damage from the natural disaster and climate changes, and, also threatened by secondary risks that arise during recovery and reconstruction

External Environment	
Opportunities	Challenges
<p><u>Political</u></p> <ul style="list-style-type: none"> ● Implementation of Mandanas-Garcia Law ● Convergence from NGAs (DPWH, DSWD, DOST, DOT, DILG, etc.) for technical and financial support 	<p><u>Political</u></p> <ul style="list-style-type: none"> ● Implementation of the Devolution Transition Plan
<p><u>Economic and Infrastructure</u></p>	



External Environment	
Opportunities	Challenges
<ul style="list-style-type: none"> ● Intensified/ heightened awareness of DRR CCA coming from national and global organizations/ agencies ● Presence of funding donors (foreign, national, and Private) 	
<p><u>Linkage</u></p> <ul style="list-style-type: none"> ● External funds (from the National Government and ODA) are available and can be accessed ● Technical assistance and expertise for reconstruction/ improvement/rehab. of cultural properties/assets are available ● Strong link with cultural agencies such as NCIP, NCCA/ National Museum, NHIP, and other cultural groups 	
<p><u>Technological</u></p> <ul style="list-style-type: none"> ● Access to state-of-the-art technology (communications, warning systems, etc.) ● Partnership with external institutions for science, research, and technology to the national, foreign, and private sector 	<p><u>Technological</u></p> <ul style="list-style-type: none"> ● Unavailability of technical experts for the conduct of vulnerability assessment
<p><u>Environmental Policies</u></p> <ul style="list-style-type: none"> ● PD 856 - Sanitation Code of the Philippines ● RA 9003 - Ecological Solid Waste Management Act of 2000 ● RA 9275 - Philippine Clean Water Act of 2004 ● 	<p><u>Environmental Policies</u></p> <ul style="list-style-type: none"> ● Presence of a mining area near the watershed area ● Climate change (changing rainfall patterns, rising temperature, frequency of typhoons) ● Pests and diseases

Disaster Preparedness

Table 2. Strengths, Weaknesses, Opportunities, and Challenges in Disaster Preparedness

INTERNAL ENVIRONMENT	
Strengths (Internal Analysis)	Weaknesses (Internal Analysis)
<p><u>Capacity Development</u></p> <ul style="list-style-type: none"> ● Conduct drills, and training on disaster preparedness ● Some of the barangays had provided orientation and training to BDRRMCs ● Well-trained PDDRMO personnel with high-tech equipment and facilities with international standards ● Capable to conduct training in the use of QGIS software 	



INTERNAL ENVIRONMENT	
Strengths (Internal Analysis)	Weaknesses (Internal Analysis)
<ul style="list-style-type: none"> • Visayan/Boholano version of DRR-CCA Training modules 	
<p><u>IEC</u></p> <ul style="list-style-type: none"> • Use of information platforms to disseminate accurate risk information to the communities • Readily available Bohol Hazard Profile and Vulnerability Assessment Report 	
<p><u>Information Technology</u></p> <ul style="list-style-type: none"> • A well-maintained network of computers, servers, and equipment, with a file backup system • Budget support for upgrades, and maintenance • PPDO local network domain established with network shared resources • Free Open-Source Software available for IT Infrastructure and Workstations Systems and Applications • Strong Internet connection provided by PLDT through BICTO • PPDO Website established for general information and data sharing • Geographic Information System • Personnel trained and able to operate basic GIS • Free Open-Source Software (QGIS) is available and installed in every PPDO computer • Thematic and Hazard map themes provided by concerned national agencies • Computer system and Internet connection sufficient in GIS operations • Online Geo-Database under development as a platform for collaborative GIS data build-up and sharing 	<p><u>Information Technology</u></p> <ul style="list-style-type: none"> • Aging computers run slow and can hamper productivity • Workstations are mostly running on pirated systems and productivity suite • Unstable power supply cause work stoppage and damages computer components • Very few workstations have power backup systems, and if any, are way past their serviceable life and failing • Occurrence of Internet connectivity failures due to Service Provider faults • Only basic GIS operation capabilities • Some operations may well be performed on proprietary software which is not available • Overwhelmed by client demands • No time to update training modules, and conduct training due to heavy workloads • Discrepancies and inaccuracies in some official data (from national agencies) • Need updates on old and perhaps obsolete thematic data
<p><u>Operations</u></p> <ul style="list-style-type: none"> • Upgrading of evacuations centers with complete sanitation/hygiene facilities, standby power, water, and food packs • Regular maintenance of rescue facilities and equipment • Very efficient and effective TARSIER 117 with sub-office to other municipalities • Presence of PDRRMO inter-cluster coordination • Readily available frontliners/responders services (Health, PDRRMO, DSWD, OPSWD, PNP, BFP, etc) 	



INTERNAL ENVIRONMENT	
Strengths (Internal Analysis)	Weaknesses (Internal Analysis)
<p><u>DRRM in Education</u></p> <ul style="list-style-type: none"> Disaster Risk Reduction Management is mainstreamed in the public school's curriculum 	
	<p><u>Social</u></p> <ul style="list-style-type: none"> Lack of family knowledge on the preparedness
<p><u>Environmental Protection and Management</u></p> <ul style="list-style-type: none"> Existing Policy on the 20-meter salvage zone (no build zone along salvage area) throughout the coastal municipalities designated as shore/environmental protection 	<p><u>Environmental Protection and Management</u></p> <ul style="list-style-type: none"> Non-implementation of the 3 (urban) 20 (agricultural), 40 (forestland and riverbanks)

EXTERNAL ENVIRONMENT	
Opportunities	Challenges
<p><u>Political (Governance)</u></p> <ul style="list-style-type: none"> Continued support from partner agencies (national: DILG, OCD, DPWH, etc. foreign and private sector) 	<p><u>Political (Governance)</u></p> <ul style="list-style-type: none"> Change of directives/ priorities of every elected official
	<p><u>Health</u></p> <ul style="list-style-type: none"> Covid-19 pandemic
<p><u>Technological</u></p> <ul style="list-style-type: none"> Use of Free Open-Source Software on Systems and Applications to reduce the cost of software and focus expenditures on hardware 	<p><u>Technological</u></p> <ul style="list-style-type: none"> Software preference may affect collaboration with other agencies Advanced GIS operations may have to be outsourced
<p><u>Legal</u></p> <ul style="list-style-type: none"> Presence of national laws e.g RA 10121, RA 7929, Water Code of the Philippines, Sanitation Code of the Philippines, Fishery Code, National Hand Use Act, and among others 	<p><u>Legal</u></p> <ul style="list-style-type: none"> Not strictly implemented and enforced



Disaster Response and Early Recovery

Table 3. Strengths, Weaknesses, Opportunities, and Challenges
in Disaster Response and Early Recovery

INTERNAL ENVIRONMENT	
Strengths	Weaknesses
<p><u>Logistics</u></p> <ul style="list-style-type: none"> • Presence of Irrigation Projects (NIS, SRIP, CIS) • Water Development Program • Port Development • Water harvesting tanks 	
<p><u>Emergency Response</u></p> <ul style="list-style-type: none"> • Organized and trained responder teams (medical, rescue and evacuation, and relief) • Provision of incentives for volunteers and responders • Availability of LDRRMC Standard Operating Procedures on disaster response 	<p><u>Emergency Response</u></p> <ul style="list-style-type: none"> • Medical and veterinary personnel during disaster response are not enough • Delayed procurement of supplies, medical equipment, and medicines • Lack of capacity to respond to subsequent disasters
EXTERNAL ENVIRONMENT	
Opportunities P-E-S-T-E-L	Threats P-E-S-T-E-L
<p><u>Linkages and Partnership</u></p> <ul style="list-style-type: none"> • Partnership with the private sector for relief operations • Assistance from the National Commission and Indigenous People to restore the dilapidated churches and government buildings • External funds (from the National Government and ODA) are available and can be accessed • Strong link with cultural agencies such as NCIP, NCCA/ National Museum, NHIP, and other cultural groups 	
<p><u>International Policies</u></p> <ul style="list-style-type: none"> • Policy on international humanitarian intervention (especially for large-scale disasters) 	



Disaster Rehabilitation and Recovery

Table 4. Strengths, Weaknesses, Opportunities, and Challenges
in Disaster Rehabilitation and Recovery

INTERNAL ENVIRONMENT	
Strengths	Weaknesses
<p><u>Livelihood and Business Development</u></p> <ul style="list-style-type: none"> • Skill training for alternative sources of livelihood • Access to financial services and micro-insurance for MSMEs to affected families 	
	<p><u>Housing and Settlements</u></p> <ul style="list-style-type: none"> • Limited funding for housing programs • Need to come up with comprehensive housing projects for displaced families
	<p><u>Infrastructure</u></p> <ul style="list-style-type: none"> • Funds allocated for the LDRRM to maintain infrastructure e.g. roads and bridges, water, and power are not sufficient
EXTERNAL ENVIRONMENT	
Opportunities P-E-S-T-E-L	Threats P-E-S-T-E-L
<p><u>Political (Governance)</u></p> <ul style="list-style-type: none"> • Support from NGAs to expedite rehabilitation and recovery programs • Approved Bohol Earthquake Assistance (BEA) Plan with funding from the national agencies 	<p><u>Political (Governance)</u></p> <ul style="list-style-type: none"> • Limited support to rehabilitate the degraded ecosystems
	<p><u>Economic and Infrastructure</u></p> <ul style="list-style-type: none"> • Absence of data on damages as no PDNA was conducted



Annex 4: DRRM Measures Per Thematic Area

Thematic Area:		Prevention and Mitigation						
Hazard	Actions specific to the province/ actions that the province can do for the component LGUs	Short Term Target (2023-2025)	PPAs	Output / Timeframe			Office/s Responsible	Partner Agencies
				2023	2024	2025		
1	ALL HAZARD	Province as lead in updating CDRA in partnership with C/MLGUs	Updating of CDRA & Hazard Maps	Risk assessment study collectively reviewed and modified based on current situation in 28 C/MLGUs	Risk assessment study collectively reviewed and modified based on current situation 20 C/MLGUs		PPDO, PDRRMO, MEO, MPDC, MENRO	OCD7, PHIVOLCS, PAG-ASA, DOST, DENR, DPWH, MGB, DHSUD
2			Review and revisit CDRA Plan & Hazard Maps					
3			Conduct necessary training/seminars					
4			Implementation & enforcement of updated CDRA					
5			Conduct On-site Survey					
6			Barangay Training on Risk Information	Integrated GIS in risk assessment and barangay profiling			PDRRMO, PPDO	OCD, MGB, MDRRMO, DILG



				Review/Updating of the eLCCAP, Contingency Plan, Risk Communication Plan, PSCP	Review/Updating of the eLCCAP, Contingency Plan, Risk Communication Plan, PSCP			PDRRMO	OCD VII
				Continued dissemination of updated LDRRM Plan, eLCCAP, Contingency Plans and other plans to all stakeholders including BALDRRMO and PDRRM Council	Conduct of review of LDRRM plans of LGUs			PDRRMO, PPDO, OPSWD	OCD VII
				Conduct of vulnerability and risk assessments provincewide in partnership with the MDRRMOs and other agencies	Conduct of capdev and IEC on the vulnerability and risk assessment results and formulation of vulnerability and updated hazard maps			PDRRMO	PPDO, C/MDRRM Os
					Conduct of workshops to contextualize the EWS with the LGUs per watershed area in coordination with BPEMO and other agencies			PDRRMO, BPEMO	C/MLGUs
					Passing of Ordinance establishing the Provincewide EWS			PDRRMO, BPEMO	C/MLGUs



					per hazard per watershed area				
					Conduct of workshops/seminars on geological and meteorological man-made hazards			PDRRMO	PAG-ASA
				Conduct inventory and mapping of heritage areas and tourism sites at risk to tsunami/storm surge	assessment of the structural integrity of heritage areas and tourism sites			PDRRMO, BPTO	DOT, C/MLGUs
				Installation of standard reflectorized early warning signages, prioritizing most hazard prone areas	Conduct IEC to support the reduction of population at risk to hazards			PDRRMO	C/MLGUs
				Partnership and collaboration with NGAs (Climate Change Commission), CSOs and the Academe in DRRM thru Memorandum of Agreement (MOA), private/business sector, CSOs, League of LDRRMOs, MPDCs, LGUs, academe, professional organizations and	Strengthened partnership with the Climate Change Commission and other relevant organizations in DRRM Memorandum of Agreements with partners			PDRRMO	



				others to formalize their commitments and mutual help during disasters				
				Conduct massive orientation and IEC on the Safety and Health Accreditation and Policy Standards and BOMRACIO for tourism-based facilities and activities	Conduct massive orientation and IEC on the Safety and Health Accreditation and Policy Standards and BOMRACIO for tourism-based facilities and activities provincewide			PDRRMO, BPTO DOT, C/MLGUs, Hotels and resorts
				Conduct of cloudseeding operations as mitigating measure for dry spell	Conduct of cloudseeding operations as mitigating measure for dry spell for the agriculture sector			OPA MAO, C/MLGUs
				Construction of operation centers/ substations cum evacuation and relief operation center in strategic municipalities in the province and vital structures for the operation of PDRRMC Command Center	Construction of TaRSIER 117 substation in Inabanga or 2nd dist town fully equipped and functional operation center serving also as mini evacuation and relief operation center in strategic municipalities in the province			PDRRMO MLGUs
				Institutionalization/ establishment of early warning and	Conduct of workshops to contextualize the			PDRRMO, BPEMO C/MLGUs



				forecasting system at prioritized watershed areas in the province and in the municipalities	EWS within the LGUs per watershed Passing of Ordinance establishing the provincewide EWS per hazard per watershed area Information dissemination at the community level on the EWS in localities and conduct of pre-disaster risk assessments/ trainings				
				Establish/update a database of human resource and their capacities, equipment, directories and location of hazards in the localities including geotagging of critical and lifeline facilities	updated and readily available database of hazard and response teams and equipment provincewide			PDRRMO, PPDO	C/MDRRM Os, C/MLGUs
				Formulation of the Disaster Response Operations Manual	Formulation of the Disaster Response Operations Manual for the PDRRMO to be adopted provincewide			PDRRMO	



7	FLOODING, TYPHOON, SEVERE WIND	Support to the reduction of population at risk to flooding, typhoon, severe wind	Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Albuquerque	Installation of Early Warning System (EWS) - All elements (risk knowledge; technical monitoring and warning service; communication and dissemination of warnings)	Clear and operational EWS			PDRRMO, BPEMO	MDRRMO, PRIVATE SECTOR, PAG-ASA	
			With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon							
8				Construction of Flood-Control Infrastructures in coordination with national agencies and other stakeholders	List of target areas/sites	Completed Detailed Engineering design	Flood control measures implemented by LGU through the assistance of the Province and DPWH		LGU (MEO, PEO)	DPWH
9				Facilitation of the implementation of Flood-Control Infrastructures						
10				Resource Mobilization (Identification of Funding Source both Internal and External Sources)						
11			Rehabilitation of existing Flood-Control Infrastructures in coordination with concerned agencies	Formulated Initial Detailed Engineering plan and design	Completed Detailed Engineering plan and design	Improved and rehabilitated Flood-Control Infrastructures	LGU (MEO, PEO)	DPWH		



12			Review the existing policies and guidelines	List of existing policies and guidelines for updating				
13			Adoption and enactment of policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)	Adoption and enactment of policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)			MENRO, MEO, MPDC, SB, MO	DENR, DPWH, DHSUD, PDRRMO?
14			Issuance of Executive Order and Sanggunian Resolutions					
15			Strict implementation of policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)		Enforced policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)			
16	Support to the reduction of agricultural areas at risk to Flooding, Typhoon, Severe Wind	Candijay (AF), Alicia, Guindulman (AF)	Introduction of climate-smart agricultural technologies	Intensify IEC to identified farmer groups/association			OPA, OPV	MLGUs, DA, NIA
		Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-Hernandez, Jagna, Sierra Bullones, Danao						
	Nipa Plantation	Cortes (nipa), Maribojoc (nipa), Loboc, Inabanga, Loay	Database on the land area of the nipa plantation				OPA, BPEMO	MLGUs



17	Fisheries	Mabini, Sevilla, Buenavista, Ubay, Bien Unido, Calape, Clarin, Talibon, Pres. CPG, Tubigon, Lila, Loon, Inabanga	Provision of climate change-resilient projects (High-Density Polyethylene (HDPE) Cages, fiberglass boats, etc. in coordination with concerned national agencies and other stakeholders	Developed a full-blown Project Proposal	Obtained partnership with NGAs and C/MLGUs for the HDPE Cages, fiberglass boats	Purchased and delivered HDPE Cages, fiberglass boats to C/MLGUs	C/MLGUs, OPA	BFAR, DA
18			Coordination with Concerned national agencies and other stakeholders					
19			Procurement and implementation of the Project Proposal					
	Livestock and Poultry	Mabini, Guindulman, Candijay, Alicia, S. Bullones, Loboc, Sikatuna, Pilar, Ubay, Calape, Loon, Cortes						
	Support to the reduction of critical facilities and lifelines at risk to Flooding, Typhoon, Severe Wind		Preparation of the Detailed Engineering design and Structural Analysis				PEO	DPWH, C/MLGUs
20	Roads and Bridges:	1st District Abatan Bridge in		Developed and approved Detailed Engineering design				



		Cortes, Camayaan Bridge in Cortes					
		2nd District Inabanga, Buenavista, Clarin, Malitbog in Dagohoy		Complete Structural analysis as basis for repair and retrofitting of roads and bridges			
		3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay, Loboc (Agape Bridge and Roads)					
21		Seawall: 1st District Baclayon (for repair) 3rd District Guindulman, Duero, Jagna, Garcia-Hernandez, Valencia, Dimiao, Lila (ongoing), Loay	Repair & retrofitting of roads, bridges, seawall			Roads and seawalls completed, upgraded and safer roads, bridges	PEO DPWH, C/MLGUs
		Support to the reduction of built-up areas at risk to Flooding, Typhoon, Severe Wind	Tagbilaran City, (Urbanizing Municipalities): Tubigon, Talibon, Ubay, Panglao, Dauis, Jagna, Loon	Inventory and mapping of all built-up areas	Database of all built-up areas	Recommend for the rehabilitation of the identified weak structures	PDRRMO, PEO, BPEMO MLGUs, DPWH



		Talibon Group of Islands Protected Landscape and Seascape: Getafe, Bien Unido, Talibon, Ubay, CPG, Tubigon, Loon	Inventory and mapping of Talibon Group of Island Protected Landscape	Database of Talibon Group of Island Protected Landscape			PDRRMO, PEO	MLGUs, DPWH
		Chocolate Hills Natural Monument: Carmen, Sagbayan, Batuan, Bilar	Inventory and mapping of Chocolate Hills Natural Monument	Database of Chocolate Hills Natural Monument			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Albuquerque-Loay-Loboc Protected Landscape / Seascape: Albuquerque, Loay, Loboc	Inventory and mapping of Albuquerque-Loay-Loboc Protected Landscape / Seascape	Geo-tagging of Albuquerque-Loay-Loboc Protected Landscape / Seascape			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Panglao Island Protected Seascape: Panglao, Dauis	Inventory and mapping of Panglao Island Protected Seascape	Geo-tagging of Panglao Island Protected Seascape			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Loboc Watershed Forest Reserve: Loboc, Bilar	Inventory and mapping of Loboc Watershed Forest Reserve	Geo-tagging of Loboc Watershed Forest Reserve			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Alejawan-Cansuhay-Anibongan River Watershed Forest Reserve: Jagna, Duero	Inventory and mapping of Alejawan-Cansuhay-Anibongan River Watershed Forest Reserve	Geo-tagging of Alejawan-Cansuhay-Anibongan River Watershed Forest Reserve			PDRRMO, PEO, BPEMO	MLGUs, DPWH



		Tubigon Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area: Tubigon	Inventory and mapping of Tubigon Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area	Geo-tagging of Tubigon Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Clarin Group of Islands Wilderness Area: Clarin	Inventory and mapping of Clarin Group of Islands Wilderness Area	Geo-tagging of Clarin Group of Islands Wilderness Area			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Calape Group of Islands Mangrove Swamp Forest Reserve and Wilderness Area: Calape	Inventory and mapping of Calape Group of Islands Mangrove Swamp Forest Reserve and Wilderness Area	Geo-tagging of Calape Group of Islands Mangrove Swamp Forest Reserve and Wilderness Area			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Cabilao Sandingan Islands, Mangrove Swamp Forest Reserve: Loon	Inventory and mapping of Cabilao Sandingan Islands, Mangrove Swamp Forest Reserve	Geo-tagging of Cabilao Sandingan Islands, Mangrove Swamp Forest Reserve			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Candijay-Anda-Mabini Mangrove Swamp Forest Reserve and Wilderness Area: Candijay, Anda, Mabini	Inventory and mapping of Candijay-Anda-Mabini Mangrove Swamp Forest Reserve and Wilderness Area	Geo-tagging of Candijay-Anda-Mabini Mangrove Swamp Forest Reserve and Wilderness Area			PDRRMO, PEO, BPEMO	MLGUs, DPWH
		Inabanga Wilderness Area and Mangrove Swamp Forest Reserve: Inabanga	Inventory and mapping of Inabanga Wilderness Area and Mangrove Swamp Forest Reserve	Geo-tagging of Inabanga Wilderness Area and Mangrove Swamp Forest Reserve			PDRRMO, PEO, BPEMO	MLGUs, DPWH



			Swamp Forest Reserve						
			President Carlos P. Garcia Mangrove Swamp Forest Reserve: Pres. CPG	Inventory and mapping of President Carlos P. Garcia Mangrove Swamp Forest Reserve	Geo-tagging of President Carlos P. Garcia Mangrove Swamp Forest Reserve			PDRRMO, PEO, BPEMO MLGUs, DPWH	
			Getafe Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area: Getafe	Inventory and mapping of Getafe Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area	Geo-tagging of Getafe Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area			PDRRMO, PEO, BPEMO MLGUs, DPWH	
			Ubay Mangrove Swamp Forest Reserve: Ubay	Inventory and mapping of Ubay Mangrove Swamp Forest Reserve	Geo-tagging of Ubay Mangrove Swamp Forest Reserve			PDRRMO, PEO, BPEMO MLGUs, DPWH	
		Support to the reduction of heritage areas and tourism sites at risk to Flooding, Typhoon, Severe Wind (For validation with NHCP)	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Daus, Inabanga, Danao, Jagna, Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Inventory and mapping of heritage areas and tourism sites	Geo-tagging of all the heritage areas and tourism sites			PDRRMO, BPTO, GO-CCAD DOT, MLGUs	
22	STORM SURGE	Support to the reduction of population at risk to storm surge	<i>Indigenous settlements (Badjao)</i>	Enactment of Ordinance on No Build Zone Areas	Provided assistance to C/MLGUs in the enactment of Ordinances	Formulation of IRRs		PDRRMO/SP	C/MLGUs
			Daus, Getafe						
			<i>Informal Settlers</i>						



23		Bien Unido, Pres. CPG, Talibon, Loay Duero, Lila, Garcia Hernandez, Jagna	LGU to identify relocation areas	Formulated relocation plan	Continued social preparation	Facilitate implementation of relocation plan	GO/PPDO	NHA
			Conduct mangrove rehabilitation activities	Established mangrove nurseries in strategic and accessible areas	Distributed mangrove seedlings and propagules	Technical assistance provided to C/MLGUs in the planting of mangroves and deployment of forest guards	BPEMO	C/MLGUs
24			Provide livelihood opportunities in the mainland	List of skills inventories		Monitoring of hired skilled workers	BEPO/PESO	DTI/DOLE/DSWD
25			Conduct job fair		Skills Matching			
26	Support to the reduction of critical facilities and lifelines at risk to storm surge		Inventory of critical facilities and lifelines	Database of all critical infrastructures and lifelines at risk to Storm Surge	Geo-tagging of critical infrastructures and lifelines	Upgraded and retrofitted critical facilities and lifelines	PDRRMO, PEO, PPDO, PHO, BPTO	DPWH, Water and Power companies, C/MLGUs, DepEd, DOH, DSWD
List of recommended critical facilities and lifelines for rehab/retrofitting								
Assess structural integrity								
Mapping								
Ongoing construction of access roads (Ubay, Talibon)			constructed access road in Ubay					
			constructed access road in Talibon					
28			Facilitate in the establishment of					



			breakwater /embankment					
	Roads and Bridges	Dauis, Baclayon, Albuquerque, Lila	Assess structural integrity	Geo-tagging of the roads and bridges in 4 MLGUs			PEO, PDRRMO	DPWH, MEO
	Water	Pres. CPG, Bien Unido, Trinidad and other coastal MLGUs	Database of all the water sources and pumping stations	Geo-tagging of the water sources and pumping stations in all coastal MLGUs			BPEDO, PDRRMO	
	Power	Pres. CPG, Ubay, Bien Unido and other coastal MLGUs	Database of all the power sources in coastal MLGUs	Geo-tagging of the power sources in all coastal MLGUs			PDRRMO, PPDO	MLGUs,
	Municipal Halls	Guindulman, Anda, Garcia-Hernandez, Jagna, Lila, and other coastal LGUs	Database of all Municipal halls in all coastal MLGUs	Geo-tagging of Municipal Halls located coastal LGUs			PDRRMO, PPDO	
	Provincial buildings and facilities	Tagbilaran City and coastal MLGUs where other Provincial facilities are located	Facilitate insurance coverage of buildings Inventory of Provincial buildings and facilities	Geo-tagging of Provincial buildings and facilities			PDRRMO, PPDO, PEO	DPWH, MLGUUs
29	Schools	Baclayon, Loay, Dimiao, Valencia, Pres. CPG, Loon, and other coastal LGUs	Database of all schools in coastal MLGUs	Geo-tagging of schools in all coastal MLGUs at risk for storm surge			PPDO, PDRRMO	Dep-Ed, MLGUs
	Churches (heritage sites)	Anda, Baclayon, Bien Unido, and other coastal LGUs	Database of all churches and heritage sites in all coastal MLGUs	Geo-tagging of churches and heritage sites in all coastal MLGUs at risk for storm surge			BPTO, PDRRMO	MLGUs, DOT, NHI, NHCP, National Museum



30	Evacuation centers	Garcia-Hernandez, Jagna, Guindulman, and other coastal LGUs	Assess existing evacuation centers	Database of all existing evacuation centers and present condition	Clustering of C/MLGUs for the establishment of evacuation centers	Evacuation centers compliant with standards	PEO, OPSWD, PDRRMO	OCD7, DSWD
31			Facilitate the establishment of compliant/resilient evacuation centers					
32	Seaports	Tagbilaran City, Loon, Alburquerque, Maribojoc	Coordination with DPWH for the Seawall Identification and Feasibility Study for C/MLGUs	Completed Feasibility Study	Constructed seawall in the identified C/MLGUs – Phase 1	Constructed seawall in the identified C/MLGUs – Phase 2	DPWH, PEO	C/MLGUs
33			Construction of seawall in the identified C/MLGUs					
	Support to the reduction of agricultural areas at risk to storm surge							
34	Fisheries		Mapping	Database of all agricultural areas	Risk map of all agricultural areas		OPA, OPV	MAO, DA
35	Agriculture		Identify relocation area for livestock and fisheries	List of safe areas for livestock and fisheries				
36		Mabini, Talibon, Bien Unido, Pres. CPG	Facilitate for crop insurance to PCIC including livestock and poultry	Approved crop insurance for farmers	Approved crop insurance for farmers			
			Facilitate for crop insurance to PCIC including livestock and poultry	Approved crop insurance for farmers	Approved crop insurance for farmers			



37	Support to the reduction of built-up areas at risk to storm surge		Assessment of structural integrity	Completed assessment report of critical buildings in			PEO, PDRRMO	DPWH, DILG, DepEd, DOH
38			Strict implementation of building code	Compliant building structure	Compliant building structure	Compliant building structure	PEO	PDRRMO
39	Microbusinesses, MSMEs, Remittance Center		LGU to identify relocation areas	List of safe relocation areas			PDRRMO, PEO	C/MLGUs. LDRRMO, MGB
		Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. Carlos P. Garcia, Valencia, Garcia-Hernandez, Ubay, Dimiao, Tagbilaran City	Coordination with DPWH for flood structure identification and Feasibility Study for the identified C/MLGUs	Completed Feasibility Study	Constructed Flood Control Structure in the identified C/MLGUs – Phase 1	Constructed Flood Control Structure in the identified C/MLGUs – Phase 2	DPWH, PEO	C/MLGUs.
40			Construction of Flood Control Structure in the identified C/MLGUs					
41			Coordination with DPWH and DENR for shoreline protection in priority C/MLGUs			Completed shoreline protection measures in priority C/MLGUs	DPWH, PEO, MEO	DENR
42			Implement shoreline protection measures					
	Support to the reduction of environmental areas at risk to storm surge							



43		River basins / Watershed	Inabanga, Trinidad	Inventory and mapping of environmental areas at risk to tsunami	Database of environmental areas at risk to tsunami	Need to identify PPAs		BPEMO, MENRO	DENR
44		Mangrove Cover	Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Assist in the establishment of nurseries for mangroves			Nurseries set-up in _ number of C/MLGUs		
45		Support to the reduction of heritage areas and tourism sites at risk to storm surge	Panglao, Dauis, Anda, Cortes, Baclayon, Loon, Maribojoc, Dauis, Alburquerque	Inventory and mapping of heritage areas and tourism sites at risk to tsunami	Database of all heritage areas and tourism sites	Database of all heritage areas and tourism sites	Database of all _% heritage areas and tourism sites	PDRRMO	PHIVOLCS, PAGASA, NI
46	Facilitate in the identification of nearest evacuation areas for tourist			List of safe evacuation areas Map and clear route of nearest and safe evacuation centers			BTO	DOT	
47	Facilitate in the establishment of an emergency communication hotline specific for foreign nationals			Clear protocol for emergency communication hotline for foreign nationals			BTO	DOT	
48	Assessment of the structural integrity of heritage areas and tourism sites			Assessment Report of heritage areas			PEO, PDRRMO	DPWH, NHI	
49	DROUGHT	Support to the reduction of critical facilities and lifelines at risk to drought	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Additional Drilling for water source	2 water drilling installed per LGU	2 water drilling installed	1 water drilling installed per LGU	PDRRMO, PPDO, PEO	DPWH, DENR, LGU



50			Construction of additional rain water collectors and reservoir Mandatory in all government own buildings.	2 units rain water collector and reservoir established /LGU (48 LGU's)	2 units rain water collector and reservoir established /LGU (48 LGU's)	2 units rain water collector and reservoir established /LGU (48 LGU's)	PDRRMO, PPDO, PEO	DPWH, DENR, LGU, AGRICULTURE, NIA
51			Conduct Feasibility study of Desalination of water facilities	Pre-determined done		Completed the study and presented the proposal for possible funding of the construction of the Desalination of water facilities to the top LGU's identified	PDRRMO, PPDO, PEO, PBO	NWRB
52			Installation of Solar powered pumps	Operational powered pumps in identified C/MLGUs				JICA, DPWH
53								
			Support to the reduction of agricultural areas at risk to drought					
54	Agricultural areas	All Agricultural Towns (45 MLGUs)	Mandatory planting of Banyan Tree, Bamboo tree	3 municipalities planted with Banyan Trees and Bamboo tree (200 seedlings)	3 municipalities planted with Banyan Trees and Bamboo tree (200 seedlings)	4 municipalities planted with Banyan Trees and Bamboo tree (200 seedlings)	PDRRMO, BEMO	DENR, MENRO, BFAR
55			Conduct Cloud seeding	Cloud seeding implemented in all Municipalities	Cloud seeding implemented in all Municipalities	Cloud seeding implemented in all Municipalities	PDRRMO,	BSWM, DA



56			Mangrove Plantation Program	Planted mangrove seedlings in all coastal towns	Planted mangrove seedlings in adaption to all coastal towns	Planted mangrove seedlings in adaption to all coastal towns	PDRRMO,	BSWM
57			Promotion of drip irrigation technologies, for selected high valued Commercial Crops (HVC)	Adopted to all 45 Agricultural Municipalities	Adopted to all 45 Agricultural Municipalities	Adopted to all 45 Agricultural Municipalities	PDRRMO,	
58			Establish Small Farm Reservoir (SFR) 480 units	16 C/MLGUS's with 10 units of SRFs	16 C/MLGUS's with 10 units each of SRFs	16 C/MLGUS's with 10 units each of SRFs	PDRRMO, OPA, MAO, PEO	NIA, DA, PSF
59			Conduct farmers field school on climate change	Farm field school established in all municipalities		All municipalities	PDRRMO, OPA, MAO, PEO	NIA, DA, PSF
60			Implement soil and water conservation measures	2 towns with soil and water conservation measures implemented	2 towns with soil and water conservation measures implemented	2 towns with soil and water conservation measures implemented		DENR, MAO, MENRO
61			Provision of drought resistant and varieties of crops	Distributed drought resistant and varieties of crops in 2 towns implemented	Distributed drought resistant and varieties of crops in 2 towns implemented	Distributed drought resistant and varieties of crops in 2 towns implemented	PDRRMO, OPA	DENR, MAO, MENRO
62			Provision of crop insurance	All Agricultural Towns (45 Municipalities)	All Agricultural Towns (45 Municipalities)	All Agricultural Towns (45 Municipalities)	PDRRMO, OPA	DENR, MAO, MENRO
	Dams, Irrigation facilities	All towns with dams, irrigation facilities	Inventory and database of the dams and irrigation	Geo-tagging of the dams and irrigations facilities			PPDO, PDRRMO, PEO	MLGUs, NIA



			Ubay, San Miguel, Pilar, Talibon (2)	facilities at risk to drought					
		Support to the reduction of environmental areas at risk to drought	7 Watershed Areas (Inabanga, Pilar, Danao, S-Bullones, Dagohoy, Loboc, Bilar, Duero G-Hernandez, San Miguel, Alicia, Candijay, Talibon, Guindulman, Pilar, Carmen, Balilihan, Catigbi-an, Batuan, Getafe, Buenavista, Clarin, Sagbayan	Database and inventory of the MLGUs comprising the 7 watershed areas	Geo-tagging of the 7 watershed areas at risk to drought			BPEMO, PDRRMO, PPDO	MLGUs,
		Support to the reduction of heritage areas and tourism sites at risk to drought	Guindulman, Candijay, Alicia, Ubay, Pilar, Danao, Mabini, San Miguel, Dagohoy, Inabanga, Talibon, Getafe, Buenavista, S-Bullones, Trinidad, Jagna, Carmen, Duero, CPG, Lila, Dimiao	Database and inventory of the MLGUs heritage areas and sites at risk to drought	Geo-tagging of the heritage areas and tourism sites at risk to drought			PDRRMO, BPTO	DOT, NHI, National Museum, MLGUs
63	RAIN-INDUCED LANDSLIDE (RIL)	Support to the reduction of population at risk to RIL	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones,	Construction of Slope protection structure	Slope protection implemented in priority C/MLGUs	Slope protection implemented in priority C/MLGUs	Slope protection implemented in priority C/MLGUs	PDRRMO, PPDO, PEO	DPWH, DENR, LGU



64		Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel		Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented		
			Tree growing project	Planted trees in the identified MLGUs Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented	Planted trees in identified C/MLGUs Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented	Planted trees in identified C/MLGUs Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel- implemented	LGU, BEMO	DPWH, DENR, DA



65			SP Ordinance for No build zone on identified RIL areas in whole Province	Approved ordinance on No build zone on identified RIL areas in whole Province			PDRRMO, SP	LGU,	
66			Conduct inventory and mapping of critical point facilities in the province	List of critical facilities with maps in 48 C/MLGUs	All municipalities	All municipalities	PDRRMO, PEO	LGU	
67	Support to the reduction of agricultural areas at risk RIL	All Agricultural Towns (45 Municipalities)	Promote farmers to practice the process of Contour Farming Technology per LGU (mandatory)	Implemented Contour Farming Technology per LGU			OPA	MAO, DA	
	TSUNAMI	Support to the reduction of population at risk to tsunami	Bien Unido, Pres. CPG, Talibon, Loay Duero, Lila, Garcia Hernandez, Jagna	LGU to identify relocation areas	Formulated relocation plan	Continued social preparation	Facilitate implementation of relocation plan	GO/PPDO	NHA
				Conduct mangrove rehabilitation activities	Established mangrove nurseries in strategic and accessible areas	Distributed mangrove seedlings and propagules	Technical assistance provided to C/MLGUs in the planting of mangroves and deployment of forest guards	BPEMO	C/MLGUs
				Provide livelihood opportunities in the mainland	List of skills inventories		Monitoring of hired skilled workers	BEPO/PESO	DTI/DOLE/ DSWD
				Conduct job fair		Skills Matching			
			Support to the reduction of critical facilities	Inventory of critical facilities and lifelines at risk to tsunami	Database of all critical facilities and lifelines at risk to tsunami	Geo-tagging of critical lifelines and facilities	Upgraded and retrofitted critical facilities and lifelines	PDRRMO, PEO, PPDo, PHO, BPTO	DPWH, Water and Power companies,



							C/MLGUs, DepEd, DOH, DSWD	
		Asses structural integrity	List of recommended critical facilities and lifelines for rehab/retrofitting					
		Mapping						
		Facilitate in the establishment of breakwater/embankment						
	Roads and Bridges	Dauis, Baclayon, Albuquerque, Lila, Guindulman, Anda, Duero	Asses structural integrity	Geo-tagging of the roads and bridges in 7 MLGUs	Recommend for the rehabilitation of identified weak structures	Upgraded and retrofitted critical facilities and lifelines	PEO, PDRRMO	DPWH, MEO, other National Government Agencies
	Water System	Pres. CPG, Bien Unido, Trinidad	Database of all the water sources and pumping stations	Geo-tagging of the water sources and pumping stations in the identified 4 MLGUs			BPEMO, PDRRMO	MLGUs, Water companies
	Power	Pres. CPG, Bien Unido, Ubay, Loon, Maribojoc,	Database of all the power sources	Geo-tagging of all the power sources in the identified 5 MLGUs			PDRRMO, PPDO	MLGUs, Power companies
	Municipal Halls	Maribojoc, All 30 coastal LGUs	Database of all the Municipal Halls in all 30 coastal MLGUs	Geo-tagging of all the Municipal Halls located in 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures	Upgraded and retrofitted critical facilities and lifelines	PEO, PDRRMO, PPDO	MEO, MLGUs, National Government Agencies



	Schools	All 30 coastal LGUs	Database of all the Schools in all 30 coastal MLGUs	Geo-tagging of all the Schools located in 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures		PPDO, PEO, PDRRMO	Dep-ED, MLGUs
	Churches	All 30 coastal LGUs	Database of all the Churches in all 30 coastal MLGUs	Geo-tagging of all the Churches located in 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures		BPTO, PDRRMO	MLGs, NHI, National Museum, other National Government Agencies
	Evacuation centers	All 30 coastal LGUs	Assess existing evacuation centers for structural integrity	Geo-tagging of all the existing evacuation centers located in the 30 coastal MLGUs	Facilitate in the establishment of compliant/resilient evacuation centers	Clustering of MLGUs for the establishment of evacuation centers compliant with standards	OPSWD, PEO, PDRRMO	MLGUs, DSWD, OCD 7, other National Government Agencies
			Database of all existing evacuation centers					
	Hospitals	All 30 coastal LGUs	Assess existing hospitals for structural integrity	Geo-tagging of all the existing hospital located in the 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures		PHO, PDRRMO, PEO	DOH, DPWH, MLGUs
			Database of all hospitals located in 30 coastal MLGUs at risk tsunami					
	Gas Station	All 30 coastal LGUs	Inventory and database of all the gas stations located in 30 coastal MLGUs with genset	Geo-tagging of all the existing hospital located in the 30 coastal MLGUs			PDRRMO	MLGUs, BPEDO



	Barangays Halls	All 30 coastal LGUs	Inventory and database of all the Barangay Halls located in 30 coastal MLGUs	Geo-tagging of all the Barangay Halls located in 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures		PDRRMO, PPDO	MLGUs, National Government Agencies
			Assess structural integrity					
	RHU	All 30 coastal LGUs	Inventory and database of all the Rural Health Units	Geo-tagging of all the Barangay Halls located in 30 coastal MLGUs	Recommend for the rehabilitation of identified weak structures		PDRRMO, PEO, PHO	MHO, DOH, MLGUs, National Government Agencies
			Assess structural integrity					
	Fire Stations	All 30 coastal LGUs	Inventory and database of all the Fire Stations	Geo—tagging of al Fire Stations located in coastal MGLUs			PDRRMO, PPDO	BFP, MLGUs, National Government Agencies
	Lying-in Clinic/Centers	All 30 coastal LGUs	Inventory and database of all the Lying-in clinics/centers	Geo-tagging of all Lying-in clinic/centers	Recommend for the rehabilitation of identified weak structures		PHO, PDRRMO	DOH, MHO, National Government Agencies
	Support to the reduction of agricultural areas at risk to tsunami							
	Fisheries	Mabini, Ubay, Talibon, Bien Unido, Pres. CPG, Calape, Candijay	Mapping	Inventory and database of all fisheries at risk to tsunami	Risk map of fisheries located in identified MLGUs		OPA, OPV	MAO, DA, MLGUs



	Poultry and Livestock	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao, Daus	Mapping	Inventory and database of all poultry and livestock at risk to tsunami	Risk map of poultry and livestock located in identified MLGUs		OPA, OPV	MAO, DA, MLGUs
	Support to the reduction of built-up areas at risk to Tsunami	Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. CPG, Valencia, Garcia-Hernandez, Ubay	Assessment of structural integrity	Completed assessment report of critical built-up areas			PEO, PDRRMO	C/MLGUs, MGB, C/MDRRMOs
	Microbusinesses, MSMEs, Remittance Center	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Alburquerque, Baclayon, Panglao, Daus	Strict implementation of building code					
			LGU to identify relocation areas	List of safe relocation sites			PDRRMO, PEO	C/MLGUs, C/MDRRMOs, MGB
			Coordination with DPWH for Flood Control Structure in the identified C/MLGUs	Completed feasibility	Construction of Flood Control Structure in the identified MLGUs-Phase 1	Construction of Flood Control Structure in the identified MLGUs- Phase 2	PEO	DPWH, MHO, C/MLGUs
			Coordination with DPWH and DENR for shoreline protection in priority C/MLGUs	Implement shoreline protection measures	Completed shoreline protection in priority C/MLGUS-Phase 1	Completed shoreline protection in priority C/MLGUS-Phase 2	PEO	DPWH, MHO, C/MLGUs
	Support to the reduction of environmental areas at risk to tsunami							



	River basins/watershed	Inabanga, Trinidad	Inventory and mapping of river basins/watersheds at risk to tsunami	Database of river basins/watersheds	Geo-tagging of identified river basins/watersheds in priority MLGUs		BPEMO, PDRRMO	MENRO, DENR, MLGUs
	Mangrove Cover	Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Assist in the establishment of nurseries for mangroves	Nurseries set-up in priority MLGUs			BPEMO, PDRRMO	MENRO, DENR, MLGUs
	Support to the reduction of heritage areas and tourism sites at risk to tsunami	Lila, Loay, Albuquerque, Baclayon, Panglao, Dauis, Anda, and all protected seascapes	Inventory and mapping of heritage areas and tourism sites at risk to tsunami	Database of all heritage areas and tourism sites in identified MLGUs	Geo-tagging of the heritage areas and tourism sites		BPTO, PDRRMO	DOT, MLGUs, NHI, other National Government Agencies
		Facilitate in the identification of nearest evacuation areas for tourist	List of safe evacuation areas				BPTO, PDRRMO	DOT, MLGUs
		Facilitate in the establishment of emergency communication hotline specific for foreign nationals	Clear protocol for emergency communication hotline				BTO	DOT
		Assess structural integrity of heritage areas and tourism sites	Assessment report of the structural integrity				PEO, PDRRMO, BPTO	DPWH, NHI, MLGUs, other National Government Agencies



		Support to the reduction of population at risk to ground shaking, liquefaction	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San Isidro, Sevilla, Antequera, Cortes, Maribojoc, Tubigon, Calape, Sikatuna, Loboc, Corella, Loay (add'l)	Enactment of Ordinance on No Build Zone Areas	Provided C/MLGUs in the enactment of Ordinances	Formulation of Implementing Rules and Regulations		PDRRMO, SP	C/MLGUs
		<i>LGUs near East Bohol Fault (epicenter at Jagna, SW propagation), and South Offshore Fault)</i>							
	EARTHQUAKE, GROUND SHAKING, LIQUEFACTION	Support to the reduction of built-up areas at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Jagna, Tagbilaran City, Valencia, Dauis, Panglao (based on form 2A DRRM Target Setting) 47 municipalities and 1 city (based on form 3A of group 2)	Support in the advocacy in the strict implementation of the National Building Code					
68				Conduct of orientation on the Bohol hazards and risk profile and impacts to structures and the strict implementation of the National Building Code	Oriented 47 municipalities and 1 city on the Bohol hazards and risk profile and impacts to structures			PDRRMO	LGU, ASEP, PICE
69									



70			Conduct of studies relating Geological Hazards in coordination with MGB, PHIVOLCS, other geo-sciences experts from academic institutions	Forged partnership with MGB, PHIVOLCS, other geo-sciences experts from academic institutions	Surveys and validation completed Presented the results and recommendations to PDRRMC Adopted recommendations for budget allocation and prioritization			
71		Tagbilaran City	Conduct of Geotechnical site surveys on built-up areas with Karst ground formation to identify Site Response and Subsidence	MOA with Tagbilaran City, PhiVolcs, MGB, and required trainings	Geotechnical site survey and map of Tagbilaran City		PDRRMO, PEO, PPDO, GO	JICA Experts, PHIVOLCS, MGB, Tagbilaran City
72	Selection of study areas			Presented the results and recommendations to PDRRMC				
73				Adopted recommendations for budget allocation and prioritization				
74		Pilot LGU	Procurement of GPR by PGBh			Site survey study of priority C/MLGUs	PDRRMO, PEO	PHIVOLCS, MGB, LGU
75	operations and data interpretation training							
76	Conduct Geotechnical site survey on pilot municipality							
	Support to the reduction of	Garcia-Hernandez, Loay,	Inventory and database of the	Geo-mapping of the agricultural			OPA, PDRRMO	DA, MAO, C/MLGUs



	agricultural areas at risk to earthquake, ground shaking, liquefaction	Jagna, Alburquerque, Tagbilaran City	agricultural areas in identified C/MLGUs	areas in identified C/MLGUs				
	Support to the reduction of critical facilities and lifelines at risk earthquake, ground shaking, liquefaction							
77	Roads and Bridges	Loay, Valencia, Lila, Dimiao, Jagna, Garcia-Hernandez, Tagbilaran City	Conduct structural integrity of provincial bridges	Recommend weak structures for retrofitting/rehab	Number of bridges retrofitted		PEO	NA, ODA, DPWH
78			Retrofitting of bridge structures recommended based on the assessment					
	Dam (reservoir)	Garcia-Hernandez, Pilar, San Miguel, Ubay, Talibon, Tubigon, Candijay	Conduct periodic dam structural integrity/stability test against ground shaking	Pilar and San Miguel Dam, Capayas Dam, Talibon Dam, Candijay Dam	Pilar and San Miguel Dam, Capayas Dam, Talibon Dam, Candijay Dam	Pilar and San Miguel Dam, Capayas Dam, Talibon Dam, Candijay Dam	NIA, DPWH	DOST-PHIVOLCS, DENR-MGB
			Conduct assessment on the storage capacity of the dams due to siltation					
	Power	Jagna (BOHECO II), Ubay	Conduct of GPR surveys on vital power installations and identify mitigating measures	All power posts of Boheco I and II	All power posts of Boheco I and II	All power posts of Boheco I and II	Boheco I and II	DENR-MGB



	Communications	Jagna, Tagbilaran, All cell sites	Conduct og GPR surveys of all cell sites installed in the province	Towers of Globe, Smart, Dito, amd other TELCOS	Towers of Globe, Smart, Dito, and other TELCOS	Towers of Globe, Smart, Dito, and other TELCOS	Globe, Smart, Dito, and other TELCOS	DICT
	Municipal Halls	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Interior and South Municipalities	Conduct of structural assessments of all Municipal government buildings	Provincewide	Provincewide	Provincewide	PEO, DPWH	DENR-MGB, PICE, C/MLGUs
	Schools	Tagbilaran City	Conduct structural assessments of all schools, private and public schools in reference to the ground-shaking hazard map	All schools in Tagbilaran City	All schools in Tagbilaran City	All schools in Tagbilaran City	Dep-Ed Administrator	DPWH, PEO, DENR-MGB
	Evacuation centers	Jagna, Tagbilaran City, Valencia, Panglao	Conduct of ocular inspection as to the structural integrity of all Evacuation Centers	Existing ECs in Jagna, Tagbilaran City, Valencia, and Panglao	All other buildings designated as ECs	All other buildings designated as ECs	PDRRMO, PEO	OCD, C/MLGUS
	Hospitals	Valencia, Tagbilaran City, Jagna	Conduct of ocular inspection as to the structural integrity of all prioritized hospitals					
	Ports	Jagna, Garcia-Hernandez, Loay, Ubay, Tagbilaran	Conduct of ocular inspection as to the structural integrity of all Ports in Bohol	All major ports of Bohol	All secondary ports of Bohol	All secondary ports of Bohol	PPA, DPWH	PCG, PICE
			Monitoring of sea level rise					



79	Support to the reduction of environmental areas at risk to Ground Shaking, Earthquake, Liquefaction	8 Stations provincewide	Establish a continuous GPS Network for Crustal Deformation Studies	3 stations	3 stations	2 stations	PDRRMO, BICTO	PHIVOLCS , JICA
	Watershed	Garcia-Hernandez (Manaba river)	Geo-tagging of the Garcia Hernandez Manaba River				PDRRMO, BPEMO	MDRRMO
80	Support to the reduction of heritage areas and tourism sites at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Heritage structures / Centennial Churches: Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Albuquerque, Loay, Garcia-Hernandez, Cortes, Maribojoc, Loon, Calape, Balilihan, Albur	Retrofitting and Detail Profiling of heritage structures (i.e., churches)		1 structure retrofitted in Baclayon		CCAD, BACH Council	NHI, National Museum, NHCP
81	Centennial Churches	Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Albuquerque, Loay, Garcia-Hernandez, Cortes, Maribojoc, Loon, Calape, Balilihan, Albuquerque, Jagna, Tagbilaran City, Valencia, Dauis, Panglao	Retrofitting and Detail Profiling of heritage structures (i.e., churches)		1 structure retrofitted in Baclayon		CCAD, BACH Council	NHI, National Museum, NHCP



82	Support to the reduction of population at risk to EIL	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan, Lila, Guindulman, Pilar, Corella, Baliihan, Catigbian, Clarin, Tubigon, Calape, Loon, Maribojoc, Antequera, Buenavista, Inabanga, Sikatuna, Albur, Loay, Cortes, Carmen Dagohoy, San Miguel, Mabini, Anda, Trinidad, Ubay,	Installation of No Build Zone Signages for identified areas	10 sites installed with No Build Zone Site signages	10 sites installed with No Build Zone Site signages	10 sites installed with No Build Zone Site signages	PDRRMO, PEO, PPDO	MGB, OCD7, DILG
	Support to the reduction of built-up areas at risk to EIL	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape, Bilar, Batuan	Support in the construction of slope protection structures			1 slope protection structure constructed	PDRRMO, PEO, PPDO, DPWH	JICA, DPWH, MEO, C/MDRRMO
	Support to the reduction of critical facilities and lifelines at risk to EIL							
	Roads and Bridges	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao,	Support in the identification & assessment or roads and bridges	Database of identified and assessed roads and bridges that are susceptible to EIL	Database of identified and assessed roads and bridges that	Database of identified and assessed roads and bridges that	Database of identified and assessed roads and bridges that	PEO, PDRRMO, PPDO



			San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan, Lila, Guindulman, Pilar, Corella, Balilihan, Catigbian, Clarin, Tubigon, Calape, Loon,	that are susceptible to EIL		are susceptible to EIL	are susceptible to EIL		
83		Schools		Support in the identification & assessment of schools that are susceptible to EIL	Database of identified and assessed schools that are susceptible to EIL	Database of identified and assessed schools that are susceptible to EIL	Database of identified and assessed schools that are susceptible to EIL	PDRRMO, PPDO	DEPED
84		Resettlement sites/ Evacuation Center	Maribojoc, Antequera, Buenavista, Inabanga, Sikatuna, Albur, Loay, Cortes, Carmen Dagohoy, San Miguel, Mabini,	Support in the identification & assessment resettlement sites & evacuation areas provincewide	List of identified and assessed resettlement sites & evacuation areas provincewide	List of identified and assessed resettlement sites & evacuation areas provincewide	List of identified and assessed resettlement sites & evacuation areas provincewide	OPSWD, PDRRMO, PPDO	DSWD
85		Roads and Bridges,	Anda, Trinidad, Ubay,	Construct slope protection on landslide prone areas along major roads, and communities		Completed slope protection in 1 priority area ?	1 Completed slope protection in priority area?	PEO, DPWH	MLGU, DPWH, ODA
		Schools,							
		Resettlement sites/ Evacuation Center							
86	SINKHOLE	Support to the reduction of population at risk to sinkholes	Jagna, Tagbilaran City, Valencia, Daus, Panglao Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San Isidro, Sevilla, Antequera, Cortes, Maribojoc, Tubigon, Calape, Sikatuna,	Conduct of ground surveying and monitoring	Completed and approved Survey and Monitoring Report for Phase 1: Jagna, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Sevilla, Loay	Completed and approved Survey and Monitoring Report for Phase 2: Valencia, Daus, Panglao, Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Antequera, Cortes, Loboc	Completed and approved Survey Report for Phase 3: Tagbilaran City, Tubigon, Calape, Sikatuna, Corella, Catigbian, San Isidro, Maribojoc, Balilihan	PDRRMO and targeted MC/MLGUs	MGB, OCD7, PHIVOLCS, DENR, DPWH



		Loboc, Corella, Loay						
87			Facilitate in the conduct of Karst Subsidence Hazard Assessment by MGB	1 Karst Subsidence Hazard Assessment by MGB per LGU - Phase 1	1 Karst Subsidence Hazard Assessment by MGB per LGU - Phase 2	1 Karst Subsidence Hazard Assessment by MGB per LGU - Phase 3	PDRRMO and targeted MC/MLGUs	MGB, OCD7, PHIVOLCS, DENR, DPWH
88			Updating of Hazard Maps for Sinkhole	8 Digitized hazard maps for identified C/MLGUs - Phase 1	8 digitized hazard maps for identified C/MLGUs- Phase 2	8 digitized hazard maps for identified C/MLGUs- Phase 3	PDRRMO and targeted MC/MLGUs	MGB, OCD7, PHIVOLCS, DENR, DPWH
89			Installation of No Build Zone/NO Dumping Signages for identified areas	10 sites installed with No Build Zone/Dumping Site signages	10 sites installed with No Build Zone/Dumping Site signages	10 sites installed with No Build Zone/Dumping Site signages	PDRRMO, PEO, PPDO	MGB, OCD7, DILG
90	Support to the reduction of built-up areas at risk to sinkholes	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Tubigon, Talibon	Support to C/MLGUs to develop / update of Climate and Disaster Risk Assessment	CDRA results of identified C/MLGUs	CDRA results of identified C/MLGUs		PDRRMO and targeted MC/MLGUs	DILG, MGB, OCD7, DHSUD
91		Jagna, Carmen, Loon, Cortes, Maribojoc, Trinidad, Calape, Candijay, Dauis	Facilitate on the Cordoning/Fencing of identified Sinkhole areas	10 sites cordoned/fenced	10 sites cordoned/fenced	10 sites cordoned/fenced	PDRRMO and targeted MC/MLGUs	DILG, MGB, DHSUD
92	AFRICAN SWINE FLU (ASF)	Prevent vulnerability and exposure of local swine to ASF viral infection	Strengthening Border Control	Set-up Border control in major ports and sub ports			OPV	BAI-VQS
							PDRRMO	MLGU
								DA
								PCG
								PPA
		Private groups						



93		Management of Disease Control and Eradication	Reviewed and approved on disease investigation and definition of disease cases				
94		establishment of protocol/guidelines on disease investigation and definition of disease cases					
95		full operation of veterinary quarantine service in all ports and airport	Operational quarantine service in all ports and airport				
96		hiring of Veterinary Quarantine Inspectors					
97		Procurement of equipment, supplies and materials					
98		Implementation of issued provincial policies on ASF	Enforced issued provincial policies on ASF in affected areas				
99		Implementation and enforcement of issued provincial policies	Implementation of issued provincial policies on ASF	Enforced issued provincial policies on ASF in affected areas			
100		Conduct of Information Education and Advocacy Campaign on ASF	48 C/MLGUs aware of ASF				



101				enactment of Provincial and Municipal Ordinances on the						
102				creation of ASF council and task force with roles and responsibilities	ASF council and task force established at the provincial and C/MLGU level				OPV, MLGU	
103					Clear ASF prevention program				OPV, MLGU	DA
104				geotagging and geo-mapping of farms						
105				Weekly disease monitoring and reporting system	Accomplished monitoring report on the ASF cases	Accomplished monitoring report on the ASF cases	Accomplished monitoring report on the ASF cases		OPV, MLGU	DA
106	OUTBREAK OF INFECTIOUS DISEASES	Assist C/MLGUs in the operationalization of Municipal Epidemiology and Surveillance Units	All C/MLGUs	Ordinance on the establishment of MESU in all C/MLGUs	48 C/MLGUs with established MESU				PHO	SP
107		Assist C/MLGUs in ensuring access to safe water to Bol-anons before and during disaster or emergencies	All C/MLGUs	Organization of Water Quality Monitoring (Policy Support)	WQM Team established with policy support in all C/MLGUs				PHO	MLGU, DOH
108		Assist C/MLGUs in ensuring access to safe water to Bol-anons before and	All C/MLGUs	Zero Open Defecation (ZOD) Technical assistance	40% of all Barangays ZOD	50% of all Barangays ZOD	70% of all Barangays ZOD		PHO, C/MHOs?	MLGU, DOH



		during disaster or emergencies							
109	EREID	Assist C/MLGUs in policy implementation and protocol compliance	All C/MLGUs	Protocol on the allocation of Isolation beds during EREID Outbreaks	Ordinance approved and funded			PHO	DOH, PDRRMO, C/MHO
110			All C/MLGUs	Policy Support for the establishment of 24/7 OpCen with budget appropriation	Ordinance approved and funded			PHO	DOH, PDRRMO, C/MHO



Thematic Area:		Preparedness							
	Hazard	Actions specific to the province/Actions that the province can do for the component LGUs	Short Term Target	PPAs	Output / Timeframe			Office/s Responsible	Partner Agencies
			(2023-2025)		2023	2024	2025		
1	ALL HAZARD			Conduct Drills/Simulation of Pre-emptive Evacuation					
2									
3				Intensify IEC on understanding risk assessment	Increased knowledge on risk assessment in 48 LGUs (Cities, Municipalities)	Increased knowledge on risk assessment in 48 LGUs (Cities, Municipalities)	Increased knowledge on risk assessment in 48 LGUs (Cities, Municipalities)	PLGU, C/MLGUs	DENR, DPWH, MGB, OCD7, PAG-ASA, DHSUD
4				Massive Information Dissemination	Produced and distributed IEC Materials to Provincial offices, all C/MLGUs	Produced and distributed IEC Materials to Provincial offices, all C/MLGUs	Produced and distributed IEC Materials to Provincial offices, all C/MLGUs	PLGU, C/MLGUs	DENR, DPWH, MGB, OCD7, PAG-ASA, DHSUD
5									
6				Organize fora and other related activities	Conducted 48 fora on risk assessment	Conducted 48 fora on risk assessment	Conducted 48 fora on risk assessment	PLGU, C/MLGUs	DENR, DPWH, MGB, OCD7, PAG-ASA, DHSUD
7									
8				Regular conduct of emergency drills	Conducted emergency drills quarterly in schools, C/MLGUs, Province level	Conducted emergency drills quarterly in schools, C/MLGUs, Province level	Conducted emergency drills quarterly in schools, C/MLGUs, Province level	PDRRMO, C/MDRRMOs	
9				All C/MLGUs	DRRRMH Planning	48 C/MLGUs, 1 Province	48 C/MLGUs, 1 Province	48 C/MLGUs, 1 Province	PHO, C/MHO



10	Assist C/MLGUs in the conduct of DRRMH Planning				Approved and completed DRRMH Plans for 48 C/MLGUs and Province	Approved and completed DRRMH Plans for 48 C/MLGUs and Province	Approved and completed DRRMH Plans for 48 C/MLGUs and Province		
				Capability Development on Disaster Preparedness and Response	Conduct of DRRM-related trainings, emergency drills and workshops to the PDRRMC, MDRRMOs and LGUs including the response teams and the creation of SRR Team, DANA Team, Accredited Community Volunteers, Information Management Team			PDRRMO	OCV VII, C/MLGUs
					Conduct of series of ladderized Incident Command System (ICS) for PDRRM Council members and other stakeholders and ICS Executive Course for local chief executives and other heads, ICS level1,			PDRRMO, PHO	OCD VII, DILG, DOH



					ICSEC, IP-ICS, LDRRM planning workshop, EOC, Management of the Dead, CSSR, HTEC, BLS-SFA, Mass Casualty Management Training, Training on WASH, MHPSS, Strategic Risk Communication, Training on Nutrition in Emergencies, RDANA, PDNA, ERT and others			
					Conduct of DRRM-CCA Training and advocacies for vulnerable sectors and PSWDO personnel			OPSWD DSWD
					Basic Skills training for emergency responders and other volunteer groups/sectors on disaster preparedness and response, search, rescue and retrieval operations			PDRRMO OCD VII



					- conduct benchmarking activities to Gawad Kalasag and eco-tourism areas				
				Conduct of skills upgrading/ enhancement training for the emergency responders of PDRRMO, TaRSIER Tagbilaran, including substations in Ubay, Jagna, Carmen, Loon, Balilihan, Talibon and Candijay and other volunteers including EMS NC II, WaSAR, EMT-B, and others	Upgrading/ Additional equipment for all TaRSIER substation offices Upgrading of the communication equipment at Unified Command Center Capability building training for the establishment of emergency response units upon request of LGUs of Bohol			PDRRMO	
				Support to the activities of the Bohol Association of LDRRM Officers and PDRRMC including its regular meetings	Conduct quarterly meetings with Bohol Association of LDRRM Officers and PDRRMC members			PDRRMO	C/MDRRMOs, PDRRMC Members



				Upgrading/ acquisition of additional disaster response/rescue equipment and other paraphernalia for the TaRSIER 117 and other substations	procurement of SRR and WaSAR equipment			PDRRMO	
				Production of IEC materials on DRRM- CCA	Production of IEC materials on DRRM-CCA provincewide			PDRRMO	C/MLGUs
				Acquisition of Disaster Response and Rescue vehicles	Purchased 2 ambulance for TaRSIER 117 Sub-station, emergency rescue vehicle, sea ambulance, fiberglass speedboat per district and relief operations during disasters and emergencies			PDRRMO	
				Conduct of capacity development to health sector to better manage emerging and re- emerging diseases	capacitate and equip health sector to address diseases during calamities or outbreak provincewide			PHO	DOH, MHO, C/MLGUs



				Conduct of capdev and vulnerability measures to swine stakeholders to reduce risk in livelihood and investment - capacitate organized farmers association and livestock growers on the potential impacts of the hazard	Established and enhanced capacities of LGUs and farmers/livestock growers' stakeholders to eliminate risk of disease contamination affecting livelihood and investment provincewide			OPV, OPA	MAO, C/MLGUs
				Stockpiling of basic emergency supplies/food packs assistance to affected families (food and non-food items)	Purchased relief goods in preparation or in the event a natural or man-made disaster/calamity is predicted (i.e. typhoon, health, EREID, disease outbreak, etc)			OPSWD	DSWD
11	FLOODING TYPHOON, SEVERE WIND	Support to the reduction of population at risk to flooding, typhoon, severe wind	Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Alburquerque	Conduct training for Provincial personnel and the communities on Pre-emptive Evacuation	Increased knowledge on the processes for pre-emptive evacuation	Increased knowledge on the processes for pre-emptive evacuation including the conduct of simulation exercise	Increased knowledge on the processes for pre-emptive evacuation including the conduct of simulation exercise	PDRRMO, MDRRMOs	OCD7, DILG



		With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon						
12			Inventory of existing Evacuation Centers	Complete list of existing evacuation centers in 48 C/MLGUs	Complete list of existing evacuation centers in 48 C/MLGUs	Complete list of existing evacuation centers in 48 C/MLGUs	PDRRMO, C/MC/MLGUs	DSWD, OCD7, DPWH
13			Facilitate the preparation of design and feasibility study of proposed evacuation centers	Developed appropriate, gender-sensitive, safe, and inclusive design for evacuation center			PDRRMO, C/MC/MLGUs, PEO	DSWD, OCD7, DPWH
14			Establishment of additional Standard Evacuation Centers		Constructed 2 evacuation centers in 2 prioritized C/MLGU	Constructed 2 evacuation centers in 2 prioritized C/MLGU	PDRRMO, C/MC/MLGUs, PEO	OCD, DPWH,
15			Inventory of existing DRRM related Equipment and identification of needs	Complete list existing DRRM related Equipment Needs assessed based on the current condition of the PDRRMO			PDRRMO	Concerned National Agencies and Offices



16			Preparation of requests and project proposals	Tapped possible partners (both public & private) for possible sources				
17			Facilitate in the sourcing of funds					
18			Facilitate procurement of equipment					
19			Provision of modern and state-of-the-art DRRM-related Equipment (Boom Trucks, Rescue Vehicles & Satellite /Handheld Radios)			Obtained ___ equipment for the province	PDRRMO, Budget Office	
20			Facilitate in the provision/stockpiling/ prepositioning of nutritious relief goods	Available stockpiles for 200 families	Available stockpiles for 200 families	Available stockpiles for 200 families	PSWDO	DSWD, Concerned National Agencies and other Offices, MLGUs
21			Coordination with NGAs and other stakeholders for the provision of nutritious relief goods					
22			Formulate training design	Training design developed based on the need of the PDRRMC			PDRRMO	OCD7, DILG
23			Conduct of Capacity Building Activities in coordination with concerned NGAs and	Trained PDRRMC members with EOC, ICS, PSCP, and CP			PDRRMO	OCD7, DILG



			other stakeholders for PDRRMC					
24			Provide capacity building for priority C/MLGUs	Identified priority trainings for C/MLGU	Trained C/MLGUs on disaster preparedness and management	Trained C/MLGUs on disaster preparedness and management	PDRRMO	OCD7, DILG
25			Promote the establishment of Quick/Emergency Response Units in all MC/MLGUs	Suggestion: Increased awareness on the importance of Quick/Emergency Response Units of the C/MLGUs	Initiated creation of Quick/Emergency Response Units in 48 C/MLGUs		PDRRMO	OCD7, DSWD, C/MLGUs Concerned National Agencies and other Offices
26			Coordination with concerned parties on the existence of hazardous structures/trees in their respective areas				PDRRMO, PEO, BPEMO	C/MLGUs, C/MDRRMO, Concerned National Agencies and other Offices
27			Facilitate the implementation of directives, memoranda or, orders relative to the clearing or abatement of hazardous structures	Issuance of notices, directives, memoranda, or orders by concerned offices or agencies			PDRRMO, PEO	C/MLGUs, C/MDRRMO, Concerned National Agencies and other Offices



28			Pruning of hazardous trees and clearing or abatement of hazardous structures in coordination with concerned offices and agencies		Implemented pruning of hazardous trees in high-risk areas	Implemented pruning of hazardous trees in high-risk areas	PDRRMO, PEO	C/MLGUs, C/MDRRMO, Concerned National Agencies and other Offices
	Support to the reduction of agricultural areas at risk to Flooding, Typhoon, Severe Wind	Candijay (AF), Alicia, Guindulman (AF) Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-Hernandez, Jagna, Sierra Bullones, Danao	Intensify IEC on understanding risk assessment				OPA	MAO, MLGUs, DA
		Nipa Plantation: Cortes (nipa), Maribojoc (nipa), Loboc, Inabanga, Loay	Organize fora and other related activities to nipa farmers			OPA	MAO, MLGUs, DA	OPA
	Support to the reduction of critical facilities and lifelines at risk to Flooding, Typhoon, Severe Wind							



	Evacuation Centers	All C/MLGUs	Complete list of existing evacuation centers in 48 C/MLGUs	Developed appropriate, gender-sensitive, safe, and inclusive design for the evacuation center	Trained 50 % of the C/MLGUs on camp coordination and camp management	Trained 50% of the C/MLGUs on camp coordination and camp management	OPSWD, PDRRMO	DSWD, MSWDO
	Operation Centers	All C/MLGUs at risk to flooding, typhoon, and severe wind	Trained PDRRMC members with ICS and EOC Trained C/MLGUs with ICS, EOC, and Technical Search and Rescue Trainings Acquired modern and state-of-the-art DRRM-related Equipment (Boom Trucks, Rescue Vehicles & Satellite /Handheld Radios)	Trained PDRRMC members with ICS and EOC Trained 50% of the C/MLGUs with ICS, EOC, and Technical Search and Rescue Trainings	Trained 50% of the C/MLGUs with ICS, EOC, and Technical Search and Rescue Trainings	PDRRMO	PDRRMO, OCD VII	
	Support to the reduction of built-up areas at risk to Flooding, Typhoon, Severe Wind	Tagbilaran City, Urbanizing Municipalities: Tubigon, Talibon, Ubay, Panglao, Dausi, Jagna, Loon	Trained PDRRMC members with ICS and EOC Trained C/MLGUs with ICS, EOC, and Technical Search and Rescue Trainings Initiated creation of Quick/Emergency	Provincewide	Provincewide	Provincewide	PDRRMO	C/MDRRMOs, C/MLGUs, OCD VII



			Response Units in 48 C/MLGUs				
	Support to the reduction of environmental areas at risk to Flooding, Typhoon, Severe Wind	Priority 16 Protected Areas in Bohol	Review implementation of Protected Area Management Plan	Talibon Group of Islands Protected Landscape and Seascape: Getafe, Bien Unido, Talibon, Ubay, CPG, Tubigon, Loon			
			Inventory of affected communities to flooding due to severe typhoons, rain and winds	Chocolate Hills Natural Monument: Carmen, Sagbayan, Batuan, Bilar	Panglao Island Protected Seascape: Panglao, Dauis	Tubigon Group of Islands Mangrove Swamp Forest Reserve / Wilderness Area: Tubigon	
			Conduct of evacuation drills of affected residents		Loboc Watershed Forest Reserve: Loboc, Bilar		
			Capacity Development on the early warning systems	Alburquerque-Loay-Loboc Protected Landscape Seascape: Alburquerque, Loay, Loboc President Carlos P. Garcia Mangrove Swamp Forest Reserve: Pres. CPG	Alejawan-Cansuhay-Anibongan River Watershed Forest Reserve: Jagna, Duero Inabanga Wilderness Area and Mangrove Swamp Forest Reserve: Inabanga	Calape Group of Islands Mangrove Swamp Forest Reserve and Wilderness Area: Calape Cabilao Sandingan Islands, Mangrove Swamp	



					Ubay Mangrove Swamp Forest Reserve: Ubay	Getafe Group of Islands Mangrove Swamp Forest Reserve/Wilderness Area: Getafe	Forest Reserve: Loon Candijay-Anda-Mabini Mangrove Swamp Forest Reserve and Wilderness Area: Candijay, Anda, Mabini		
		Support to the reduction of heritage areas and tourism sites at risk to Flooding, Typhoon, Severe Wind (For validation with NHCP)	Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Conduct of DRRM related trainings, emergency drills and workshops to PDRRMC, MDRRMOs and LGUs including the response teams	50% of the C/MDRRMOs and C/MLGUs trained on ICS, EOC	50% of the C/MDRRMOs and C/MLGUs trained on ICS, EOC		PDRRMO	OCD VII
	DROUGHT	Support to the reduction of population at risk to drought		Production of IEC materials on DRRM-CCA to communities				PDRRMO	C/MLGUs
29		Support to the reduction of critical facilities and lifelines at risk to drought	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Prepositioning of water truck	3 units water trucks available and accessible	3 units water trucks available and accessible	4 units water trucks available and accessible	PDRRMO, GSO	BFP, C/MLGUs
30				Conduct Information Education Campaign (IEC) in every municipality on?	Increased knowledge and awareness in 48 LGU	Increased knowledge and awareness in 48 LGU	Increased knowledge and awareness in 48 LGU	PDRRMO	LGU



31			Secure MOU with private water service utilities	3 MOU secured by the province			PDRRMO	Private operated water refilling stations
	Support to the reduction of agricultural areas at risk to drought	All Agricultural Towns (45 Municipalities)	Conduct of capacity development and vulnerability measures to farmers association and livestock growers on the potential impacts of the hazard				APO, OPV, PDRRMO	MAO, MLGUs
		All towns with Dams, Irrigation facilities Ubay, San Miguel, Pilar, Talibon (2)						
	Support to the reduction of heritage areas and tourism sites at risk to drought	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Dauis, Inabanga, Danao, Jagna, Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Develop heritage and tourism master plan		Completed and approved Provincial heritage and tourism master plan		PDRRMO, BTO	DOT, Municipal Tourism Office
31				Capacity building for resort, boat operators and guide on DRR-CCA in all tourism sites	Trained resort, boat operators and guide on CCA and DRR	Trained resort, boat operators and guide on CCA and DRR	Trained resort, boat operators and guide on CCA and DRR	PDRRMO
32								



		Support to the reduction of environmental areas at risk to drought	Priority 16 Protected Areas in Bohol	<p>Review implementation of the Protected Area Management Plan</p> <p>Inventory of affected communities to flooding due to severe typhoons, rain, and winds</p> <p>Conduct of evacuation drills of affected residents</p> <p>Capacity development on the early warning systems</p>	<p>Talibon Group of Islands Protected Landscape and Seascape: Getafe, Bien Unido, Talibon, Ubay, Pres. CPG, Tubigon, Loon</p> <p>Chocolate Hills Natural</p>				
33	STORM SURGE	Support to the reduction of population at risk to storm surge	Indigenous settlements (Badjao)	Conduct IEC in 30 LGUs (based on form 4A)	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	PDRRMO	MDRRMO
			Getafe						
34			<p>Informal Settlers</p> <p>Bien Unido, Pres. CPG, Talibon</p> <p>Loay, Duero, Lila, Garcia-Hernandez, Jagna</p>	Updating of LDRRM Plan of C/MLGUs	Suggestion: 30% of the C/MLGUs with comprehensive risk-based LDRRMP	70% of the C/MLGUs with comprehensive risk-based LDRRMP	100% of the C/MLGUs with comprehensive risk-based LDRRMP	PDRRMO, C/MDRRMOs	OCD VII



				Assist Barangay in the updating of BDRRM Plan (30%)				
35								
36			Organize Emergency Response Teams (ERTs)	Established 10 ERTs	Organized and capacitated ERT to 10 coastal LGUs	Organized and capacitated ERT to 10 coastal LGUs	PDRRMO	C/MLGUs
37			Clustering of C/MLGUs for capacity development	Identified C/MLGUs with similar needs of capacity development			PDRRMO	C/MLGUs, OCD VII
38			Facilitate the necessary documents for the insurance coverage (DRRM Council Approval and SP Resolution)	100% of the responders and 10% of community volunteers insured	100% of the responders and 10% of community volunteers insured	100% of the responders and 10% of community volunteers insured	PDRRMO	
39			Capacity development for responders and community volunteers	3 trainings conducted to responders of 30 coastal MLGUs	Updating and upgrading of trainings	Updating and upgrading of trainings	PDRRMO	
40			Trained pool of trainers for MHPSS	10 coastal MLGUs trained on MHPSS	10 coastal MLGUs trained on MHPSS	10 coastal MLGUs trained on MHPSS	OPSWD, PHO	
41			Conduct of BRGY Emergency Drills	2 drills participated by the Barangays	2 drills participated by the Barangays	2 drills participated by the Barangays	PDRRMO	C/MLGU
42			Stockpiling of food and non-food items	Available food and non-food	Available food and non-food	Available food and non-food items for	OPSWD	DSWD



				items for 500 HH/families	items for 500 HH/families	500HH/families		
43			Updating of Contingency Plan		Improved and revised 3 CPs for typhoon, severe wind, and flooding		PDRRMO	OCD VII
44			Procurement of wing van for relief operations	Acquired wing van for relief operations in affected areas	Yearly maintenance routine of wing van	Yearly maintenance routine of wing van	PSWDO, PDRRMC	
45			Construction of warehouse	Standard warehouse operational	Managed and maintained warehouse	Managed and maintained warehouse	PSWDO, PDRRMC	DSWD,
46			Establishment of DRRM Database or Management Information System per LGU	Database/MIS set-up and operational in 15 MLGUs	Database/MIS set-up and operational in 15 MLGUs	Database/MIS set-up and operational in 18 LGUs	PDRRMO, PPDO	C/MLGUs, C/MDRRMOs
47			Distribution of Evacuation routes to community	Increased awareness and familiarity of communities on the evacuation routes			OPSWD, PDRRMO	DSWD
			Support to the reduction of critical facilities and lifelines at risk to storm surge					
48	Roads and Bridges	Daus, Baclayon, Albuquerque, Lila	Conduct training for the officer-in-charge and personnel for critical facilities and lifelines (emergency management training)	Trained the officer-in-charge and personnel for critical facilities and lifelines on emergency management	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and	PDRRMO-TaRSIER 117	OCD7 MDRRMO



				training for 10 coastal MLGUs	emergency management training to 10 coastal MLGUs	lifelines on emergency management training to 10 coastal MLGUs		
	Support to the reduction of agricultural areas at risk to storm surge							
49	Agriculture areas		Capacitate farmers and livestock growers on the potential impacts of the hazard	Capacitated 100% of organized farmers association and livestock growers on the potential impacts of the hazard to 10 coastal MLGUs	Capacitated 100% of organized farmers association and livestock growers on the potential impacts of the hazard to 10 coastal MLGUs	Capacitated 100% of organized farmers association and livestock growers on the potential impacts of the hazard to 10 coastal MLGUs	OPA/OPV	
50	Support to the reduction of built-up areas at risk to storm surge	Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. Carlos P. Garcia, Valencia, Garcia-Hernandez	Capacitate MSMEs staff and communities within the built-up areas on emergency management of the hazard	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	PDRRMO-TaRSIER 117	OCD7/
	Microbusinesses, MSMEs, Remittance Center	Ubay, Dimiao						MDRRMO



		Support to the reduction of environmental areas at risk to storm surge							
51		River basins / Watershed	Inabanga, Trinidad	Updating of protected area management plans to include the potential impacts of tsunami and storm surge	Updated 6 protected area management plans	Updated 5 protected area management plans	Updated 5 protected area management plans	PDRRMO-TaRSIER 117	OCD7/ MDRRMO
52				Capacitate the executive committee of the protected area management board on emergency management of the hazard		Capacitated the executive committee of the 5 protected area management board on emergency management of the hazard	Capacitated the executive committee of the 5 protected area management board on emergency management of the hazard		
53		Support to the reduction of heritage areas and tourism sites at risk to storm surge	Panglao, Daus, Anda, Cortes, Baclayon, Loon, Maribojoc, Daus, Alburquerque	Capacitate the site managers on emergency management of the hazard	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	PDRRMO-TaRSIER 117	OCD7/MDRRMO/ DIOCESE/NM/D OT
	TSUNAMI	Support to the reduction of population at risk to tsunami	Indigenous settlements (Badjao)	Conduct IEC in 30 LGUs (based on form 4A)	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to dos, in 10 coastal MLGUs	PDRRMO	MDRRMO
			Daus, Getafe						



						coastal MLGUs		
		Informal Settlers						
		Bien Unido, Pres. CPG, Talibon, Loay Duero, Lila, Garcia Hernandez, Jagna	Updating of LDRRM Plan of C/MLGUs	Suggestion: 30% of the C/MLGUs with comprehensive risk-based LDRRMP	70% of the C/MLGUs with comprehensive risk-based LDRRMP	100% of the C/MLGUs with comprehensiv e risk-based LDRRMP	PDRRMO, C/MLGUs	OCD VII
	Support to the reduction of critical facilities and lifelines at risk to tsunami							
	Roads and Bridges	Davis, Baclayon, Albuquerque, Lila, Guindulman, Anda, Duero	Conduct training for the officer-in-charge and personnel for critical facilities and lifelines (emergency management training)	Trained the officer-in-charge and personnel for critical facilities and lifelines on emergency management training for 10 coastal MLGUs	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on emergency management training to 10 coastal MLGUs	Conducted 2 trainings of the officer-in- charge and personnel for critical facilities and lifelines on emergency management training to 10 coastal MLGUs	PDRRMO- TaRSIER 117	OCD7, MDRRMO
	Support to the reduction of agricultural areas at risk to tsunami	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao,	Capacitate farmers and livestock growers on the potential impacts of the hazard	Capacitated 100% of organized farmers association and livestock growers on the potential impacts of the	Capacitated 100% of organized farmers association and livestock growers on the potential	Capacitated 100% of organized farmers association and livestock growers on the potential	OPA/OPV	Capacitate farmers and livestock growers on the potential impacts of the hazard



		Daus, Mabini, Ubay		hazard to 10 coastal MLGUs	impacts of the hazard to 10 coastal MLGUs	impacts of the hazard to 10 coastal MLGUs		
	Support to the reduction of built-up areas at risk to Tsunami							
	Microbusinesses, MSMEs, Remittance Center	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao, Daus	Capacitate MSMEs staff and communities within the built-up areas on emergency management of the hazard	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	PDRRMO-TaRSIER 117	OCD7/
	Support to the reduction of environmental areas at risk to tsunami							
	River basins / Watershed	Inabanga, Trinidad	Updating of protected area management plans to include the potential impacts of tsunami and storm surge	Updated 6 protected area management plans	Updated 5 protected area management plans	Updated 5 protected area management plans	PDRRMO-TaRSIER 117	OCD7/ MDRRMO
	Mangrove Cover	Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Capacitate the executive committee of the protected area management board on emergency management of the hazard		Capacitated the executive committee of the 5 protected area management board on emergency	Capacitated the executive committee of the 5 protected area management board on		



					management of the hazard	emergency management of the hazard				
		Support to the reduction of heritage areas and tourism sites at risk to tsunami	Lila, Loay, Albuquerque, Baclayon	Capacitate the site managers on emergency management of the hazard	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	PDRRMO-TaRSIER 117	OCD7/MDRRMO /DIOCESE/NM/D OT	
			Panglao, Daus, Anda, and all protected seascapes							
	RAIN-INDUCED LANDSLIDES	support to the reduction of population at risk to RIL	Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel	Installation of standard reflectorized early warning signages (4X4)	Installed visible, clear early warning signages in strategic areas	__ number of Visible, clear early warning signages installed in __ strategic areas	__ number of Visible, clear early warning signages installed in __ strategic areas	PDRRMO, LGU		
54				IEC dissemination on RIL	LGUs with acquired knowledge on RIL	LGUs with acquired knowledge on RIL	LGUs with acquired knowledge on RIL	PDRRMO, LGU		
55				Activation of evacuation plan for every LGU's					PDRRMO, LGU	
56										



57				Conduct Collapsed Structure Search and Rescue training (CSSR) for 48 LGU' Responders	Trained 48 C/MLGUs with Collapsed Structure Search and Rescue			PDRRMO, TaRSIER, PEO	C/MLGUs, DPWH, BFP
58				Procurement for Disaster response equipment (for SRR and EMS) and PPE's	48 C/MLGUs	Available response equipment and PPEs	Available response equipment and PPEs	PDRRMO, PEO	LGU, DPWH, NIA, BOHECO
					Available response equipment and PPEs				
59	EARTHQUAKE, GROUND SHAKING, LIQUEFACTION	Support to the reduction of population at risk to earthquake, ground Shaking, liquefaction	C/MLGUs near East Bohol Fault (epicenter at Jagna, SW propagation), and South Offshore Fault: Jagna, Tagbilaran City, Corella, Valencia, Dauis, Panglao, Loay, Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Loboc, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San	Conduct information dissemination on what to do before during, and after disaster	100 highly susceptible barangays increased awareness on the impacts of ground shaking, liquefaction	100 highly susceptible barangays increased awareness on the impacts of ground shaking, liquefaction	100 susceptible barangays conducted IEC increased awareness on the impacts of ground shaking, liquefaction	PDRRMO	LGU, DILG, OCD7



		Isidro, Sevilla, Antequera, Cortes, Maribojoc, Tubigon, Calape, Sikatuna						
60			Conduct Drills to various offices and schools	5 schools, 5 offices and 2 hospitals participated in earthquake drills	5 schools, 5 offices and 2 hospitals participated in earthquake drills	5 schools, 5 offices and 2 hospitals participated in earthquake drills	PDRRMO	OCD7, MC/MLGUs, Barangays
61			Create & Train Collapse Structure Search and Rescue Team	PGBh, Tagbilaran City with knowledge and skills on Collapse Structure Search and Rescue			PDRRMO	Tagbilaran City
62			Establish Evacuation Center for communities highly susceptible to hazards	Site identified and validated for Evacuation Center Passed the set of standards required by DSWD	Purchased of lot that passed standards set by MGB and PHIVOLCS	1 constructed evacuation center to cater affected communities	PPDO, PDRRMO	DSWD, DPWH
	Support to the reduction of built-up at risk to earthquake, ground Shaking, liquefaction	Jagna, Tagbilaran City, Valencia, Dausi, Panglao	Conduct of DRRM related trainings, emergency drills and workshops to C/MDRRMC, C/MDRRMOs and response teams including volunteers	Trainings and emergency drills conducted to the responders and volunteers to identified C/MDRRMC, C/MLGUs			PDRRMO, TaRSIER 117	



	Support to the reduction of agricultural areas at risk to earthquake, ground Shaking, liquefaction	Garcia-Hernandez, Loay, Jagna, Alburquerque, Tagbilaran City	Conduct capacity development to farmers association and livestock growers on the potential impacts of the hazards	Production of IEC materials on DRRM-CCA			PDRRMO	C/MDRRMOd
	Support to the reduction of critical facilities and lifelines at risk to earthquake, ground Shaking, liquefaction		Conduct IEC on and increased awareness on the impacts of earthquake, ground shaking, and liquefaction				PDRRMO	C/MLGUs
			Conduct emergency drills and workshops					
63	Communications	Jagna, Tagbilaran, All cell sites	Establish Satellite-based internet connectivity using alternate source of power i.e., photovoltaic-based (solar) power system, portable power generator, etc.	PGBh with access to internet and power system			PGBh (BICTO)	NTC
64			Establish Single Side Band (SSB) Radio Communication System (ICOM SSB system)	47 municipalities and 1 city with operational SSB Radio Communication System			PDRRMO	MC/MLGUs
	Municipal Halls	Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Interior and	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards				PDRRMO	C/MLGUs



		South Municipalities						
	Schools	Tagbilaran City	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards				PDRRMO	C/MLGUs
	Evacuation centers	Jagna, Tagbilaran City, Valencia, Panglao	Construction of resilient and standard compliant evacuation centers	Construction of resilient and standard compliant evacuation centers in each of the 3 districts of Bohol			PSWDO, PDRRMO	DSWD, other NGAs
	Hospitals	Valencia, Tagbilaran City, Jagna	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards on thr hospitals located in the 3 C/MLGUs			PDRRMO	C/MLGUs
	Ports	Jagna, Garcia-Hernandez, Loay, Ubay, Tagbilaran	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards	Conduct emergency drills and IEC on to to the ports located on the identified MLGUs			PDRRMO	MLGUs, PPA
	Support to the reduction of environmental areas at risk to earthquake, ground Shaking, liquefaction	Watershed: Garcia-Hernandez (Manaba river)	Installation of visible Early Warning System	Installation of visible early Warning System per watershed area			PDRRMO, BPEMO	C/MLGUs



		Support to the reduction of heritage areas and tourism sites at risk to earthquake, ground Shaking, liquefaction	Centennial Churches: Baclayon, Jagna, Tagbilaran City, Valencia, Dausi, Panglao, Lila, Dimiao, Alburquerque, Loay, Garcia-Hernandez, Cortes, Maribojoc, Loon, Calape, Balilihan, Albur	Conduct emergency drills and IEC on to increase awareness on the impacts of the hazards					
65	EARTHQUAKE INDUCED LANDSLIDE (EIL)	Support to the reduction of population at risk to EIL	Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan, Lila,	Formulation/ Preparation/ reproduction of laymanized DRR-CCA materials	Laymanized IEC materials			PDRRMO	DILG



66		Guindulman, Pilar, Balilihan, Catigbian, Clarin, Tubigon, Calape, Loon, Maribojoc, Antequera, Buenavista, Inabanga, Sikatuna, Albur, Loay, Cortes, Carmen Dagohoy, San Miguel, Mabini, Anda, Trinidad, Ubay, Corella	Distribution of laymanized IEC materials on DRR-CCA	1,116 Public Schools, 1109 Barangays, All Government Offices			PDRRMO, MDRRMOs/ BALDRRMO	DEPED
67		48 C/MC/MLGUs	Conduct of USAR and SAR Training to Organized MLGU Response Teams	1 training conducted	1 training conducted	1 training conducted	PDRRMO and targeted MC/MLGUs	OCD7
68		20 provincial personnel	Conduct of Collapsed Structure Search and Rescue (CSSR) for TaRSIER 117 Personnel	1 CSSR training conducted for 10 personnel of TaRSIER 117	1 CSSR training conducted for 10 personnel of TaRSIER 117		PDRRMO/ TaRSIER 117	
69			Purchase of Disaster Response Equipment -SRR, EMS, CSSR		1 set of Response Equipment for SRR, EMS, CSSR		PDRRMOPD RRM/ TaRSIER 117	
70			Formulation / Updating of Contingency Plan for EIL	1 formulated/ updated CP for EIL			PDRRMO	OCD7, DILG



71			Formulation of Disaster Response Operations Manual	1 DROM formulated			PDRRMO	OCD7	
	Support to the reduction of built-up areas at risk to EIL	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape, Bilar, Batuan	Conduct capability building on USAR, SAR, and CSSR						
			Initiate creation of Quick/Emergency Response Units in 48 C/MLGUs						
	Support to the reduction of critical facilities and lifelines at risk to EIL								
	Roads and Bridges	Loboc, Bilar, Loay, Catigbian, Balilihan	Construction and maintenance of drainage systems					PEO	DPWH, MLGUs, other NGAs
		LGUs traversing/ near East Bohol Fault;	Improvement and retrofitting of the weak existing structures						
LGUs extending to north west of Bohol									



		Evacuation centers	LGUs traversing/ near East Bohol Fault; LGUs extending to northwest of Bohol	Construction of resilient and standard compliant evacuation centers	Construction of resilient and standard compliant evacuation centers in each of the 3 districts of Bohol			OPSWD, PDRRMO	DSWD
72	SINKHOLE	Support to the reduction of population at risk to sinkholes	(Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra Bullones, San Isidro, Tubigon, Catigbian, Antequera, Calape, Cortes	Intensify IEC on DRRM-CCA to the barangay level or purok level	Increased awareness on DRRM-CCA to the barangay level or purok level			PDRRMO and targeted MC/MLGUs	MGB, OCD7, DILG
73					Laymanized IEC materials	Laymanized IEC materials	Laymanized IEC materials		
74				Conduct of IEC Program on KARST Subsidence	DRRM Orientation on KARST Subsidence hazard	DRRM Orientation on KARST Subsidence hazard	DRRM Orientation on KARST Subsidence hazard		
75				Conduct of Risk Communication Training	1 training conducted	1 training conducted	1 training conducted	PDRRMO	OCD7
76					Conduct of USAR and SAR Training to Organized Response Teams	1 training conducted	1 training conducted	1 training conducted	PDRRMO and targeted MC/MLGUs



77		Support to the reduction of built-up areas at risk to sinkholes	Tubigon, Talibon Jagna, Carmen, Loon, Tagbilaran, Cortes, Maribojoc, Trinidad, Calape, Candijay, Daus	Purchase of underwater robot and/or rescue drones	1 underwater robot and/ rescue drone purchased	1 underwater robot and/ rescue drone purchased		PDRRMO	
78	(Animal) Health-Related	Strict implementation of related veterinary quarantine policies and local ordinance & related issuances	MLGU with major ports and sub ports coastal MLGU facing ASF affected	Establishment of a Provincial Surveillance System	surveillance facilities/tools put in place to ensure surveillance activities are properly carried out Designated surveillance facility/center where all supplies/date are processed Obtained supplies and materials but not limited to testing kits and other equipment, personnel protective equipment as well as IT equipment for disease case profiling	Continue surveillance to ensure surveillance activities are properly carried out Obtained supplies and materials but not limited to testing kits and other equipment, personnel protective equipment as well as IT equipment for disease case profiling	Continue surveillance to ensure surveillance activities are properly carried out Obtained supplies and materials but not limited to testing kits and other equipment, personnel protective equipment as well as IT equipment for disease case profiling	OPV OPV OPV	C/MLGU C/MLGU C/MLGU



79			formulation of swine depopulation plan in areas with confirmed positive cases	Developed and approved swine depopulation plan in areas with confirmed positive cases				
80		rest of MLGU		registration and deputation of VBO and BBO				
81			Strengthening Bio-security Measures	master listing and registration of backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers	continue master listing and registration of new backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers	continue master listing and registration of new backyard and commercial farms, breeding and livestock facilities, feed dealers, livestock handlers		
82	Support to the LGUs to eliminate risk of disease contamination		Capability building and operationalization of task forces and conduct of advocacy campaign	Trained 20 C/MLGUs with management and elimination of risk of disease contamination	Trained 15 C/MLGUs with management and elimination of risk of disease contamination	Trained 13 C/MLGUs with management and elimination of risk of disease contamination	OPV	MLGU, BLGU
83	Support to the swine industry stakeholders & partner agencies	swine industry stakeholders & partner agencies	Conduct intensive IEC and orientation	Increase disease awareness and responsibilities among swine industry			OPV	MLGUs, BLGUs



					stakeholders & partner agencies				
84	EREID	Capacitate C/MLGUs in infection prevention and Control of EREID	All C/MLGUs	Training Donning and Doffing of PPEs	Trained 50% of C/MLGUs/ All Hospitals on Donning and Doffing of PPEs	Trained 50% of C/MLGUs/ All Hospitals on Donning and Doffing of PPEs		PHO	DOH, PDRRMO, C/MHO
85			All C/MLGUs	Training on Infection Prevention and Control in Health Facilities	50% of the C/MLGUs/ All Hospitals obtained knowledge and skills on infection prevention and control	50% of the C/MLGUs/ All Hospitals obtained knowledge and skills on infection prevention and control		PHO	DOH, PDRRMO, C/MHO
86			All C/MLGUs	Training on Philippine Integrated Disease Surveillance and Response	48 C/MLGUs/ All Hospitals obtained knowledge and skills on Integrated Disease Surveillance and Response			PHO	DOH, PDRRMO, C/MHO
87			All C/MLGUs	Training on Event-Based Surveillance System	48 C/MLGUs obtained knowledge on event-Based Surveillance System			PHO	DOH, PDRRMO, C/MHO
88			All C/MLGUs	Training on Clinical Pathway Guidelines on Infectious Diseases	48 C/MLGUs obtained knowledge on Clinical Pathway Guidelines on			PHO	DOH, PDRRMO, C/MHO



				Infectious Diseases				
89		All C/MLGUs	Training on Field Epidemiology Training Program	2 Personnel (1 per HCPN)			DOH	PHO, PDRRMO, C/MHO
90		All C/MLGUs	Procurement of PPEs or prepositioning of PPEs	To be determined	To be determined	To be determined	PDRRMO	DOH, PDRRMO, C/MHO
91		All C/MLGUs	Establish 24/7 Operation Center (Infrastructure)	Constructed an OpCen space to monitor and respond EREID cases			PHO	DOH, PDRRMO, C/MHO
92		All C/MLGUs	BLS Training of Trainers	5 representatives from LGUs with acquired knowledge and skills on BLS	5 representatives from LGUs will acquire knowledge and skills on BLS		PHO	DOH, PDRRMO, C/MHO
93		All C/MLGUs	BLS Training	48C/MLGUs with acquired knowledge and skills on BLS		48 C/MLGUs	PHO	DOH, PDRRMO, C/MHO
94		All C/MLGUs	SFA Training of Trainers	5 representatives from LGUs with acquired knowledge and skills on SFA	5 representatives from LGUs will acquire knowledge and skills on SFA		PHO	DOH, PDRRMO, C/MHO
95		All C/MLGUs	Training on Health Emergency Response Operation	48 C/MLGUs representatives from LGUs Health Emergency with acquired knowledge and skills on			PHO	DOH, PDRRMO, C/MHO



				Response Operation				
96		All C/MLGUs	Mass Casualty Management Training of Trainers	30 participants with acquired knowledge and skills on Mass Casualty Management			PHO	DOH, PDRRMO, C/MHO
97		All C/MLGUs	Mass Casualty Management Training	24 C/MLGUs with acquired knowledge and skills on Mass Casualty Management	24 C/MLGUs with acquired knowledge and skills on Mass Casualty Management		PHO	DOH, PDRRMO, C/MHO
98		All C/MLGUs	Training on WASH in Emergencies	24 C/MLGUs with acquired knowledge and skills on WASH in Emergencies	24 C/MLGUs		PHO	DOH, PDRRMO, C/MHO
99		All C/MLGUs	Training on MHPSS	24 C/MLGUs with acquired knowledge and skills on MHPSS	24 C/MLGUs with acquired knowledge and skills on MHPSS		PHO	DOH, PDRRMO, C/MHO
100		All C/MLGUs	Training on Nutrition in Emergencies	24 C/MLGUs with acquired knowledge and skills on Nutrition in Emergencies	24 C/MLGUs with acquired knowledge and skills on Nutrition in Emergencies		PHO	DOH, PDRRMO, C/MHO
101		All C/MLGUs	Training on Surveillance on Post Extreme Emergencies and Disasters	24 C/MLGUs with acquired knowledge and skills on Surveillance on Post Extreme Emergencies and Disasters	24 C/MLGUs with acquired knowledge and skills on Surveillance on Post Extreme Emergencies and Disasters		PHO	DOH, PDRRMO, C/MHO



102		All C/MLGUs	Training on Minimum Initial Service Package	24 C/MLGUs with acquired knowledge and skills on Minimum Initial Service Package	24 C/MLGUs with acquired knowledge and skills on Minimum Initial Service Package		PHO	DOH, PDRRMO, C/MHO
103		All C/MLGUs	Training on Sub-PHEMAP	24 C/MLGUs with acquired knowledge and skills on Sub-PHEMAP	24 C/MLGUs with acquired knowledge and skills on Sub-PHEMAP		PHO	DOH, PDRRMO, C/MHO
104		All C/MLGUs	Training on Health and Hygiene promotion	48 C/MLGUs with acquired knowledge and skills on Health and Hygiene promotion			PHO	DOH, PDRRMO, C/MHO
105		All C/MLGUs and Province	PDNA Training on Health	48 C/MLGUs and Province with obtained knowledge on PDNA for health			PHO	DOH, PDRRMO, C/MHO
106		All C/MLGUs and Province	Prepositioning of Health Emergency Supplies/Logistics to C/MLGUs (Hygiene Kits, Family Health Kits, CAMPOLAS, Plus Kits, Essential medicines, HypoSol, Aquatabs, CMAM Commodities, Cadaver bags, Psychotropic Drugs, Psychosocial First Aid Kit, Equipment and Tools for RNA,	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	PHO, C/MHO	DOH, PDRRMO,



			Micronutrient Supplements, IYCF, Drinking water container, water purifier bags)					
107		All C/MLGUs or Province level	Procurement of mobile water purifier	mobile water purifier available and accessible to Province and C/MLGUs			PHO	DOH, PDRRMO, C/MHO
108		All Health Facilities	Back-up power supply for all RHUs (Cold Chain)	100% of all RHUs with Back-up power supply that is in good condition			C/MLGUs	DOH, PHO, PDRRMO



Thematic Area:		Response and Early Recovery							
Hazard	Actions specific to the province/Actions that the province can do for the component LGUs	Short Term Target	PPAs	Output / Timeframe			Office/s Responsible	Partner Agencies	
		(2023-2025)		2023	2024	2025			
1	ALL HAZARD	Augment needs of LGUs affected	Affected LGUs	Deployment of Relief Teams for Relief goods distribution	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	OPSWDO, C/MSWDO, PDRRMO	DSWD, private sector
2				Provision food and non-food items to all affected areas					
3				Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
4				Provision of alternative source of water and power supply	Tapped available and alternative source of water and power supply	Tapped available and alternative source of water and power supply	Tapped available and alternative source of water and power supply	BPEMO/PEO	OCD7/BFP/PNP
5				Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
6				Cash for work activities (emergency assistance to disaster survivors)	families with additional income through cash for activities	families with additional income through cash for activities	families with additional income through cash for activities	OPSWD	DSWD



7			Management of evacuation centers	Direct and systematic operations of Evacuation centers for affected families	Direct and systematic operations of Evacuation centers for affected families	Direct and systematic operations of Evacuation centers for affected families	OPSWD/PHO	DSWD/ OCD7
8								
9			Activation of ICS and Evacuation management system	ICS and evacuation management	ICS and evacuation management	ICS and evacuation management	PDRRMO-TaRSIER 117	Related NGAs
10				Fully operational, as needed	Fully operational, as needed	Fully operational, as needed		
11			Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
12			Deployment of SAR Teams & Search, Rescue & Retrieval operations	SAR teams provided prompt assistance to affected areas	SAR teams provided prompt assistance to affected areas	SAR teams provided prompt assistance to affected areas	PDRRMO-TaRSIER 117	
13			Provision of Emergency Medical Services	Assisted and treated affected individuals needing medical attention	Assisted and treated affected individuals needing medical attention	Assisted and treated affected individuals needing medical attention	PHO, C/MHO	DOH Can be for all hazards
14								
15			Support to MLGU Emergency Response (Evacuation, Search & Rescue, Relief Operations)	as needed	as needed	as needed	PDRRMO-TaRSIER 117	Concerned NGAs



				Provision of emergency relief goods/supplies to affected LGUs	As needed			OPSWD	DSWD
				Procurement of medical equipment/ supplies for barangays to respond to calamities/ health emergencies/ outbreak, vaccines, vitamins, drugs and medicines and other laboratory requirements to manage emerging and re-emerging diseases such as Covid-19 and other EREID	<p>Provided medical equipment and supplies to barangays to be able to manage/ control the spread of emerging and re-emerging diseases. (P40M)</p> <p>Provide testing kits, vaccines, needed drugs and medicines to affected public in times of calamities and health emergencies</p>			PHO	DOH, C/MLGUs
				Provision of indemnification/incentive funds to affected farmers to control, eradicate and contaminate disease outbreak of hogs and other livestock	Provided indemnity fund to affected farmers/hog growers			OPA, OPV	MAO, C/MLGUs
				Conduct of Post Disaster and Needs Analysis (PDANA) activities	Conducted trainings for disaster assessment and needs analysis (DANA) and post			PDRRMO	OCD VII, C/MLGUs



					DANA capabilities				
				Procurement of fuel (diesel and unleaded) for the continued operation of the COVID-19 and Typhoon Odette response measures	Provided assistance to the affected families			PDRRMO	C/MLGUs
				Deployment of Relief Teams, Emergency Medical Services, SAR/SRR Teams, psychosocial teams	Provide immediate medical services to disaster victims including psychosocial aid			OPSWD, PHO, PDRRMO	DWSD, C/MLGUs
				Provision of human interventions/psychosocial support to affected individuals/families/communities	Provided alternative livelihood relief or assistance or activities to fisherfolks/farmers and community if crops/livelihood are destroyed after disasters			OPSWD, OPV, OPA	DSWD, MAO, DOLE, Other National Government Agencies
16	Health-related	Monitoring and Supervision of Health Cluster Operations in Evacuation Centers (for outbreak of infectious diseases)	All Evacuation Centers	Deployment of MHPSS, WASH, Medical & NiE Teams	MHPSS, WASH, Medical & NiE Teams provided immediate assistance to affected population, as needed	MHPSS, WASH, Medical & NiE Teams provided immediate assistance to affected population, as needed	MHPSS, WASH, Medical & NiE Teams provided immediate assistance to affected population, as needed	PHO, C/MHO	DOH, LGU, DSWD



17				Conduct of Hygiene Promotion Activities	Hygiene activities are adopted in all evacuation centers as necessary	Hygiene activities are adopted in all evacuation centers as necessary	Hygiene activities are adopted in all evacuation centers as necessary	PHO, C/MHO	DOH, LGU
18				Deployment of Mobile Water Purifier	Mobile purifier available and accessible to affected population, as needed	Mobile purifier available and accessible to affected population, as needed	Mobile purifier available and accessible to affected population, as needed	PHO, C/MHO	DOH, LGU
19		Augmentation of Health Emergency Supplies	All C/MLGUs	Provision (Augmentation) of Health Emergency Supplies	Health emergency supplies are available to C/MLGUs to augment supply gap, as needed	Health emergency supplies are available to C/MLGUs to augment supply gap, as needed	Health emergency supplies are available to C/MLGUs to augment supply gap, as needed	PHO, C/MHO	DOH, LGU
20		Support C/MLGUs in operations and response during emergencies and disaster	1 fixed site and alternate site identified	Operational Emergency Operation Center and One Hospital Command Center	Identified Space or infrastructure available in case of emergency (with policy)			PHO	DOH, LGU
21				Emergency hiring of EOC Staff	As needed	As needed	As needed	PHO	DOH, LGU
22	FLOODING TYPHOON, SEVERE WIND	Support to the reduction of population at risk to flooding, typhoon, severe wind	Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Alburquerque	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population		PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned



		With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon		Preparation and submission of proposals and requests				
				Execution or signing of MOU				
				Monitoring and follow up partners				
	Support to the reduction of agricultural areas at risk to Flooding, Typhoon, Severe Wind	Candijay (AF), Alicia, Guindulman (AF)	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-Hernandez, Jagna, Sierra Bullones, Dana						
			Cash for work activities (emergency assistance to farmers and growers)				OPA	MAO, DA, MLGUs
		Nipa Plantation: Cortes (nipa), Maribojoc (nipa), Loboc, Inabanga, Loay	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Mabini, Sevilla, Buenavista, Ubay, Bein Unido, Calape, Clarin, Talibon, Pres. CPG, Tubigon, Lila, Loon, Inabanga	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs



		Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Support to the reduction of critical facilities and lifelines at risk to Flooding, Typhoon, Severe Wind	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Roads and Bridges:	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	1st District Abatan Bridge in Cortes, Camayaan Bridge in Cortes	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
	2nd District Inabanga, Buenavista, Clarin, Malitbog in Dagohoy	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
	3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay, Loboc	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH



		(Agape Bridge and Roads)						
	Support to the reduction of built-up areas at risk to Flooding, Typhoon, Severe Wind	Tagbilaran City, Urbanizing Municipalities: Tubigon, Talibon, Ubay, Panglao, Dauis, Jagna, Loon	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
			Deployment of Relief Teams for Relief goods distribution	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	OPSWDO, C/MSWDO, PDRRMO	DSWD, private sector
			Provision food and non-food items to all affected areas					
	Support to the reduction of environmental areas at risk to Flooding, Typhoon, Severe Wind	Priority 16 Protected Areas in Bohol	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
			Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
	Support to the reduction of heritage areas and tourism sites at risk to Flooding, Typhoon, Severe	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayan, Panglao, Dauis, Inabanga,	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH



		Wind (For validation with NHCP)	Danao, Jagna, Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
23	DROUGHT	Support to the reduction of critical facilities and lifelines at risk to drought	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
				Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
		Support to the reduction of agricultural areas at risk to drought	All Agricultural Towns (45 Municipalities)	Cash for work activities (emergency assistance to farmers and growers)	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	OPA	DA, MAO
			All towns with Dams, Irrigation facilities Ubay, San Miguel, Pilar, Talibon (2)	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Support to the reduction of heritage areas and tourism sites at risk to drought	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Dauis, Inabanga, Danao, Jagna,	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs



		Talibon, Sierra Bullones, Pilar, Guindulman, Duero						
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Support to the reduction of environmental areas at risk to drought	7 Watershed Areas (Inabanga, Pilar, Danao, S-Bullones, Clarin, Dagohoy, Loboc, Bilar, Duero G-Hernandez, San Miguel, Alicia, Candijay, Talibon, Guindulman, Pilar, Carmen, Balilihan, Catigbi-an, Batuan, Getafe, Buenavista, Sagbayan	Cash for work activities (emergency assistance to farmers and growers)	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	OPA	DA, MAO
STORM SURGE	Support to the reduction of population at risk to storm surge	Indigenous settlements (Badjao) Getafe Informal Settlers Bien Unido, Pres. CPG, Talibon Loay, Duero, Lila, Garcia-	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population		PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned



		Hernandez, Jagna						
			Preparation and submission of proposals and requests					
			Deployment of Relief Teams for Relief goods distribution	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	OPSWDO, C/MSWDO, PDRRMO	DSWD, private sector
			Cash for work activities (emergency assistance to disaster survivors)	families with additional income through cash for activities	families with additional income through cash for activities	families with additional income through cash for activities	OPSWD	DSWD
	Support to the reduction of critical facilities and lifelines at risk to storm surge	All C/MLGUs	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Support to the reduction of agricultural areas at risk to storm surge	All MLGUs with agricultural areas	Cash for work activities (emergency assistance to farmers and growers)	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	OPA	DA, MAO
24	Support to the reduction of heritage areas and tourism sites at risk to storm surge	Panglao, Dausi, Anda, Cortes, Baclayon, Loon, Maribojoc, Dausi, Alburquerque	Activate emergency communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	BTO	DOT/EMBASSY



TSUNAMI	Support to the reduction of population at risk to tsunami	Indigenous settlements (Badjao) Dausi, Getafe Informal Settlers Bien Unido, Pres. CPG, Talibon, Loay Duero, Lila, Garcia Hernandez, Jagna	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population		PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned
			Deployment of Relief Teams for Relief goods distribution	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	OPSWDO, C/MSWDO, PDRRMO	DSWD, private sector
			Cash for work activities (emergency assistance to disaster survivors)	families with additional income through cash for activities	families with additional income through cash for activities	families with additional income through cash for activities	OPSWD	DSWD
	Support to the reduction of critical facilities and lifelines at risk to tsunami	All coastal LGUs	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Support to the reduction of agricultural areas at risk to tsunami							
	Coastal Towns	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon,	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
			Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to	Response teams conducted search and rescue to	PDRRMC	OCD7 and other NGAs



		Panglao, Daus, Mabini, Ubay			affected communities	affected communities		
	Fisheries	Mabini, Ubay, Talibon, Bien Unido, Pres. CPG, Calapi, Candijay	Cash for work activities (emergency assistance to fisherfolks)	Fisherfolks with additional income through cash for activities	Fisherfolks with additional income through cash for activities	Fisherfolks with additional income through cash for activities	OPA	DA
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Poultry and Livestock	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao, Daus	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
			Cash for work activities (emergency assistance)	Poultry and livestock owners with additional income through cash for activities	Poultry and livestock owners with additional income through cash for activities	Poultry and livestock owners with additional income through cash for activities	OPA, OPV	DA, MAO
	Support to the reduction of built-up areas at risk to Tsunami	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Albuquerque, Baclayon, Panglao, Daus	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
			Conduct RDANA Deployment of Relief Teams for Relief goods distribution Provision food and non-food items to all affected areas	Accomplished RDANA Delivered food and non-food items to affected areas	Accomplished RDANA Delivered food and non-food items to affected areas	Accomplished RDANA Delivered food and non-food items to affected areas	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector



			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs	
		Dimiao							
		Support to the reduction of environmental areas at risk to tsunami	Cortes, Maribojoc, Loon, Calape Dimiao	Cash for work activities (emergency assistance to farmers and growers)	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	OPA	DA, MAO
		River basins		Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
		Support to the reduction of heritage areas and tourism sites at risk to tsunami	Lila, Loay, Albuquerque, Baclayon	Activate emergency communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	Tapped communication hotline for foreign nationals	BTO	DOT/EMBASSY
			Panglao, Dauis, Anda, and all protected seascapes						
				Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
RAIN-INDUCED LANDSLIDES	support to the reduction of population at risk to RIL	Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar (not too severe) Catigbian, Inabanga, Balilihan, Antiquera, San Miguel	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population			PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned
				Preparation and submission of proposals and requests					
				Execution or signing of MOU					
				Monitoring and follow up partners					
EARTHQUAKE , GROUND	Support to the reduction of	C/MLGUs near East Bohol	Execution of Memorandum of Understanding with NGAs,		Delivered nutritious relief			PDRRMO, C/MDRRMO,	DSWD, NGOs, POs, private



SHAKING, LIQUEFACTION	population at risk to Ground Shaking, Liquefaction	Fault (epicenter at Jagna, SW propagation), and South Offshore Fault: Jagna, Tagbilaran City, Corella, Valencia, Daus, Panglao, Loay, Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Loboc, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San Isidro, Sevilla, Antequera, Cortes, Maribojoc, Tubigon, Calape, Sikatuna	NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency		food items to affected population		OPSWD), C/NSWDO	groups and other concerned
				Monitoring and follow up partners				
	Support to the reduction of built-up at risk to earthquake, ground Shaking, liquefaction	Jagna, Tagbilaran City, Valencia, Daus, Panglao	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs



			Provision food and non-food items to all affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	OPSWDO, C/MSWDO, PDRRMO	DSWD, private sector
	Support to the reduction of agricultural areas at risk to earthquake, ground Shaking, liquefaction	Garcia-Hernandez, Loay, Jagna, Alburquerque, Tagbilaran City	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
			Cash for work activities (emergency assistance to farmers and growers)	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	Farmers and growers with additional income through cash for activities	OPA	DA, MAO
	Support to the reduction of critical facilities and lifelines at risk to earthquake, ground Shaking, liquefaction	All C/MLGUs	Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH
			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
	Support to the reduction of environmental areas at risk to earthquake, ground Shaking, liquefaction	Watershed: Garcia-Hernandez (Manaba river)	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs



		Support to the reduction of heritage areas and tourism sites at risk to earthquake, ground Shaking, liquefaction	Centennial Churches: Baclayon, Jagna, Tagbilaran City, Valencia, Dauis, Panglao, Lila, Dimiao, Alburquerque, Loay, Garcia-Hernandez, Cortes, Maribojoc, Loon, Calape, Balilihan, Albur	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC	OCD7 and other NGAs
				Deployment of clearing teams	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PEO	DPWH



EARTHQUAKE INDUCED LANDSLIDE (EIL)	Support to the reduction of population at risk to EIL	Loboc , Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan, Lila, Guindulman, Pilar, Balilihan, Catigbian, Clarin, Tubigon, Calape, Loon, Maribojoc, Antequera, Buenavista, Inabanga, Sikatuna, Albur, Loay, Cortes, Carmen Dagohoy, San Miguel, Mabini, Anda, Trinidad, Ubay, Corella	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population		PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned
			Provision food and non-food items to all affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector
			Preparation and submission of proposals and requests					
			Execution or signing of MOU					



			Monitoring and follow up partners						
		Support to the reduction of built-up areas at risk to EIL	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape, Bilar, Batuan	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
				Conduct RDANA Provision food and non-food items to all affected areas	Conduct RDANA Delivered food and non-food items to affected areas	Accomplished RDANA Delivered food and non-food items to affected areas	Accomplished RDANA Delivered food and non-food items to affected areas	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector
		Support to the reduction of critical facilities and lifelines at risk to EIL		Conduct RDANA	Conduct RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector
				Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs
	SINKHOLE	Support to the reduction of population at risk to sinkholes	(Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra	Execution of Memorandum of Understanding with NGAs, NGOs, POs, private groups and other concerned stakeholders for the provision of nutritious relief food items after an emergency	Linkaging and Identification of possible partners:	Delivered nutritious relief food items to affected population		PDRRMO, C/MDRRMO, OPSWD), C/NSWDO	DSWD, NGOs, POs, private groups and other concerned



		Bullones, San Isidro, Tubigon, Catigbian, Antequera, Calape, Cortes							
		(Portions) Panglao, Balilihan, Garcia-Hernandez, Sagbayan, Carmen, Tagbilaran, Maribojoc	Provision food and non-food items to all affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	Delivered food and non-food items to affected areas	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector	
	Support to the reduction of built-up areas at risk to sinkholes	Tubigon, Talibon Jagna, Carmen, Loon, Tagbilaran, Cortes, Maribojoc, Trinidad, Calape, Candijay, Dauis	Deployment of response teams and rescue equipment	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	Response teams conducted search and rescue to affected communities	PDRRMC	OCD7 and other NGAs	
Conduct RDANA			Conduct RDANA	Accomplished RDANA	Accomplished RDANA	Accomplished RDANA	PDRRMC OPSWDO, C/MSWDO, PDRRMO	OCD7 and other NGAs DSWD, private sector	
25	(Animal) Health-Related	Prevent further Contamination of Infection or Containment of Infection	Infection Area and nearby MLGU	conduct of outbreak investigation and establishment of outbreak zones in ASF confirmed cases	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	OPV	DA, MLGU, BLGU, DENR



26			enforcement of policies on movement restrictions following the 1 – 7 – 10 protocols	1 – 7 – 10 protocols in place and monitored	1 – 7 – 10 protocols in place and monitored	1 – 7 – 10 protocols in place and monitored	OPV	DA, MLGU, BLGU, DENR	
27			identification of burial sites and working teams for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	OPV	DA, MLGU, BLGU, DENR	
28			conduct test and destroy	Implemented test and destroy	Implemented test and destroy	Implemented test and destroy	OPV	DA, MLGU, BLGU, DENR	
29			decontamination, disinfection and observe downtime period	Strictly implemented proper decontamination, disinfection	Strictly implemented proper decontamination, disinfection	Strictly implemented proper decontamination, disinfection	OPV	DA, MLGU, BLGU, DENR	
30			Provision of Special Fund for the Compensation of Affected Farmers	Available and distributed compensation fund to affected farmers	Available and distributed compensation fund to affected farmers	Available and distributed compensation fund to affected farmers	OPV, C/MLGUs	DA	
31	EREID	Physical provincial isolation center to support C/MLGUs for EREID management	1 Isolation Center (Tagbilaran City)	Re-activate provincial isolation center as step-down facility	Operational provincial isolation center, as needed	Operational provincial isolation center, as needed	Operational provincial isolation center, as needed	PHO, C/MHO	DOH, LGU
32		Ensure availability of Isolation beds during EREID Outbreaks	All government and private Hospitals	Activation of hospital protocol on EREID Outbreak	All hospitals compliant to EREID outbreak protocol, as needed	All hospitals compliant to EREID outbreak protocol, as needed	All hospitals compliant to EREID outbreak protocol, as needed	PHO, C/MHO	DOH, LGU



Thematic Area:		Rehabilitation and Recovery							
1	Hazard	Actions specific to the province/Actions that the province can do for the component LGUs	Short Term Target (2023-2025)	PPAs	Output / Timeframe			Office/s Responsible	Partner Agencies
					2023	2024	2025		
1	ALL HAZARD	Augment needs of LGUs affected		Conduct of PDNA	Accomplished PDNA Report	Accomplished RDNA and PDNA Report	Accomplished RDNA and PDNA Report	PDRRMO	OCD7 and other concerned NGAs
2				Rehabilitation and retrofitting of damaged infrastructures per municipality and province	Upgraded and safe infrastructures based on e PDNA Report	Upgraded and safe infrastructures based on e PDNA Report	Upgraded and safe infrastructures based on e PDNA Report	PEO	DPWH
3				Shelter program	shelters provided to affected LGUs	shelters provided to affected LGUs	shelters provided to affected LGUs	PPDO, OPSWD, PDRRMO, PEO	NHA, DSWD, DSUD
					Conduct of cash for work/food for work activities/alternative livelihood for affected families	provided alternative livelihood or assistance to affected families			OPSWD
4	HEALTH (DRRM-H)	Assist C/MLGUs in the rehabilitation and recovery	All C/MLGUs affected	Conduct PIE	Post incident Evaluation (PIE) and documentation of best practices, lessons, problems encountered, challenges and recommendations, as necessary	Post incident Evaluation (PIE) and documentation of best practices, lessons, problems encountered, challenges and recommendatio	Post incident Evaluation (PIE) and documentation of best practices, lessons, problems encountered, challenges and recommendati	PDRRMO	PHO, DOH, LGU



						ns, as necessary	ons, as necessary		
5				Psychosocial interventions for the victims	all victims provided with psychosocial intervention base on medical assessment	all victims provided with psychosocial intervention base on medical assessment	all victims provided with psychosocial intervention base on medical assessment	PHO, C/MHO	DOH, LGU
6				Continuous monitoring of health conditions of the affected population (ex. Surveillance)	health conditions of the affected population reported and assisted, as necessary	health conditions of the affected population reported and assisted, as necessary	health conditions of the affected population reported and assisted, as necessary	PHO, C/MHO	DOH, LGU
7				Repair of damaged health facilities and lifelines	Health facilities upgraded based on standards as necessary	Health facilities upgraded based on standards as necessary	Health facilities upgraded based on standards as necessary	PHO, C/MHO	DOH, LGU
8				Replenishment of utilized resources	Available medical resources if necessary	Available medical resources if necessary	Available medical resources if necessary	PHO	DOH, LGU
9				Recognition of responders	Responders given recognition for saving lives (as necessary)	Responders given recognition for saving lives (as necessary)	Responders given recognition for saving lives (as necessary)	PHO, PDRRMO	DOH, LGU



10				Review and Updating of DRRMH Plan	Updated and approved DRRMH Plan	Updated and approved DRRMH Plan	DRRMH Plan approved for 2026-2028	PHO, C/MHO	DOH, LGU
11				Stress debriefing of the responders	all responders provided with care and debriefing as necessary	all responders provided with care and debrief as necessary	all responders provided with care and debrief as necessary	PHO, C/MHO	DOH, LGU
12	TYPHOON, SEVERE WIND, FLOODING	Support to the reduction of population at risk to flooding, typhoon, severe wind	Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Albuquerque	Determine number of families / households whose livelihood/ main source of income were affected	families with appropriate alternative livelihood	families with appropriate alternative livelihood	families with appropriate alternative livelihood	PSWDO, PDRRMO, and C/MLGUs	DSWD
13				Assess and evaluate appropriate livelihood interventions					DTI
14			With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon	Provision of alternative livelihood intervention to expedite recovery					
15				Linkage with counterpart National Agencies, NGOs, etc					



16	Support to the reduction of agricultural areas at risk to Flooding, Typhoon, Severe Wind	Candijay (AF), Alicia, Guindulman (AF)	Provision of farm inputs to farmers and farmer associations					
17		Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-Hernandez, Jagna, Sierra Bullones, Dana	Determine number of target farmers and farmer associations	Delivered and distributed farm inputs to affected farmers and farmer association	Delivered and distributed farm inputs to affected farmers and farmer association	Delivered and distributed farm inputs to affected farmers and farmer association	OPA, PDRRMO, C/MLGUs	DA
18			Assess and evaluate appropriate farm inputs					
19			Linkage with counterpart National Agencies, NGOs, etc					
		Nipa Plantation: Cortes (nipa), Maribojoc (nipa), Loboc, Inabanga, Loay	Capability training on nipa and vegetable production	Identification of possible beneficiaries, fund sourcing and conduct of training	Identification of possible beneficiaries, fund sourcing and conduct of training	Identification of possible beneficiaries, fund sourcing and conduct of training	OPA, G.O., City/Mun. LGUs	DA, DENR
			Establishment of Nipa Nursery for Rehabilitation	Identification of areas for the establishment of nursery and actual nursery establishment	Identification of areas for the establishment of nursery and actual nursery establishment	Identification of areas for the establishment of nursery and actual nursery establishment	BPEMO, OPA	DA, DENR
		Mabini, Sevilla, Buenavista, Ubay, Bein	Capability training on nipa and vegetable production	Identification of possible beneficiaries	Identification of possible beneficiaries,	Identification of possible beneficiaries,	OPA, G.O., City/Mun. LGUs	DA, DENR



		Clarín, Malitbog in Dagohoy	(public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged roads or bridges	private) and other stakeholders and actual linkage and collaboration	agencies (public and private) and other stakeholders	agencies (public and private) and other stakeholders		Senate, Office of the President, other NGAs, CSOs, other private partners
		3rd District Candijay, Guindulman, Duero, Garcia-Hernandez, Lila, Bilar, Carmen, Batuan, Valencia, Alicia, Loay, Loboc (Agape Bridge and Roads)	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged roads or bridges	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Seawall: Support to the reduction of built-up areas at risk to Flooding, Typhoon, Severe Wind	1st District Baclayon (for repair)	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged seawall	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
		3rd District Guindulman, Duero, Jagna, Garcia-Hernandez, Valencia,	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and	Linkage and collaboration with partner agencies (public and private) and	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs,



			Dimiao, Lila (ongoing), Loay	for the repair and rehabilitation of damaged seawall		other stakeholders	other stakeholders		other private partners
			Tagbilaran City, Urbanizing Municipalities: Tubigon, Talibon, Ubay, Panglao, Daus, Jagna, Loon	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged seawall	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
		Support to the reduction of environmental areas at risk to Flooding, Typhoon, Severe Wind	Priority 16 Protected Areas in Bohol,	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO, BPEMO	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
		Support to the reduction of heritage areas and tourism sites at risk to Flooding, Typhoon, Severe Wind (For validation with NHCP) Support to the reduction of critical facilities and lifelines at risk to drought	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Daus, Inabanga, Danao, Jagna, Talibon, Sierra Bullones, Pilar, Guindulman, Duero	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged heritage areas and tourism sites	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BTO, CCAD, PEO, LGUs	DPWH, NHCP, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners



			Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Rehabilitation of damage water sources	All damage water sources are rehabilitated	All damage water sources are rehabilitated	All damage water sources are rehabilitated	PDRRMO, PEO, PPDO	DPWH and other NGAs
20	DROUGHT	Support to the reduction of critical facilities and lifelines at risk to drought	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Rehabilitation of damage water sources	All damage water sources are rehabilitated	All damage water sources are rehabilitated	All damage water sources are rehabilitated	PDRRMO, PEO, PPDO	MEO, MPDO, NEDA
21		Support to the reduction of agricultural areas at risk to drought	All Agricultural Towns (45 Municipalities)	Provision farm inputs to affected farmers	Allocated farm inputs to all affected farmers in MLGUs	Allocated farm inputs to all affected farmers in MLGUs	Allocated farm inputs to all affected farmers in MLGUs	PDRRMO, OPA	DA, DOLE, DTI
22			All towns with Dams, Irrigation facilities Ubay, San Miguel, Pilar, Talibon (2)	Provision of alternative livelihoods	All affected farmers provided with appropriate source of alternative livelihood	All affected farmers provided with appropriate source of alternative livelihood	All affected farmers provided with appropriate source of alternative livelihood	PDRRMO, OPA	DA, DOLE, DTI
		Support to the reduction of heritage areas and tourism sites at risk to drought	Loboc, Cortes, Alburquerque, Loon, Balilihan, Dimiao, Loay, Baclayon, Panglao, Dauis, Inabanga, Danao, Jagna, Talibon, Sierra	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BTO, CCAD, PEO, LGUs	DPWH, NHCP, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners



			Bullones, Pilar, Guindulman, Duero	damaged heritage areas and tourism sites						
		Support to the reduction of environmental areas at risk to drought	7 Watershed Areas (Inabanga, Pilar, Danao, S-Bullones, Clarin, Dagohoy, Loboc, Bilar, Duero G-Hernandez, San Miguel, Alicia, Candijay, Talibon, Guindulman, Pilar, Carmen, Balilihan, Catigbi-an, Batuan, Getafe, Buenavista, Sagbayan	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO, BPEMO	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners	
23	STORM SURGE	Support to the reduction of population at risk to storm surge	Indigenous settlements (Badjao)	Provision of shelter assistance	Shelter assistance extended to affected families	Shelter assistance extended to affected families	Shelter assistance extended to affected families	OPSWD, C/MSWDO	DSWD/BPESO	
			Getafe							
24			Informal Settlers	Provision of livelihood start up kits	Affected families availed livelihood start-up kits	Affected families availed livelihood start-up kits	Affected families availed livelihood start-up kits		Affected families availed livelihood start-up kits	
25			Bien Unido, Pres. CPG, Talibon							



26		Loay, Duero, Lila, Garcia-Hernandez, Jagna	Provided livelihood skills enhancement	Individuals with additional livelihood skills to generate income	Individuals with additional livelihood skills to generate income	Individuals with additional livelihood skills to generate income	
29	Support to the reduction of critical facilities and lifelines at risk to storm surge		Provision Climate-smart industries and facilities				BIPC/BICTO/PEO
30	Roads and Bridges	Dauis, Baclayon, Albuquerque, Lila	Relocation of critical facilities				
31	Water	Pres. CPG, Bien Unido, Trinidad	Assessment of structural integrity as basis for the recommendation for rehab/retrofitting of damaged facilities	Accomplished assessment report of damages facilities and lifelines to be recommended for rehabilitation or retrofitted	Accomplished assessment report of damages facilities and lifelines to be recommended for rehabilitation or retrofitted	Accomplished assessment report of damages facilities and lifelines to be recommended for rehabilitation or retrofitted	PEO
32	Power	Pres. CPG, Ubay, Bien Unido	Database on the power sources and supplies	Geo-tagging of the power sources and supplies at risk to storm surge			PDRRMO, PPDO
	Municipal Halls	Guindulman, Anda, Garcia-Hernandez, Jagna, Lila, and other coastal LGUs	Assessment of structural integrity as the basis for the recommendation for rehab/retrofitting of damaged facilities	Geo-tagging of the Municipal Halls and Provincial buildings and critical facilities at risk to storm surge			PDRRMO, PPDO, PEO
	Provincial buildings						MLGUs, DPWH,



	Schools	Baclayon, Loay, Dimiao, Valencia, Pres. CPG, Loon, and other coastal LGUs	Database of all the schools located in the coastal areas at risk to storm surge	Geo-tagging of the Municipal Halls at risk to storm surge			PDRRMO, PPDO	DEP-ED, MLGUs
	Churches and heritage sites	Anda, Baclayon, Bien Unido, and other coastal LGUs	Database and mapping of the churches and heritage sites located in the coastal areas at risk to storm surge	Geo-tagging of the churches and heritage sites			PDRRMO, BPTO	MLGUs, DOT, NHI, National Museum
	Evacuation centers	Garcia-Hernandez, Jagna, Guindulman, and other coastal LGUs	Assessment of structural integrity as basis for the recommendation for rehab/retrofitting of damaged facilities identify PPAs					
	Seaports	Tagbilaran City, Loon, Alburquerque, Maribojoc	Database on the seaports	Geo-tagging of seaports at risk to storm surge				
	Support to the reduction of agricultural areas at risk to storm surge							
	Fisheries	Mabini, Talibon, Bien Unido, Pres. CPG	Provision of alternative livelihood/cash or food for work for affected farmers	families with additional income through alternative livelihood/cash or food for work	families with additional income through alternative livelihood/cash or food for work	families with additional income through alternative livelihood/cash or food for work	OPSWD	DSWD



34			Provision of motorized bancas to affected fisherfolks	Affected fisherfolks provided with 6-footer fiberglass reinforced non-motorized bancas to affected fisherfolks association	Affected fisherfolks provided with 6-footer fiberglass reinforced non-motorized bancas to affected fisherfolks association	Affected fisherfolks provided with 6-footer fiberglass reinforced non-motorized bancas to affected fisherfolks association	OPA	BFAR
35	Agriculture areas		Provision of alternative livelihood/cash or food for work for affected farmers	families with additional income through alternative livelihood/cash or food for work	families with additional income through alternative livelihood/cash or food for work	families with additional income through alternative livelihood/cash or food for work	OPSWD	DSWD
	Support to the reduction of built-up areas at risk to storm surge	Bien Unido, Talibon, Panglao, Baclayon, Jagna, Pres. Carlos P. Garcia, Valencia, Garcia-Hernandez	Repairs/construction of damaged facilities	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	PEO	DPWH
36	Microbusinesses, MSMEs, Remittance Center	Ubay, Dimiao						
	Support to the reduction of environmental areas at risk to storm surge		Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC	Identification of partner agencies (public and private) and other stakeholders and	Linkage and collaboration with partner agencies (public and private) and	Linkage and collaboration with partner agencies (public and private) and	GO, PEO, BPEMO	



TSUNAMI	River basins / Watershed	Inabanga, Trinidad	and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape	actual linkage and collaboration	other stakeholders	other stakeholders		
	Mangrove Cover	Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO, BPEMO	
	Support to the reduction of heritage areas and tourism sites at risk to storm surge	Panglao, Dauis, Anda, Cortes, Baclayon, Loon, Maribojoc, Dauis, Alburquerque	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged heritage areas and tourism sites	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BTO, CCAD, PEO, LGUs	DPWH, NHCP, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Support to the reduction of population at risk to tsunami	Indigenous settlements (Badjao) Informal Settlers	Determine number of families / households whose livelihood/ main source of income were affected				OPSWD	DSWD



		Bien Unido, Pres. CPG, Talibon, Loay Duero, Lila, Garcia Hernandez, Jagna						
	Support to the reduction of critical facilities and lifelines at risk to tsunami							
		All coastal MLGUs	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged roads or bridges	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, othe NGAs, CSOs, other private partners
	Support to the reduction of built- up areas at risk to Tsunami	Cortes, Maribojoc, Loon, Calape, Dimiao, Lila, Loay, Alburquerque, Baclayon, Panglao, Dauis	Repairs/construction of damaged facilities	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	PEO	DPWH, other NGAs
	Support to the reduction of environmental areas at risk to tsunami		Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and	Linkage and collaboration with partner agencies (public and private) and	GO, BPEMO, PEO, LGUs	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs,



			necessary for the repair and rehabilitation of damaged river basins and watershed		other stakeholders	other stakeholders		other private partners
	River basins / Watershed Mangrove Cover	Inabanga, Trinidad Tubigon, Getafe, Clarin, Calape, Loon, Maribojoc	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged river basins and watershed mangrove cover	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BPEMO, PEO, LGUs	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Support to the reduction of heritage areas and tourism sites at risk to tsunami	Lila, Loay, Albuquerque, Baclayon	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged heritage areas and tourism sites	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BPEMO, BTO, CCAD, PEO, LGUs	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
		Panglao, Daus, Anda, and all protected seascapes						
EARTHQUAKE, GROUND SHAKING, LIQUEFACTION	Support to the reduction of population at risk to earthquake, ground Shaking, liquefaction	C/MLGUs near East Bohol Fault (epicenter at Jagna, SW propagation), and South Offshore Fault:	Determine number of families / households whose livelihood/ main source of income were affected				PSWDO, PDRRMO, and C/MLGUs	DSWD



		Jagna, Tagbilaran City, Corella, Valencia, Dauis, Panglao, Loay,						
		Baclayon (Pamilacan Is.), Panglao (Balicasag Is.), Loboc, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Balilihan, Catigbian, San Isidro, Sevilla, Antequera, Cortes, Maribojoc, Tubigon, Calape, Sikatuna	Assess and evaluate appropriate livelihood interventions	families with appropriate alternative livelihood	families with appropriate alternative livelihood	families with appropriate alternative livelihood	PSWDO, PDRRMO, and C/MLGUs	DTI
	Support to the reduction of built-up at risk to earthquake, ground Shaking, liquefaction	Jagna, Tagbilaran City, Valencia, Dauis, Panglao	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged seawall	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Support to the reduction of agricultural areas at risk to earthquake, ground	Garcia-Hernandez, Loay, Jagna, Albuquerque, Tagbilaran City	Provision of farm inputs to farmers and farmer associations	Delivered and distributed farm inputs to affected farmers and farmer association	Delivered and distributed farm inputs to affected farmers and	Delivered and distributed farm inputs to affected farmers and	OPA, PDRRMO, C/MLGUs	DA



	Shaking, liquefaction				farmer association	farmer association		
	Support to the reduction of critical facilities and lifelines at risk to earthquake, ground Shaking, liquefaction	Provincewide	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged roads or bridges	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, othe NGAs, CSOs, other private partners
	Support to the reduction of environmental areas at risk to earthquake, ground Shaking, liquefaction	Watershed: Garcia-Hernandez (Manaba river)	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged landscape and seascape	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO, BPEMO	DPWH, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Support to the reduction of heritage areas and tourism sites at risk to earthquake, ground Shaking, liquefaction	Centennial Churches: Baclayon, Jagna, Tagbilaran City, Valencia, Dausi, Panglao, Lila, Dimiao, Albuquerque, Loay, Garcia-Hernandez, Cortes,	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of IEC and other assistance necessary for the repair and rehabilitation of damaged heritage areas and tourism sites	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, BTO, CCAD, PEO, LGUs	DPWH, NHCP, DENR, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners



			Maribojoc, Loon, Calape, Balilihan, Albur						
EARTHQUAKE INDUCED LANDSLIDE (EIL)	Support to the reduction of population at risk to EIL		Loboc, Dimiao, Jagna, Garcia Hernandez, Duero, S. Bullones, Sagbayan, Danao, San Isidro, Sevilla, Valencia, Candijay, Bilar, Alicia, Sikatuna, Batuan, Lila, Guindulman, Pilar, Balilihan, Catigbian, Clarin, Tubigon, Calape, Loon, Maribojoc, Antequera, Buenavista, Inabanga, Sikatuna, Albur, Loay, Cortes, Carmen Dagohoy, San Miguel, Mabini, Anda, Trinidad, Ubay, Corella	Determine number of families / households whose livelihood/ main source of income were affected					
				Assess and evaluate appropriate livelihood interventions	families with appropriate	families with appropriate	families with appropriate	PSWDO, PDRRMO, and C/MLGUs	DTI



				alternative livelihood	alternative livelihood	alternative livelihood		
	Support to the reduction of built-up areas at risk to EIL	Sagbayan, Garcia-Hernandez, Duero, S. Bullones, Jagna, Calape, Bilar, Batuan	Linkage and collaboration with partner agencies (public and private) and other stakeholders for the provision of assistance necessary for the repair and rehabilitation of damaged seawall	Identification of partner agencies (public and private) and other stakeholders and actual linkage and collaboration	Linkage and collaboration with partner agencies (public and private) and other stakeholders	Linkage and collaboration with partner agencies (public and private) and other stakeholders	GO, PEO	DPWH, DILG, DBM, Congress, Senate, Office of the President, other NGAs, CSOs, other private partners
	Support to the reduction of critical facilities and lifelines at risk to EIL		Repairs/construction of damaged facilities	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	PEO	DSWD
	Microbusinesses, MSMEs, Remittance Center	Ubay, Dimiao	Repairs/construction of damaged facilities	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	PEO	DPWH
SINKHOLE	Support to the reduction of population at risk to sinkholes	Majority) Corella, Lila, Loboc, Sevilla, Daus, Valencia, Guindulman, Anda, Sierra Bullones, San Isidro, Tubigon, Catigbian,	Provision of shelter assistance Provision of livelihood start up kits	Shelter assistance extended to affected families Affected families availed livelihood start-up kits	Shelter assistance extended to affected families Affected families availed livelihood start-up kits	Shelter assistance extended to affected families Affected families availed livelihood start-up kits	OPSWD, C/MSWDO BIPC/BICTO/PEO	DSWD/BPESO



			Antequera, Calape, Cortes (Portions) Panglao, Balilihan, Garcia- Hernandez, Sagbayan, Carmen, Tagbilaran, Maribojoc						
		Support to the reduction of built-up areas at risk to sinkholes	Tubigon, Talibon Jagna, Carmen, Loon, Tagbilaran, Cortes, Maribojoc, Trinidad, Calape, Candijay, Dauis	Repairs/construction of damaged facilities	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	Damaged facilities repaired and upgraded	PEO	DPWH, Other NGAs
37	(Animal) Health-Related	Prevent further Contamination of Infection or Containment of Infection	Infection Area and nearby MLGU	conduct of outbreak investigation and establishment of outbreak zones in ASF confirmed cases	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	Accomplished report on ASF outbreak in areas with confirmed cases, as needed	OPV	DA, MLGU, BLGU, DENR
38				enforcement of policies on movement restrictions following the 1 – 7 – 10 protocol	1 – 7 – 10 protocol in place and monitored	1 – 7 – 10 protocol in place and monitored	1 – 7 – 10 protocol in place and monitored	OPV	DA, MLGU, BLGU, DENR



39				identification of burial sites and working teams for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	Appropriate and safe burial sites identified for proper disposal of culled / slaughtered animals	OPV	DA, MLGU, BLGU, DENR
40				conduct test and destroy	Implemented test and destroy	Implemented test and destroy	Implemented test and destroy	OPV	DA, MLGU, BLGU, DENR
41				decontamination, disinfection and observe downtime period	Strictly implemented proper decontamination, disinfection	Strictly implemented proper decontamination, disinfection	Strictly implemented proper decontamination, disinfection	OPV	DA, MLGU, BLGU, DENR
42				Provision of Special Fund for the Compensation of Affected Farmers	Available and distributed compensation fund to affected farmers	Available and distributed compensation fund to affected farmers	Available and distributed compensation fund to affected farmers	OPV, C/MLGUs	DA, MLGU, BLGU, DENR



Annex 5: LDRRMFIP of Bohol Province

DRRM Fund Investment Plan - Province of Bohol Prevention and Mitigation

GROUP	Functiona l Classifica tion	PPA Code and Descriptio n	Implemen ting Office	Period of Implementation														Expected Output			Funding Source	Remark s			
				Year 1 (2023)				Year 2 (2024)				Year 3 (2025)				Total for 2023-2025									
				Starting Date: January				Starting Date: January				Starting Date: January													
				Co mpl etio n Dat e: Dec em ber	Completion Date: December				Completion Date: December				Total for 2023-2025				Expected Output								
					MO OE	CO	Oth ers	Total	MOOE	CO	Other s	Total	MO OE	CO	Oth ers	Tota l	MO OE	CO	Oth ers	TOT AL			2023	2024	205
All hazard		Update Risk/ Climate Impact Assessment; Updating of CDRA & Updating of Hazard Maps	PPDO, PDRRM O, MEO, MPDC, MENRO	1,700,000	500,000		2,200,000	1,700,000	500,000		2,200,000	1,700,000	500,000		2,200,000	5,100,000	1,500,000	-	6,600,000						
		Review/Updating of the eLCCAP,	PDRRM O	4M			4M								4M				Reviewed/updated eLCCAP						

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		per watershed area																watershed areas				
		Conduct of workshops/seminars on geological and meteorological man-made hazards																Geometrical materials				
		Conduct inventory and mapping of heritage areas and tourism sites at risk to tsunami/s storm surge	PDRMO	600,000.00			600,000.00											support to the reduction of environmental areas at risk to hazards				
		Installation of standard reflectorized early warning signages, prioritizing most hazard prone areas	PDRMO	3M			3M											IEC to support the reduction of population at risk to hazards				
		Partnership and collaboration with NGAs (Climate	PDRMO	50,000.00			50,000.00											Strengthened partnership with the Climate				

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		Change Commission), CSOs and the Academic in DRRM thru Memorandum of Agreement (MOA), private/business sector, CSOs, League of LDRRMOs, MPDCs, LGUs, academe, professional organizations and others to formalize their commitments and mutual help during disasters															Change Commission and other relevant organizations in DRRM						
		Conduct massive orientation and IEC on the Safety and Health Accreditation and Policy Standard	PDRRMO	500,000.00			500,000.00																

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		s and BOMRAC IO for tourism-based facilities and activities																					
		Conduct of cloud seeding operations as mitigating measure for dry spell for the agriculture sector	OPA	2.5 M		2.5M								2.5 M									conduct of cloud seeding operation
		Construction of operation centers/substations cum evacuation and relief operation center in strategic municipalities in the province and vital structures for the operation of PDRMC Command Center	PDRMO, OPSWD		2.5M	2.5M								2.5 M									fully equipped and functional operation center serving also as mini evacuation and relief operation center in strategic municipalities in the province
		Institutionalization/establish	PDRMO	3M		3M								3M									>Purchased devices

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		ment of early warning and forecasting system at prioritized watershed areas in the province and in the municipalities																necessary for the monitoring and communication of emergency/disaster-related concerns. > purchased and installed rain gauges in the municipality				
		Conduct of workshops to contextualize the EWS within the LGUs per watershed Passing of Ordinance establishing the	PDRRM O, BPEMO	1.5 M		1.5M								1.5 M				> To come up with strategies and actions to reduce vulnerabilities of high-risk communities to flooding and landslides To institutionalize EWS in the province				

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		provincewide EWS per hazard watershed area																				
		Information dissemination at the community level on the EWS in localities and conduct of pre-disaster risk assessments/trainings	PDRMO	750,000.00			750,000.00															increase awareness of EWS in the grassroots and to prepare the community of impending weather disturbance
		Establish/update a database of human resource and their capacities, equipment, directories and location of hazards in the localities including geotagging of critical and	PDRMO	300,000.00			300,000.00															make/update database of possible response teams and volunteers per hazard area and determine the preparedness level of affected community

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		lifeline facilities																							
		Formulation of the Disaster Response Operations Manual	PDRRM O	500,000.00			500,000.00																To come up with unified response approaches/protocols for disaster response among agencies involved for adoption province wide		
Typhoon, Severe Wind, Flooding)		Construction of Flood-Control Infrastructures in coordination with national agencies and other stakeholders	PEO, MEO, DPWH	1,420,000	650,000		2,070,000	1,420,000	650,000			2,070,000	1,420,000	650,000									List of targeted areas/sites	Completed Detailed Engineering design	Flood control measures implemented by LGU through the assistance of the Province and DPWH
		Rehabilitation of existing Flood-Control Infrastructures in coordination with concerned	PEO, MEO, DPWH	950,000	500,000		1,450,000	950,000	500,000			1,450,000	950,000	500,000									Formulated Initial Detailed Engineering plan and design	Completed Detailed Engineering plan and design	Improved and rehabilitated Flood-Control Infrastructures

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	d agencies																																																											
	Strict implementation of policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)	MENRO, MEO, MPDC, SB, MO	1,000,000	350,000		1,350,000	1,000,000	350,000		1,350,000	1,000,000	350,000		1,350,000	3,000,000	1,050,000	-	4,050,000	Passed new? Additional? policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)	Enforced policies and guidelines (Environmental Laws, Building Code and No-Build Zones and CLUP)	Review the existing policies and guidelines																																							
	Provision of climate change-resilient projects (High-Density Polyethylene (HDPE) Cages, fiberglass boats, etc. in coordination with concerned national agencies and other stakeholders		750,000			750,000	750,000		750,000	750,000		750,000	2,250,000	-	-	2,250,000	Developed a full-blown Project Proposal	Obtained partnership with NGAs and C/MLGUs for the HDPE Cages, fiberglass boats	Purchased and delivered HDPE Cages, fiberglass boats to number of C/MLGUs																																									

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	Preparation of the Detailed Engineering design and Structural Analysis						-															
	Repair & retrofitting of roads, bridges, seawall		1,550,000				1,550,000	1,550,000					1,550,000	4,650,000	-	-		4,650,000			Completed, upgraded and safer roads, bridges, seawall in ___ district ?	
	Provision of Climate-smart industries and facilities	BIPC/BICTO/PEO/DOST/DICT/DOE	10,000,000				10,000,000						10,000,000	30,000,000	-	-		30,000,000	Provided Climate-smart industries and facilities to affected coastal communities (solar panels, solar street lights)	Provide Climate-smart industries and facilities to affected coastal communities (solar panels, solar street lights)	Provided Climate-smart industries and facilities to affected coastal communities (solar panels, solar street lights)	DOST/DICT/DOE-GAA

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Earthquake, Grounds haking, Liquefaction	Support to the reduction of built-up at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Conduct of orientation on the Bohol hazards and risk profile and impacts to structures and the strict implementation of the National Building Code	PDRMO	100,000															47 municipalities and 1 city					
			PEO, DPWH	200,000		200,000													Province wide					
		Conduct of Geotechnical site surveys on built-up areas with Karst ground formation to identify Site Response and Subsidence	PDRMO, PEO, PPDO, GO	100,000			200,000													MOA with Tagbilaran City, PhIVolc S, MGB, and required trainings	Geotechnical site survey and map of Tagbilaran City			
		Procurement by PGBh of GPR and operations and						6,500,000		6,500,000	200,000				200,000	200,000	6,500,000				Site survey study of priority			

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	data interpretation training																			C/MLGUs		
	Retrofitting of bridge structures	PEO				50,000,000			50,000,000	51,000,000		51,000,000	101,000,000	-	-	101,000,000			1 structure retrofitted	1 structure retrofitted		
Support to the reduction of environmental areas at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Establish Continuous GPS Network for Crustal Deformation Studies	PDRMO, BICTO		9,000,000		9,000,000			9,000,000		6,000,000						3 stations	3 stations	2 stations	PGBh, JICA		
Support to the reduction of heritage areas and tourism sites at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Retrofitting and Detail Profiling of heritage structures (i.e. churches)	CCAD, BACH Council						100,000,000				100,000,000							1 structure retrofitted (Baclayon)		NHI	

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Storm Surge and Tsunami	Support to the reduction of population at risk to Tsunami	Install early warning sensors and alarm system for tsunami	PDRRM O																	1 early warning system operational and installed for southern municipalities?	Covering 12 towns in the south-east	
	Support to the reduction of environmental areas at risk to Tsunami	Coastal vegetation, mangrove plantation	BPEMO	700,000			350,000				25,000									Planted mangrove seedlings in Tagbilaran City, Dauis, Panglao, Baclayon, Alburquerque, Loay, Lila, Dimiao, Valencia, Garcia-Hernandez, Jagna, Duero, Guindulman, Andagun	Planted mangrove seedlings in Candija, Mabini, Maribojoc, Calape, Tubigon, Clarin, Inabanga	Planted mangrove seedlings in Buena vista, Getafe, Talibon, Bien Unido, Ubay
	Enactment of Ordinance on No Build		PDRRM O/SP																	Approved Ordinance	Implementation and monitoring	Implementation and monitoring



	Zone Areas																							
	LGU to identify relocation areas	GO/PPDO																		Relocation areas identified	Funding and acquisition	Development of relocation sites		
	Conduct mangrove rehabilitation activities	BPEMO/DENR/MLGUs	5,000,000			5,000,000														Established mangrove nurseries in 10 MLGUs	Established mangrove nurseries in 10 MLGUs	Established mangrove nurseries in 10 MLGUs	BPEMO-GF	DENR-GAA
	Provide livelihood opportunities in the mainland	PESO/DOLE/DSWD	5,000,000			5,000,000														List of skills inventory	Skills Matching	Monitoring of hired skilled workers	PESO-GF	DOLE/DSWD-GAA
	Inventory of critical facilities and lifelines	PEO/PPDO/PHO																		Database of critical facilities and lifelines	List of recommended critical facilities and lifelines for rehab/retrofitting	Upgraded and retrofitted_# of structures		
	Assess structural integrity	PEO/DPWH	1,000,000			1,000,000														Assessment report	Assessment report	Assessment report	PEO-GF	DPWH-GAA
	Mapping	PPDO/NAMRIA/HIVOLCS/PAG-ASA	1,000,000			1,000,000														Province wide storm surge and tsunami maps updated	Province wide storm surge and tsunami maps updated	Province wide storm surge and tsunami maps	PPDO-GF	5% of the MLGU LDRR MF



																				update			
	Ongoing construction of access roads (Talibon)	DPWH		53,000,000		53,000,000		15,000,000		15,000,000		15,000,000		15,000,000		-	83,000,000		83,000,000	constructed access road in Talibon	constructed access road in Talibon	constructed access road in Talibon	DPWH-GAA
	Ongoing construction of access roads (Ubay)	DPWH		150,000,000		150,000,000		100,000,000		100,000,000		100,000,000		100,000,000		-	350,000,000		350,000,000	constructed access road in Ubay	constructed access road in Ubay	constructed access road in Ubay	DPWH-GAA
	Inventory of agricultural areas and critical commodities	OPA/OPV/DA	1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		3,000,000		-	-	3,000,000		Database of exposed /high risk agricultural areas	Database of exposed /high risk agricultural areas	Database of exposed /high risk agricultural areas	OPA/OPV- GF	DA-GAA
	Identify relocation area for livestock and fisheries	OPA/OPV/DA				-			-				-			-	-		Relocation sites identified	Acquisition of the relocation sites	Development of relocation sites		
	Facilitate for crop insurance to PCIC including livestock and poultry	OPA/OPV/DA	10,000,000		10,000,000		10,000,000		10,000,000		10,000,000		30,000,000		-	-	30,000,000		Approved crop insurance for farmers	Approved crop insurance for farmers	Database of livestock owners	OPA/OPV- GF	DA-GAA
	Strict implementation of building code	MLGU				-			-				-			-	-		Disaster resilient buildings	Disaster resilient buildings	Disaster resilient buildings/zero building		



																			- Phase I	e-Phase II	structu re-Phase III		
	Shore Line Protection (Ubay)	DPWH		100,000,000		100,000,000		50,000,000		50,000,000		50,000,000		200,000,000		200,000,000		200,000,000	Construc tion of shore line protection-Phase I	Construc tion of shore line protection-Phase II	Construc tion of shore line protection-Phase III		DPWH-GAA
	Shore Line Protection (Buenavista)	DPWH		50,000,000		50,000,000		50,000,000		50,000,000		50,000,000		150,000,000		150,000,000		150,000,000	Construc tion of shore line protection-Phase I	Construc tion of shore line protection-Phase II	Construc tion of shore line protection-Phase III		DPWH-GAA
	Shore Line Protection (Pres. CPG)	DPWH		100,000,000		100,000,000		50,000,000		50,000,000		50,000,000		200,000,000		200,000,000		200,000,000	Construc tion of shore line protection-Phase I	Construc tion of shore line protection-Phase II	Construc tion of shore line protection-Phase III		DPWH-GAA
	Inventory and mapping of heritage areas and tourism sites at risk to tsunami/s torm surge	BTO/DO T/NHCP/ NM	250,000		250,000		250,000		250,000		250,000	750,000		-		-		750,000	Databas e of all -% heritage areas and tourism sites	Databas e of all -% heritage areas and tourism sites	Databas e of all -% heritag e areas and touris m sites	BTO-GF	NM-GAA



		Facilitate in the identification of nearest evacuation areas for tourist	BTO/MD RRMO				-												List of safe evacuation areas Map and clear route of nearest and safe evacuation centers				
		Assessment of the structural integrity of heritage areas and tourism sites	BTO/DP WH/NCCA/NM/NH CP	350,000			350,000							350,000	1,050,000	-	-	1,050,000	Assessment Report of heritage areas	Assessment Report of heritage areas	Assessment Report of heritage areas	BTO-GF	DPWH/NCCA/NM/NH CP-GAA
Sinkhole		Conduct of ground surveying and monitoring	PDRRMO and targeted MLGUs	50,000			50,000							50,000	150,000	-	-	150,000	Completed and approved Survey and Monitoring Report for Phase 1: Jagna, Carmen, Sierra Bullones, Pilar, Bilar, Batuan, Sevilla, Loay	Completed and approved Survey and Monitoring Report for Phase 2: Valencia, Dauis, Panglao, Baclayon (Pamillan Is.), Panglao (Balicasag Is.), Antequera,	Completed and approved Survey Report for Phase 3: Tagbilaran City, Tubigon, Calape, Sikatuna, Corella, Catigbian, San Isidro, Maribo	Prov'l DRRMF	The targeted LGUs per year will have their own allocation for the said PPA.



																			Cortes, Loboc	loc, Balilihan			
	Facilitate in the conduct of KARST Subsidence Hazard Assessment by MGB -Updating of Hazard Maps for Sinkhole	PDRRM O and targeted MLGUs	50,000				50,000												150,000	1 KARST Subsidence Hazard Assessment by MGB per LGU - Phase 2 8 digitized hazard maps for identified LGUs-Phase 3	1 KARST Subsidence Hazard Assessment by MGB per LGU - Phase 3 8 digitized hazard maps for identified LGUs-Phase 3	Prov'l DRRMF	The targeted LGUs per year will have their own allocation for the said PPA. PDRRMO will help in the facilitation and coordination with MGB.
	Installation of No Build Zone/NO Dumping Signages for identified areas	PDRRM O, PEO, PPDO	50,000				50,000												150,000	10 sites installed with No Build Zone/Dumping Site signages	10 sites installed with No Build Zone /Dumping Site signages	Prov'l DRRMF	



	Maps for EIL																	identified LGU				
	Support to LGUs to develop/update of Climate and Disaster Risk Assessment	PDRRM O and targeted MLGUs	50,000			50,000			50,000									100,000	CDRA results of identified LGUs	CDRA results of identified LGUs		
	Support in the construction of slope protection structures	PDRRM O, PEO, PPDO, DPWH				-			-		100,000,000		100,000,000					100,000,000			1 slope protection structure constructed	DPWH
	Support in the identification & assessment of roads and bridges that are susceptible to EIL	PEO, PDRRM O, PPDO	300,000			300,000			300,000										Databas e of identified and assessed roads and bridges that are susceptible to EIL	Databas e of identified and assessed roads and bridges that are susceptible to EIL	Databas e of identified and assessed roads and bridges that are susceptible to EIL	Prov'l DRRMF
	Support in the identification & assessment of schools that are susceptible to EIL	OPSWD, PDRRM O, PPDO				300,000			300,000				300,000	900,000				900,000	Databas e of identified and assessed schools that are susceptible to EIL	Databas e of identified and assessed schools that are susceptible to EIL	Databas e of identified and assessed schools that are susceptible to EIL	

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	Support in the identification & assessment resettlement sites & evacuation areas provincewide																	List of identified and assessed resettlement sites & evacuation areas provincewide	List of identified and assessed resettlement sites & evacuation areas provincewide	schools that are susceptible to EIL			
	Support to the reduction of critical facilities and lifelines at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Construct slope protection on landslide prone areas along major roads, and communities					-	10,000,000													1 priority area	1 priority area	
	Construct slope protection on landslide prone areas						-																



		along major roads, and communities																				
		Additional Drilling for water source	PDRRM O, PPDO, PEO	500,000		500,000		500,000		300,000		300,000	-	1,300,000	-	1,300,000	2 water drilling established per LGU	2 water drilling established per LGU	1 water drilling established per LGU	PDRRM Fund, Out Source	Lack of Funds	
		Construction of additional rain water collectors and reservoir Mandator y in all government own buildings (3m x6m x 0.4m)	PDRRM O, PPDO, 48 LGU's	33,600,000		33,600,000		33,600,000		33,600,000		33,600,000	-	100,800,000	-	100,800,000	2 units rain water collector and reservoir established /LGU (48 LGU's)	2 units rain water collector and reservoir established /LGU (48 LGU's)	2 units rain water collector and reservoir established /LGU (48 LGU's)	PDRRM Fund, LDRRM Fund, Out Source, NGA's,	Lack of Funds	
Drought		Conduct Feasibility study of Desalination of water facilities	PDRRM O	200,000		200,000		200,000		200,000		200,000	-	600,000	-	600,000	Pre-determined done	Conducted study	Completed the study and presented the proposal for possible funding of the construction of the Desalination of	PDRRM Fund, JICA, LGU	Able to construct the project of Desalination of water facilities as result after the study	



																						water facilities to the top LGU's identified	
	Installation of Solar powered pumps				-				-												Operational powered pumps identified C/MLGUs		
	Mandatory planting of Banyan Tree, Bamboo tree	PDRRM O, PENRO, DENR, MENRO		1,000,000			1,000,000		1,000,000		1,000,000		1,000,000		-	3,000,000		3,000,000		3 municipalities planted with Banyan Trees and Bamboo tree (3,500 seedling)	3 municipalities planted with Banyan Trees and Bamboo tree (3,500 seedling)	3 municipalities planted with Banyan Trees and Bamboo tree (3,500 seedling)	PDRRM Fund. LGU
	Conduct Cloud seeding	PDRRM O		2,500,000		2,500,000		2,500,000		2,500,000		2,500,000		-	7,500,000		7,500,000		All Municipalities	All Municipalities	All Municipalities	PDRRM Fund	
	Mangrove Plantation Program 33,000/100 hec.	PDRRM O, PENRO, DENR, MENRO	100,000	1,000,000		1,100,000		100,000	1,000,000		1,000,000		1,100,000		300,000	3,000,000		3,300,000		Adaption to all coastal towns	Adaption to all coastal towns	Adaption to all coastal towns	PDRRM Fund, LGU's Coustal Area, DENR, DA

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		Promotion of drip irrigation technologies, for selected high valued Commercial Crops (HVC)	PDRRM O, OPA, MAO		6,700,000						6,700,000			6,700,000	-	13,400,000	-	13,400,000	Adopted to all 45 Agricultural Municipalities	Adopted to all 45 Agricultural Municipalities	Adopted to all 45 Agricultural Municipalities		
		Establish Small Farm Reservoir (SFR) 480 units	PDRRM O		9,600,000			9,600,000		9,600,000			9,600,000	9,600,000	-	28,800,000	-	28,800,000					
		Conduct farmers field school on climate change	PDRRM O, OPA, MAO	2,400,000							2,400,000			2,400,000	4,800,000	-	-	4,800,000	Farm field school established in all municipalities		48 Municipalities	NIA, DA,PSF	
		Provision of crop insurance	PDRRM O, OPA	3,000,000			3,000,000			6,000,000		3,000,000	3,000,000	6,000,000	-	6,000,000	12,000,000	All Agricultural Towns (45 Municipalities)	All Agricultural Towns (45 Municipalities)	PDRRM Fund, DA, MAO, OPA			
RIL	Reduction or risk population	Construction of Slope protection structure	PDRRM O, PPDO, PEO		40,000,000			50,000,000			50,000,000			60,000,000		150,000,000	-	150,000,000	Slope protection implemented in _ of C/MLGUs	Slope protection implemented in _ of C/MLGUs	Slope protection implemented in _ of C/MLGUs	DPWH, DENR, LGU	
		Tree growing project	PDRRM O, PPDO, PEO	300,000			400,000			400,000			500,000	500,000	1,200,000	-	-	1,200,000	Planted # of trees (in the identified	Planted # of trees (in the identified	Planted # of trees (in the identified	DPWH, DENR, LGU, DA	

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																			C/MLGUs	C/MLGUs	C/MLGUs			
		SP Ordinance for No build zone on identified RIL areas in whole Province	PDRRM O, SP	10,000															10,000	Approved Ordinance			PDRRM Fund	
		Conduct inventory and mapping of critical point facilities in the Province	PDRRM O, PEO	100,000															100,000	Inventory and mapping conducted			PDRRM Fund	
	Agriculture	Promote farmers to practice the process of Contour Farming Technology per LGU (mandatory)	PDRRM O, BEMO, PEO,	50,000			50,000												150,000	Contour Farming Technology adopted			PDRRM Fund	
OUTBREAK OF INFECTIOUS DISEASES		Ordinance on the establishment of MESU in all C/MLGUs																	-	48 C/MLGUs with established MESU				
		Organization of Water Quality Monitoring	P/C/MLGU	168,000			201,600												638,400	60 pax (RHU, Water works, Brgy council)	60 pax (RHU, Water works, Brgy council)	60 pax (RHU, Water works, Brgy council)	5% LDRRM F	



		g (Policy Support)																			council)		
		Zero Open Defecation (ZOD) Technical assistance	P/C/MLGU	60,000			60,000	72,000				72,000	86,400			86,400	218,400	-	-	218,400	40% of all Barangays ZOD	50% of all Barangays ZOD	70% of all Barangays ZOD
		Protocol on the allocation of Isolation beds during EREID Outbreaks	P/C/MLGU	76,800			76,800	92,160				92,160	110,592			110,592	279,552	-	-	279,552	Ordinance approved and funded		
		Policy Support for the establishment of 24/7 OpCen with budget appropriation					-					-				-	-	-	-	-	Ordinance approved and funded		



DRRM Fund Investment Plan - Province of Bohol																									
Preparedness																									
GROUP	Function al Classification	PPA Code and Descripti on	Impleme nting Office	Period of Implementation														Expected Output			Fu nding So urce	Rem arks			
				Year 1 (2023)				Year 2 (2024)				Year 3 (2025)				Total for 2023-2025									
				Starting Date: January				Starting Date: January				Starting Date: January													
				Completion Date: December				Completion Date: December				Completion Date: December													
				MOO E	CO	Others	Total	MOO E	CO	Othe rs	Total	MOOE	CO	Other s	Total	MOO E	CO	Oth ers	TOT AL	2023			2024	2025	
All Hazard		Conduct of DRRM-related trainings, emergency drills and workshops to the PDRRMC, MDRRM Os and LGUs including the response teams and the creation of SRR Team, DANA Team, Accredited Communi	PDRRMO	8.5M			8.5M									8.5M				>To train Brgy. Officials on disaster preparedness. > Conduct of series of pre-disaster risk assessment meetings and trainings					

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		Management Training, Training on WASH, MHPSS, Strategic Risk Communication, Training on Nutrition in Emergencies, RDANA, PDNA, ERT and others																						
		Conduct of DRRM-CCA Training and advocacies for vulnerable sectors and PSWDO personnel	PDRRMO	1M			1M							1M										To reduce distress and restore normalcy among the affected groups (children, women, etc) experiencing traumatic events
		Basic Skills training for emergenc	PDRRMO	750,000.00			750,000.00							750,000.00										To conduct and participate



		<p>y responder s and other volunteer groups/se ctors on disaster prepared ness and response, search, rescue and retrieval operation s</p> <ul style="list-style-type: none"> - conduct benchmarking activities to Gawad Kalasag and ecotourism areas 																<p>DRRM - related trainin gs to respon ders and other volunt eers and condu ct of bench markin g activiti es to LGUs with DRRM best practic es and with operati onal comm unicati on center</p>				
		<p>Conduct of skills upgrading / enhance ment training for the emergenc y responder s of PDRRMO , TaRSIER</p>	<p>PDRRMO</p> <p>Training expense s</p> <p>Drug and Medicine s</p> <p>Commun ication Equipme nt</p>	<p>3M</p> <p>500,000.00</p> <p>3M</p> <p>4M</p>			<p>10.5 M</p>							<p>10.5 M</p>				<p>To effectiv ely handle and respon d to emerg encies for all hazard s includi ng search</p>				

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		Tagbilaran, including substations in Ubay, Jagna, Carmen, 500Loon, Balilihan, Talibon and Candijay and other volunteers including EMS NC II, WaSAR, EMT-B, and others	Other Machines and equipment																	and rescue operations as mechanism for disaster risk reduction
		Upgrading/ Additional equipment for all TaRSIER substation offices	PDRRMO		5,191,565.15		5,191,565.15							5,191,565.15						
		Capability building training for the establishment of emergency response units upon request of LGUs of Bohol	PDRRMO	100,000.00			100,000.00							100,000.00						To capacitate LGUs as the first responders in their respective communities

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		Production of IEC materials on DRRM-CCA	PDRRMO	200,000.00			200,000.00													Increased DRRM awareness among communities				
		Acquisition of Disaster Response and Rescue vehicles > Ambulance for TaRSIER substation (2) > rescue vehicle for TaRSIER 117 > sea ambulance, fiberglas speedboat per district > addl amount for wingvan for OPSWD (1.6m)	PDRRMO	39.6M			39.6M													Purchased vehicles for emergency rescue and relief operations during disasters and emergencies				
		Conduct of capacity development to	PHO	4M			4M													To capacitate and equip				

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		health sector to better manage emerging and re-emerging diseases																	health sector to address diseases during calamities or outbreaks				
		Conduct of capdev and vulnerability measures to swine stakeholders to reduce risk in livelihood and investment - capacitate organized farmers association and livestock growers on the potential impacts of the hazard	PDRRMO, OPA, OPV	2M			2M							2M					prevent vulnerability and exposure of local swine to ASF viral infection				
		Stockpiling of basic emergency supplies/food packs	OPSWD	2M			2M							2M					Purchase of relief goods in prepar				



		assistance to affected families (food and non-food items)																		ation or in the event a natural or man-made disaster/calamity is predicted (i.e. typhoon, health, EREID, disease outbreak, etc)					
		Upgrading of the communication equipment at Unified Command Center	PDRRMO		11M		11M								11M										
Floding , Typhoon, Severe wind		Installation of Early Warning System (EWS)	PDRRMO	1,000,000	500,000		1,500,000	1,000,000	500,000		1,500,000	1,000,000	500,000		1,500,000	3,000,000	1,500,000	-	4,500,000	1.1 Installation of Early Warning System					

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		Inventory of existing Evacuation Centres	PDRMO, OPSWD				-				-									1.2 Conduct Capacity Development for personnel and the communities on Pre-emptive Evacuation				
		Establishment of additional Standard Evacuation Centres	PDRMO, C/MC/MLGUs, PEO	500,000	1,200,000		1,700,000	500,000	1,200,000		1,700,000	500,000	1,200,000		1,700,000	1,500,000	3,600,000	-	5,100,000		Constructed evacuation center in priority C/MLGUs	Constructed evacuation center in priority C/MLGUs		
		Provision of modern and state-of-the-art DRRM-related Equipment (Boom Trucks, Rescue Vehicles & Satellite /Handheld Radios)	PDRMO	300,000	150,000		450,000	300,000	150,000		450,000	300,000	150,000		450,000	900,000	450,000	-	1,350,000			Obtained equipment for the province		

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	Facilitate in the provision/stockpiling/prepositioning of nutritious relief goods	OPSWD	200,000	150,000		350,000	200,000	150,000		350,000	200,000	150,000		350,000	600,000	450,000	-	1,050,000	Available stockpiles for families	Available stockpiles for families	Available stockpiles for families		
	conduct of Capacity Building Activities in coordination with concerned NGAs and other stakeholders	PDRMO	100,000			100,000	100,000			100,000	100,000			100,000	300,000	-	-	300,000	Training design developed based on the need of the PDRMC	Trained PDRMC members with?	Trained PDRMC members with?		
	6. Promote the establishment of Quick/Emergency Response Units in all MLGUs	PDRMO	400,000			400,000	400,000			400,000	400,000			400,000	1,200,000	-	-	1,200,000	Suggestion: Increased awareness on the importance of Quick/Emergency Response Units of the C/MLGUs	Initiated creation of Quick/Emergency Response Units in 48 C/MLGUs			

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Earthquake, ground shaking, liquefaction	Support to the reduction of population at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Conduct information dissemination on what to do before, during, and after disaster	PDRRMO				-														100 highly susceptible barangays increased awareness on the impacts of ground shaking, liquefaction	100 highly susceptible barangays increased awareness on the impacts of ground shaking, liquefaction	100 susceptible barangays conducted IEC increased awareness on the impacts of ground shaking, liquefaction		
	Conduct Drills to various offices and schools		PDRRMO	20,000			20,000	20,000			20,000	20,000			20,000	60,000	-	-	60,000	5 schools, 5 offices and 2 hospitals participated in earthquake drills	5 schools, 5 offices and 2 hospitals participated in earthquake drills	5 schools, 5 offices and 2 hospitals participated in earthquake drills			

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		Create & Train Collapse Structure Search and Rescue Team	PDRRMO	1,750,000		1,750,000	3,500,000			-				-	1,750,000	-	1,750,000	3,500,000	PGBh, Tagbilaran City with knowledge and skills on Collapse Structure Search and Rescue				
		Establish Evacuation Center for communities highly susceptible to hazards	PPDO, PDRRMO				-	10,000,000		10,000,000			50,000,000	50,000,000	-	10,000,000	50,000,000	60,000,000	Site identified and validated for Evacuation Center Passed the set of standards required by DSWD	Purchased lot that passed standard set by MGB and PHIVOLCS	1 constructed evacuation center to cater affected communities		ND RR MF

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	Support to the reduction of critical facilities and lifelines at risk to Ground Shaking, Earthquake-Induced Landslide, Liquefaction	Establish Satellite-based internet connectivity using alternate source of power i.e. photovoltaic-based (solar) power system, portable power generator, etc.	PGBh (BICTO), MLGUs	107,000			107,000	72,000			72,000	72,000			72,000	251,000	-	-	251,000	PGBh with access to internet and power system				For PGBh only
		Establish Single Side Band (SSB) Radio Communication System (ICOM SSB system)	PDRMO				-			-					-	-	-	-	-	47 municipalities and 1 city with operational SSB Radio Communication System				
	Support to the reduction of population at risk to Tsunami	Conduct information dissemination on what to do before during, and after disaster	PDRMO				-			-					-	-	-	-	-	Trainers training, logistics planning, and budgeting	100 highly susceptible barangays conducted IEC	100 susceptible barangays conducted IEC		

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Storm Surge, Tsunami	Conduct IEC to 30 coastal MLGUs	PDRRMO /MLGU				-													Increase awareness on the nature of storm surge, to do, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to do, in 10 coastal MLGUs	Increase awareness on the nature of storm surge, to do, in 10 coastal MLGUs		
	Updating LDRRM Plan/Contingency Plan/LCC AP	PDRRMO /MLGU/OCD	1,500,000			1,500,000				-	2,000,000			2,000,000	3,500,000	-	-	3,500,000	Suggestion: 30% of the C/MLGUs with comprehensive risk-based LDRRM	70% of the C/MLGUs with comprehensive risk-based LDRRM	100% of the C/MLGUs with comprehensive risk-based LDRRM	5% of the LDRRMF	OCD-GAA
	Organize and capacitate Emergency Response Teams	PDRRMO /MDDRM O	2,000,000			2,000,000	2,000,000			2,000,000	2,000,000			2,000,000	6,000,000	-	-	6,000,000	Organized and capacitated ERT to 10 coastal LGUs	Organized and capacitated ERT to 10 coastal LGUs	Organized and capacitated ERT to 10 coastal LGUs	5% of the LDRRMF	5% of the LDRRMF of the MLGU

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	Insurance for responders and community volunteers	PDRRMO /MDDRM O	2,000,000			2,000,000	2,000,000			2,000,000	2,000,000			2,000,000	6,000,000	-	-	6,000,000	100% of the responders and 10% of community volunteers insured	100% of the responders and 10% of community volunteers insured	100% of the responders and 10% of community volunteers insured	5% of the LDRRMF	5% of the LDRRMF of the MLGU
	Capacity development for responders and community volunteers	PDRRMO /MDDRM O	1,000,000			1,000,000	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	3 trainings conducted to responders of 30 coastal MLGUs	Updating and upgrading of trainings	Updating and upgrading of trainings	5% of the LDRRMF	5% of the LDRRMF of the MLGU
	Trained pool of trainers for MHPSS	OPSWD/PHO/PDRRMO/D SWD/DOH	1,000,000			1,000,000	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	10 coastal MLGUs trained on MHPSS	10 coastal MLGUs trained on MHPSS	10 coastal MLGUs trained on MHPSS	5% of the LDRRMF	Unicef and INGOs
	Conduct of simultaneous Province wide Emergency Drills	PDRRMO /MDDRM O				-				-				-	-	-	-	-	Conducted simultaneous Provincewide Emergency Drills	Conducted simultaneous Provincewide	Conducted simultaneous Provincewide Emer		



		Distribution of Evacuation routes to community	PDRRMO /MLGU	1,500,000			1,500,000	1,500,000			1,500,000	1,500,000			1,500,000	4,500,000	-	-	4,500,000	Database/MIS set-up and operational in number of LGUs?	Database /MIS set-up and operational in number of LGUs?	Database/ MIS set-up and operational in number of LGUs?	5% of the LDRRMF	5% of the LDRRMF of the MLGU
		Conduct training for the officer-in-charge and personnel for critical facilities and lifelines on emergency management training	PDRRMO - TARSIER 117/MLGU	1,000,000			1,000,000	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on emergency management training to 10 coastal MLGUs	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on emergency management training to 10 coastal	Conducted 2 trainings of the officer-in-charge and personnel for critical facilities and lifelines on emergency management training to 10 coastal	5% of the LDRRMF	5% of the LDRRMF of the MLGU

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		Capacitate MSMEs staff and communities within the built-up areas on emergency management of the hazard	BIPC/PD RRMO/MLGU	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	Capacitated 100% MSMEs managers within the built-up areas on emergency management of the hazard to 10 coastal MLGUs	BIP-CGF	5% of the LDR RMF of the MLGU
		Updating of protected area management plans to include the potential impacts of tsunami and storm surge	BPEMO/DENR	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	Updated 6 protected area management plans	Updated 5 protected area management plans	Updated 5 protected area management plans		DENR-GAA

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	Capacitate the executive committee of the protected area management board on emergency management of the hazard	PDRRMO - TARSIER 117	1,000,000			1,000,000	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	Capacitated the executive committee of the 6 protected area management board on emergency management of the hazard	Capacitated the executive committee of the 5 protected area management board on emergency management of the hazard	Capacitated the executive committee of the 5 protected area management board on emergency management of the hazard		DENR-GAA
	Capacitate the site managers on emergency management of the hazard (heritage and tourism sites)	PDRRMO - TARSIER 117	1,000,000			1,000,000	1,000,000			1,000,000	1,000,000			1,000,000	3,000,000	-	-	3,000,000	100% site managers with acquired skills on emergency management of the hazard in 10 coastal MLGUs	100% site managers with acquired skills on emergency management of the hazard	100% site managers with acquired skills on emergency management of the hazard		NM-GAA



Sinkhole		Intensify IEC on DRRM-CCA to the barangay level or purok level	PDRMO and targeted MLGUs	500,000			500,000	500,000			500,000	500,000			500,000	1,500,000	-	-	1,500,000	Intensify IEC on DRRM-CCA to the barangay level or purok level	Laymanized IEC materials	Laymanized IEC materials	ProvlDRRMF
		-Conduct of IEC Program on KARST Subsidence																		Laymanized IEC materials	DRRM Orientation on KARST Subsidence hazard		
		-Crafting of Ordinance on the use of Purok System within the Province																		DRRM Orientation on KARST Subsidence hazard			
																				1 Ordinance Approved and adopted			



		Conduct of Risk Communication Training	PDRRMO	300,000			300,000	300,000			300,000	300,000			300,000	900,000	-	-	900,000	1 training conducted	1 training conducted	1 training conducted	Provl DRRMF
		Conduct of USAR and SAR Training to Organized Response Teams	PDRRMO and targeted MLGUs				-				-				-	-	-	-	-	1 training conducted	1 training conducted	1 training conducted	PDRRMO and targeted MLGUs
		Purchase of underwater robot and/or rescue drones	PDRRMO	3,500,000			3,500,000	3,500,000			3,500,000				-	7,000,000	-	-	7,000,000	1 underwater robot and/rescue drone purchased	1 underwater robot and/rescue drone purchased		
EIL		Formulation/Preparation/reproduction of laymanized DRR-CCA materials	PDRRMO	350,000			350,000				-				-	350,000	-	-	350,000	Laymanized IEC materials			
		Distribution of laymanized IEC materials on DRR-CCA	PDRRMO, MDRRMOs/BALDRRMO	100,000			100,000				-				-	100,000	-	-	100,000	1,116 Public Schools, 1109 Barangays, All			



																				Government Offices				
	Conduct of USAR and SAR Training to Organized MLGU Response Teams	PDRRMO and targeted MLGUs	300,000			300,000	300,000			300,000	300,000			300,000	900,000	-	-	900,000	1 training conducted	1 training conducted	1 training conducted			
	Conduct of Collapsed Structure Search and Rescue (CSSR) for TaRSIER 117 Personnel	PDRRMO / TaRSIER 117	1,500,000			1,500,000	1,500,000			1,500,000				-	3,000,000	-	-	3,000,000	1 CSSR training conducted for 10 personnel of TaRSIER 117	1 CSSR training conducted for 10 personnel of TaRSIER 117				
	Purchase of Disaster Response Equipment -SRR, EMS, CSSR	PDRRMO / TaRSIER 117	2,000,000			2,000,000				-				-	2,000,000	-	-	2,000,000	1 set of Response Equipment for SRR, EMS, CSSR					
	Formulation / Updating of Contingency Plan for EIL	PDRRMO	300,000			300,000				-				-	300,000	-	-	300,000	1 formulated/updated CP for EIL					

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		Formulation of Disaster Response Operations Manual	PDRRMO	300,000			300,000				-				-	300,000	-	-	300,000	1 DROM formulated				
Drought		Prepositioning of water truck (10,000 L)	PDRRMO, GSO		18,000,000		18,000,000		18,000,000		18,000,000		24,000,000		24,000,000	-	60,000,000	-	60,000,000	3 units water trucks acquired	3 units water trucks acquired	4 units water trucks acquired	PD RRM O, BFP, NGA's	Highly needed
		Conduct Information Education Campaign (IEC) every municipalities	PDRRMO	100,000		100,000	100,000			100,000	100,000				100,000	300,000	-	-	300,000	Increased knowledge and awareness in 48 LGU	Increased knowledge and awareness in 48 LGU	Increased knowledge and awareness in 48 LGU	PD RRM MF und	
		Secure MOU with private water service utilities	PDRRMO	10,000		10,000										10,000	-	-	10,000	3 MOU secured by the Province			PD RRM MF und	
		Provision of alternative crops suited in drought	PDRRMO, OPA	3,000,000		3,000,000	3,000,000			3,000,000	3,000,000				3,000,000	9,000,000	-	-	9,000,000	All Agricultural Towns (45 Municipalities)-adopted	All Agricultural Towns (45 Municipalities)-adopted	All Agricultural Towns (45 Municipalities)-adopted	PD RRM MF und, DA, MA O, OPA	

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		Develop heritage and tourism master plan	PDRRMO , BTO	500,000			500,000			-				-	500,000	-	-	500,000	Activated to all existing Tourism - LGU's	Activated to all existing Tourism - LGU's	Activated to all existing Tourism - LGU's	DO T, M U N I C I P A L, T O U R I S M O F F I C E
		Training of resort, boat operators and guide on CCA and DRR in all tourism facilities	PDRRMO , BTO	100,000			100,000	100,000		100,000	100,000			100,000	300,000	-	-	300,000	All tourism facilities trained	All tourism facilities trained	All tourism facilities trained	Municipal Tourism Office
RIL		Installation of standard reflectorized early warning signages (4X4)	PDRRMO , LGU		5,000,000		5,000,000			-				-	-	5,000,000	-	5,000,000	Visible, clear early warning signages installed in strategic areas	Visible, clear early warning signages installed in strategic areas	Visible, clear early warning signages installed in strategic areas	PD RR MF und , LD RR MF und , DP WH
		IEC dissemination	PDRRMO , LGU	50,000			50,000			-				-	50,000	-	-	50,000	LGUs with acquired knowledge on RIL	LGUs with acquired knowledge on RIL	LGUs with acquired knowledge on RIL	PD RR MF und , LD RR MF und

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		Preparation of an evacuation plan for every LGUs	PDRRMO, LGU	50,000			50,000			-				-	50,000	-	-	50,000	48 LGU's			PD RR MF und , LD RR MF und
		Conduct Collapse Structure Search and Rescue training (CSSR) for 48 LGU Responders	PDRRMO, LGU	150,000			150,000			-				-	150,000	-	-	150,000	Trained 48 C/MLGUs with Collapsed Structure Search and Rescue			PD RR MF und , LD RR MF und , Red Cro s
		Procurement for Disaster response equipment (for SRR and EMS) PPE's and heavy equipment	PDRRMO, LGU	500,000	9,000,000		9,500,000			-				-	500,000	9,000,000	-	9,500,000	Available response equipment and PPEs	Available response equipment and PPEs	Available response equipment and PPEs	PD RR MF und , LD RR MF und , PS F, ND RR MF und
EREID		DRRMH Planning	DOH	921,600			921,600	1,105,920		1,105,920	1,327,104			1,327,104	3,354,624	-	-	3,354,624	Approved and completed DRRM Plans for 48 C/MLG			5% LD RR MF



																				Us and Province				
	Training Donning and Doffing of PPEs	PHO	268,800			268,800	322,560			322,560	387,072			387,072	978,432	-	-	978,432	Trained 48 C/MLGUs/ All Hospitals on Donning and Doffing of PPEs				5% LD RR MF	
	Training on Infection Prevention and Control in Health Facilities	PHO	268,000			268,000	321,600			321,600	385,920			385,920	975,520	-	-	975,520	48 C/MLGUs/ All Hospitals obtained knowledge and skills on infection prevention and control				5% LD RR MF	
	Training on Philippine Integrated Disease Surveillance and Response & Event-based Surveillance System	PHO	652,800			652,800	783,360			783,360	940,032			940,032	2,376,192	-	-	2,376,192	48 C/MLGUs obtained knowledge on event-Based Surveillance System				5% LD RR MF	

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	Training on Clinical Pathway Guidelines on Infectious Diseases	PHO	268,000			268,000	321,600			321,600	385,920			385,920	975,520	-	-	975,520	48 C/MLGUs obtained knowledge on Clinical Pathway Guidelines on Infectious Diseases			5% LD RR MF
	Training on Field Epidemiology Training Program/ Basic Epidemiology	PHO	652,800			652,800	783,360			783,360	940,032			940,032	2,376,192	-	-	2,376,192	2 Personnel (1 per HCPN)			5% LD RR MF
	Procurement of PPEs or prepositioning of PPEs	PHO	1,000,000			1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	-	-	3,640,000	To be determined			5% LD RR MF
	Protocol on the allocation of Isolation beds during EREID Outbreaks	PHO	76,800			76,800	92,160			92,160	110,592			110,592	279,552	-	-	279,552	Constructed an OpCen space to monitor and respond EREID cases			5% LD RR MF

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	Establish 24/7 Operation Center (Infrastructure)	PHO		1,000,000		1,000,000			-				-	-	1,000,000	-	1,000,000	Constructed an OpCen space to monitor and respond EREID cases			5% LD RR MF
	Hiring of 24/7 OpCen Personnel	PHO	1,000,000		1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	-	-	3,640,000	— representatives from LGUs with acquired knowledge and skills on BLS			5% LD RR MF
	Procurement of IT/Communication Equipment	PHO	1,280,000		1,280,000	1,536,000			1,536,000	1,843,200			1,843,200	4,659,200	-	-	4,659,200	48 C/MLGUs			5% LD RR MF
	BLS Training of Trainers	PHO	84,000		84,000	100,800			100,800	120,960			120,960	305,760	-	-	305,760	1 per LGU? — representatives from LGUs with acquired knowledge	1 per LGU? — representatives from LGUs with acqu		5% LD RR MF



																				and skills on BLS	ired knowledge and skills on BLS			
	BLS Training	PHO	268,000			268,000	321,600			321,600	385,920			385,920	975,520	-	-	975,520	1 per LGU	1 per LGU		5% LD RR MF		
	SFA Training of Trainers	PHO	144,000			144,000	172,800			172,800	207,360			207,360	524,160	-	-	524,160	48 C/MLGUs			5% LD RR MF		

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	SFA Training	PHO	460,000			460,000	552,000			552,000	662,400			662,400	1,674,400	-	-	1,674,400	1 per LGU __representatives from LGUs with acquired knowledge and skills on SFA	1 per LGU __representatives from LGUs with acquired knowledge and skills on SFA		5% LD RR MF
	Training on Health Emergency Response Operation	PHO	352,000			352,000	422,400			422,400	506,880			506,880	1,281,280	-	-	1,281,280	48 C/MLGUs __representatives from LGUs Health Emergency with acquired knowledge and skills on Response Operation			5% LD RR MF

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	Mass Casualty Management Training of Trainers	PHO	264,000			264,000	316,800			316,800	380,160			380,160	960,960	-	-	960,960	30 participants with acquired knowledge and skills on Mass Casualty Management			5% LD RR MF
	Mass Casualty Management Training	PHO	352,000			352,000	422,400			422,400	506,880			506,880	1,281,280	-	-	1,281,280	24 C/MLGUs with acquired knowledge and skills on Mass Casualty Management	24 C/MLGUs with acquired knowledge and skills on Mass Casualty Management		5% LD RR MF
	Training on WASH in Emergencies	PHO	192,000			192,000	230,400			230,400	276,480			276,480	698,880	-	-	698,880	24 C/MLGUs with acquired knowledge and skills on WASH	24 C/MLGUs		5% LD RR MF

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		Training on Surveillance on Post Extreme Emergencies and Disasters	PHO	32,000			32,000	38,400			38,400	46,080			46,080	116,480	-	-	116,480	24 C/MLGUs with acquired knowledge and skills on Surveillance on Post Extreme Emergencies and Disasters	24 C/MLGUs with acquired knowledge and skills on Surveillance on Post Extreme Emergencies and Disasters		5% LD RRMF
		Training on Minimum Initial Service Package	PHO	192,000			192,000	230,400			230,400	276,480			276,480	698,880	-	-	698,880	24 C/MLGUs with acquired knowledge and skills on Minimum Initial Service Package	24 C/MLGUs with acquired knowledge and skills on Minimum Initial Service Package		5% LD RRMF

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	Training on Sub-PHEMAP	PHO	352,000			352,000	422,400			422,400	506,880			506,880	1,281,280	-	-	1,281,280	24 C/MLGUs with acquired knowledge and skills on Sub-PHEMAP	24 C/MLGUs with acquired knowledge and skills on Sub-PHEMAP		5% LD RR MF
	Training on Health and Hygiene promotion	PHO				-				-				-	-	-	-	-	C/MLGUs with acquired knowledge and skills on Health and Hygiene promotion			
	PDANA Orientation	PHO	38,400			38,400	46,080			46,080	55,296			55,296	139,776	-	-	139,776	C/MLGUs and Province with obtained knowledge on PDANA for health			5% LD RR MF



	Procurement of mobile water purifier	PHO				-				-				-	-	-	-	-	mobile water purifier available and accessible to Province and C/MLGUs			5% LD RR MF	
	Back-up power supply for all RHUs (Cold Chain)	PHO				-				-				-	-	-	-	-	100% of all RHUs with Back-up power supply that is in good condition			5% LD RR MF	
	Prepositioning of Health Emergency Supplies/Logistics to LGUs	PHO	5,000,000			5,000,000	6,000,000			6,000,000	7,200,000			7,200,000	18,200,000	-	-	18,200,000	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	48 C/MLGUs with available and accessible health Emergency Supplies/Logistics as necessary	5% LD RR MF	



DRRM Fund Investment Plan - Province of Bohol																								
Early Recovery and Response																								
GROUP	Functional Classification	PPA Code and Description	Implementing Office	Period of Implementation																Expected Output			Funding Source	Remarks
				Year 1 (2023)				Year 2 (2024)				Year 3 (2025)				Total for 2023-2025								
				Starting Date: January				Starting Date: January				Starting Date: January												
				Completion Date: December				Completion Date: December				Completion Date: December												
				MOE	CO	Others	Total	MOE	CO	Others	Total	MOE	CO	Others	Total	MOE	CO	Others	TOTAL	2023	2024	205		
All Hazards		Provision of emergency relief goods/supplies to affected LGUs	OPSWD																					To immediately respond to affected families
		Procurement of medical equipment/supplies for barangays to respond to	PHO																					To provide the needed medical equipment and supplies

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Floodi ng, Typho on, Sever e Wind	Executi on of Memor andum of Underst anding with NGAs, NGOs, POs, private groups and other concer ned	PDRRMO	1,20 0,00 0	500, 000		1,70 0,00 0	2,00 0,00 0	800, 000		2,80 0,00 0	2,20 0,00 0	1,00 0,00 0		3,20 0,00 0	5,40 0,00 0	2,30 0,00 0	0	7,70 0,00 0	Linka ging and Identif icatio n of possib le partne rs: - Prepa ration and submi ssion of propo sals and reque sts - Execu tion or signin g of MOU - Monit oring and follow up partne rs	Delive red nutriti ous relief items to affect ed popul ation	Execu tion or signin g of MOU		
	Provisi on of food and non- food items to affecte	OPSWD, OPA, OPV	3,00 0,00 0	800, 000		3,80 0,00 0	4,00 0,00 0	1,00 0,00 0		5,00 0,00 0	5,00 0,00 0	1,00 0,00 0		6,00 0,00 0	12,0 00,0 00	2,80 0,00 0	0	14,8 00,0 00	Identif icatio n and data gather ing of possib le				



		d fisherfolk and farmers in coordination with NGA's, NGO's, Private Sector and other stakeholders																	beneficiaries				
Earthquake, groundshaking, liquefaction	Support to the reduction of population at risk to Ground Shaking, Earthquake - Induced Landslide, Liquefaction	Support to MLGU Emergency Response (Evacuation, Search & Rescue, Relief Operations)	PDRRMO				0												as needed	as needed	as needed		Budgeted by PDRRMO
Storm Surge, Tsunami	Provision of food and non-food items	OPSWD/DSWD/MLGUs	1,000,000				1,000,000	1,000,000						1,000,000	3,000,000	0	0	3,000,000	Provided food and NFIs to affected comm	Provided food and NFIs to affected comm	Provided food and NFIs to affected comm	OPSW D-GF	DSWD-GAA, MLGU 5% of the MDRRMF



																			unities	unities	unities			
	Management of evacuation centers	OPSWD/DSWD/MLGUs				0				0					0	0	0	0	0	Camp management standards implemented	Camp management standards implemented	Camp management standards implemented		
	Conduct of Stress debriefing	OPSWD/DSWD/PHO/PDRRMO/MLGU	500,000.00			500,000	500,000.00			500,000	500,000.00			500,000	1,500,000	0	0	1,500,000	10 coastal MLGUs conducted	10 coastal MLGUs conducted	10 coastal MLGUs conducted	OPSW D-GF		
	Conduct PDNA	PDRRMO/OC D/MLGU				0				0				0	0	0	0	0	Conducted PDNA to 10 coastal MLGUs	Conducted PDNA to 10 coastal MLGUs	Conducted PDNA to 10 coastal MLGUs		OCD-GAA	
	Deployment of response teams and rescue equipment	PDRRMO	2,000,000.00			2,000,000	2,000,000.00			2,000,000	2,000,000.00			2,000,000	6,000,000	0	0	6,000,000	Deployment of (1) WASAR Team to conduct search, rescue, and retrieval	Deployment of (1) WASAR Team to conduct search, rescue, and retrieval	Deployment of (1) WASAR Team to conduct search, rescue, and retrieval	5% of the PDRR MF	5% of the MDRRF	
	Provision of Emergency Medical	PHO/DOH	2,000,000.00			2,000,000	2,200,000.00			2,200,000	2,400,000.00			2,400,000	6,600,000	0	0	6,600,000	Provided Emergency Medic	Provided Emergency Medic	Provided Emergency Medic	PHO-GF	DOH-GAA	

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	Service s																		al Services to affected communities	al Services to affected communities	al Services to affected communities		
	Procurement of mobile water treatment and alternative power supply	BPEMO/PEO/OCD/BFP/PNP		15,000,000		15,000,000		10,000,000		10,000,000		5,000,000		5,000,000	0	30,000,000	0	30,000,000	Acquisition of (1) mobile water treatment per district	Acquisition of (1) mobile water treatment per district	Acquisition of (1) mobile water treatment per district	5% of the PDRR MF	OCD-GAA/MAYNILA/MANILA WATER/MMDA/JICA
	Deployment of clearing teams	PMPO/PEO/DPWH	1,000,000		1,000,000	1,000,000		1,000,000	1,000,000				1,000,000	3,000,000	0	0	3,000,000	Passable roads and bridges	Passable roads and bridges	Passable roads and bridges	PEO-GF	DPWH-GAA	
	Implement contingency plan	PDRRMO/OCD			0				0				0	0	0	0	0	Contingency plan implemented	Contingency plan implemented	Contingency plan implemented			
	Provision of fiberglass reinforced motorized bancas to affected fisherfolks	OPA/OPV/DSWD/BFAR	2,000,000		2,000,000	2,000,000		2,000,000	2,000,000				2,000,000	6,000,000	0	0	6,000,000	Provided (1) 16 reinforced motorized bancas to affected fisherfolks association	Provided (1) 16 reinforced motorized bancas to affected fisherfolks association	Provided (1) 16 reinforced motorized bancas to affected fisherfolks association		BFAR-GAA	

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	Provision of 16 footer fiberglass reinforced non-motorized bancas to affected fisherfolks	OPA/OPV/DSWD/BFAR	2,000,000			2,000,000	2,000,000			2,000,000	2,000,000			2,000,000	6,000,000	0	0	6,000,000	Provided (1) 16 footer fiberglass reinforced non-motorized bancas to affected fisherfolks association	Provided (1) 16 footer fiberglass reinforced non-motorized bancas to affected fisherfolks association	Provided (1) 16 footer fiberglass reinforced non-motorized bancas to affected fisherfolks association		BFAR-GAA
	Provide alternative livelihood/cash for work	OPSWD/BPE SO/DSWD	5,000,000			5,000,000	6,000,000			6,000,000	7,000,000			7,000,000	18,000,000	0	0	18,000,000	Provided alternative livelihood/cash for work to affected coastal MLG Us	Provided alternative livelihood/cash for work to affected coastal MLG Us	Provided alternative livelihood/cash for work to affected coastal MLG Us	OPSWD- GF	DOLE/DSWD- GAA
	Provision of planting materials (seedlings, seeds, drugs, and other livestock	OPA/OPV/BFAR/BPEMO/DENR	5,000,000			5,000,000	5,000,000			5,000,000	5,000,000			5,000,000	15,000,000	0	0	15,000,000	Provided planting materials to affected coastal MLG Us	Provided planting materials to affected coastal MLG Us	Provided planting materials to affected coastal MLG Us	OPA/O PV- GF	BFAR/DE NR- GAA



		k dispersal)																							
		Conduct MHPSS	OPSWD/PHO/PDRRMO/DSWD	500,000			500,000	500,000				500,000	500,000			500,000	1,500,000	0	0	1,500,000	Conducted MHPSS to affected coastal MLGU	Conducted MHPSS to affected coastal MLGU	Conducted MHPSS to affected coastal MLGU	OPSWD- GF	DSWD/D OH- GAA
		Activate emergency communication hotline for foreign nationals	BTO/DOT/EMBASSY				0					0				0	0	0	0	0	Established of emergency communication hotline for foreign nationals	Established of emergency communication hotline for foreign nationals	Established of emergency communication hotline for foreign nationals		TELCOS
Sinkhole		Deployment of SAR Teams & Search, Rescue & Retrieval operations	PDRRMO-TaRSIER 117	100,000			100,000	100,000				100,000	100,000			100,000	300,000	0	0	300,000	100% of incidents provided with SAR deployment teams	100% of incidents provided with SAR deployment teams	100% of incidents provided with SAR deployment teams	Prov'l DRRM F	
		Deployment of Relief Teams For Relief	OPSWD, PDRRMO	500,000			500,000	500,000				500,000	500,000			500,000	1,500,000	0	0	1,500,000	100% of incidents provided	100% of incidents provided	100% of incidents provided	Prov'l DRRM F	



		goods distribut ion																	with relief teams for relief goods distrib ution	with relief teams for relief goods distrib ution	with relief teams for relief goods distrib ution			
		Activati on of ICS and Evacua tion System	OPSWD, PDRRMO	300,000			300,000	300,000			300,000	300,000			300,000	900,000	0	0	900,000	100% of incidents provid ed with ICS and evacu ation syste m	100% of incidents provid ed with ICS and evacu ation syste m	100% of incidents provid ed with ICS and evacu ation syste m	Prov'l DRRM F	
EIL		Deploy ment of SAR Teams & Search, Rescue & Retrie val operati ons	PDRRMO-TaRSIER 117	100,000			100,000	100,000			100,000	100,000			100,000	300,000	0	0	300,000	100% of incidents provid ed with SAR deplo yment teams	100% of incidents provid ed with SAR deplo yment teams	100% of incidents provid ed with SAR deplo yment teams	Prov'l DRRM F	
		Deploy ment of Relief Teams For Relief goods distribut ion	OPSWD, PDRRMO	500,000			500,000	500,000			500,000	500,000			500,000	1,500,000	0	0	1,500,000	100% of incidents provid ed with relief teams for relief goods distrib ution	100% of incidents provid ed with relief teams for relief goods distrib ution	100% of incidents provid ed with relief teams for relief goods distrib ution	Prov'l DRRM F	

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		Activati on of ICS and Evacua tion System	OPSWD, PDRRMO	300, 000			300, 000	300, 000			300, 000	300, 000			300, 000	900, 000	0	0	900, 000	100% of incide nts provid ed with ICS and evacu ation syste m	100% of incide nts provid ed with ICS and evacu ation syste m	100% of incide nts provid ed with ICS and evacu ation syste m	Prov'l DRRM F	
Droug ht		Provisi on of water truck for water supply rationin g	PDRRMO, GSO		18,0 00,0 00		18,0 00,0 00		18,0 00,0 00		18,0 00,0 00		24,0 00,0 00		24,0 00,0 00	0	60,0 00,0 00	0	60,0 00,0 00	Corell a, Corte s, Balilih an, Loboc , Dana o, Getaf e, Ubay, Buen avista , San Migue l, Dago hoy- provid ed	Corell a, Corte s, Balilih an, Loboc , Dana o, Getaf e, Ubay, Buen avista , San Migue l, Dago hoy- provid ed	Corell a, Corte s, Balilih an, Loboc , Dana o, Getaf e, Ubay, Buen avista , San Migue l, Dago hoy- provid ed	BFP,LD RRMFu nd, PDRR MFund, NDRR MFund, NEDA	
		Provisi on food and non- food items to all affecte d LGU's	PDRRMO, OPA		50,0 00,0 00		50,0 00,0 00		60,0 00,0 00		60,0 00,0 00		70,0 00,0 00		70,0 00,0 00	0	180, 000, 000	0	180, 000, 000	All Agricu ltural Town s (45 Munic ipalitie s)- provid ed	All Agricu ltural Town s (45 Munic ipalitie s)- provid ed	All Agricu ltural Town s (45 Munic ipalitie s)- provid ed	LDRR MFund, PDRR MFund, DWSD, NGO's	

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		Provision of alternative livelihood	PDRRMO, OPA		5,000,000		5,000,000		10,000,000		10,000,000		15,000,000		15,000,000	0	30,000,000	0	30,000,000	All Agricultural Towns (45 Municipalities)-educated	All Agricultural Towns (45 Municipalities)-educated	All Agricultural Towns (45 Municipalities)-educated	DENR, MAO, DOLE, DTI	
RIL		Provision of Food and non-food items	PDRRMO, OPSWD		20,000,000		20,000,000		30,000,000		30,000,000		40,000,000		40,000,000	0	90,000,000	0	90,000,000	48 LGU's	48 LGU's	48 LGU's	DSWD, NGO's	
		Provision of alternative livelihood	PDRRMO, OPSWD		10,000,000		10,000,000		15,000,000		15,000,000		20,000,000		20,000,000	0	45,000,000	0	45,000,000	48 LGU's	48 LGU's	48 LGU's	DSWD, DTI, DOLE	
HEALTH SECTOR		Operational provincial isolation center	PHO/DOH	1,000,000		1,000,000	1,200,000		1,200,000	1,440,000		1,440,000	3,640,000	0	0	3,640,000	equipped with logistics	equipped with logistics	equipped with logistics				5% LDRR MF	
		Activation of hospital protocol on EREID Outbreak	PHO/DOH	1,000,000		1,000,000	1,200,000		1,200,000	1,440,000		1,440,000	3,640,000	0	0	3,640,000	equipped and functional	equipped and functional	equipped and functional				5% LDRR MF	
		Deployment of MHPS, WASH, Medical & NiE Teams/Conduc	PHO/DOH	280,000		280,000	336,000		336,000	403,200		403,200	1,019,200	0	0	1,019,200	MHP SS, WASH, Medical & NiE Teams	MHP SS, WASH, Medical & NiE Teams	MHP SS, WASH, Medical & NiE Teams				5% LDRR MF	



		t of Hygiene Promotion Activities																		provided immediate assistance to affected population, as needed	provided immediate assistance to affected population, as needed	provided immediate assistance to affected population, as needed		
		Deployment of Mobile Water Purifier	PHO/DOH	1,000,000			1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	0	0	3,640,000	Hygiene activities are adopted in all evacuation centers as necessary	Hygiene activities are adopted in all evacuation centers as necessary	Hygiene activities are adopted in all evacuation centers as necessary	5% LDRR MF	
		Provision (Augmentation) of Health Emergency Supplies	PHO/DOH	1,000,000			1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	0	0	3,640,000	Mobile purifier available and accessible to affected population, as needed	Mobile purifier available and accessible to affected population, as needed	Mobile purifier available and accessible to affected population, as needed	5% LDRR MF	

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	Operational Emergency Operation Center and One Hospital Command Center	PHO/DOH	1,000,000			1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	0	0	3,640,000	Health emergency supplies are available to C/MLGUs to augment supply gap, ss needed	Health emergency supplies are available to C/MLGUs to augment supply gap, ss needed	Health emergency supplies are available to C/MLGUs to augment supply gap, ss needed	5% LDRR MF	
	Augmentation of Support Staff for EOC	P/C/MLGU	1,000,000			1,000,000	1,200,000			1,200,000	1,440,000			1,440,000	3,640,000	0	0	3,640,000				5% LDRR MF	
	Emergency 333 transport vehicle for response, monitoring and surveillance	PDRRMO	1,500,000.00			1,500,000	1,500,000			1,500,000			0	1,500,000	1,500,000	0	0	3,000,000	1 functional vehicle			5% LDRR MF	



DRRM Fund Investment Plan – Province of Bohol																									
Rehabilitation and Recovery																									
GR OU P	Func tiona l Clas sifica tion	PPA Code and Descri ption	Implementing Office	Period of Implementation																Expected Output			Fundin g Source	Remarks	
				Year 1 (2023)				Year 2 (2024)				Year 3 (2025)				Total for 2023-2025				2023	2024	2025			
				Starting Date: January				Starting Date: January				Starting Date: January													
				Completion Date: December				Completion Date: December				Completion Date: December													
				MO OE	CO	Ot he rs	Tota l	MO OE	CO	Ot he rs	Tota l	MO OE	CO	Ot he rs	Tota l	MO OE	CO	Ot he rs	TOT AL						
All Hazard s		Recons truction and rehabilita tion of damag ed infrastr uctures and facilities	PEO																	To provid e calami ties' affecte d individ uals a safe relocat ion					
		Provisi on of shelter assista nce to affected commu nities	OPSWD																	Help affecte d familie s surpas s mental , physic al and econo mic proble ms					
		Conduc t of cash for work/fo od for	OPSWD, PPDO																	To provid e calami ties'					



		work activities/alternative livelihood for affected families																	affected individuals alternative livelihood/source of income				
Flooding, Typhoon, Severe Wind		Provision of alternative livelihood intervention to expedite recovery		500,000	500,000		1,000,000	500,000	1,500,000		2,000,000	1,000,000	3,000,000		4,000,000	2,000,000	5,000,000	-	7,000,000	families with appropriate alternative livelihood	families with appropriate alternative livelihood	families with appropriate alternative livelihood	
		Provision of farm inputs to farmers and farmer associations		500,000	500,000		1,000,000	500,000	1,500,000		2,000,000	1,000,000	3,000,000		4,000,000	2,000,000	5,000,000	-	7,000,000	Delivered and distributed farm inputs to affected farmers and farmer association	Delivered and distributed farm inputs to affected farmers and farmer association	Delivered and distributed farm inputs to affected farmers and farmer association	
Storm Surge, Tsunami		Provision of shelter assistance to affected communities	OPSWD/DSWD/NHA/INGOs/O P/OVP	20,000,000			20,000,000				20,000,000	20,000,000			20,000,000	60,000,000	-	-	60,000,000	number of shelter provides to affected	number of shelter provides to affect	number of shelter provides to affect	DSWD/NHA- GAA, INGOS, OP, OVP



																				LGUs	ed LGUs	ed LGUs		
	Provision of livelihood assistance and start up kits to affected people's organization	OPSWD/DSWD /DOLE/INGOs/ DOST	100,000,000			100,000,000	100,000,000			100,000,000	100,000,000			100,000,000	300,000,000	-	-	300,000,000	Affected families available livelihood start-up kits	Affected families available livelihood start-up kits	Affected families available livelihood start-up kits	OPSWD- GF	DSWD/DOLE/DO ST- GAA, INGOs	
	Provided livelihood skills enhancement					-				-				-	-	-	-	-	Individuals with additional livelihood skills to generate income	Individuals with additional livelihood skills to generate income	Individuals with additional livelihood skills to generate income			
	Relocation of critical facilities	PEO/DPWH/TE LCOS/OCD	20,000,000			20,000,000	20,000,000			20,000,000	20,000,000			20,000,000	60,000,000	-	-	60,000,000	Critical facilities relocated	Critical facilities relocated	Critical facilities relocated	PEO-GF	DPWH/OCD- GAA, TELCOS	
	Assessment of structural integrity as basis for the recommendation for rehab/r	PEO/DPWH	500,000			500,000	500,000			500,000	500,000			500,000	1,500,000	-	-	1,500,000	Accomplished assessment report of damages facilities and lifeline	Accomplished assessment report of damages facilities and	Accomplished assessment report of damages facilities and	PEO-GF	DPWH-GAA	



	etrofittin g of damag ed facilities																		s to be recom mend ed for rehabil itation or retrofit ted	lifelin es to be reco mme nded for rehab ilitatio n or retrofit ted	lifelin es to be reco mme nded for rehab ilitatio n or retrofit ted		
	Provisio n of fibergla ss reinforc ed motoriz ed bancas to affected fisherfol ks	OPA/OPV/DSW D/BFAR	2,00 0,00 0			2,00 0,00 0	2,00 0,00 0			2,00 0,00 0	2,00 0,00 0			2,00 0,00 0	6,00 0,00 0	-	-	6,00 0,00 0	Affect ed fisherf olks provid ed with 6- footer fibergl ass reinfor ced non- motori zed banca s to affect ed fisherf olks assoc iation	Affect ed fisherf olks provid ed with 6- footer fibergl ass reinfo rced non- motor ized banca s to affect ed fisherf olks assoc iation	Affect ed fisherf olks provid ed with 6- footer fibergl ass reinfo rced non- motor ized banca s to affect ed fisherf olks assoc iation		BFAR- GAA
	Provisio n of 16 footer fibergla ss reinforc ed non- motoriz ed bancas to	OPSWD/BPES O/DSWD				-				-				-	-	-	-	-	numb er of famili es with additi onal incom e throug h altern	numb er of famili es with additi onal incom e throug h	numb er of famili es with additi onal incom e throug h	OPSW D- GF	DOLE/DS WD- GAA



	affected fisherfolks																		active livelihood/cash or food for work	alternative livelihood/cash or food for work	alternative livelihood/cash or food for work		
	Rehabilitation of damaged sites/ areas	PEO/DPWH/OC D/NM/OPA/OPV/DENR/	500,000			500,000	500,000			500,000	500,000			500,000	1,500,000	-	-	1,500,000	Damaged sites/ areas rehabilitated in affected coastal areas	Damaged sites/ areas rehabilitated in affected coastal areas	Damaged sites/ areas rehabilitated in affected coastal areas	PEO/OPV/OPA- GF	DPWH/OC D/NM/DENR-GAA
	Mangrove planting and dispersal of mangrove mud crabs (Establishment of mangrove nurseries,	BPEMO/DENR/BFAR/OPA	2,000,000			2,000,000	2,000,000			2,000,000	2,000,000			2,000,000	6,000,000	-	-	6,000,000	Provided mangrove planting materials and mud crabs to affected coastal areas	Provided mangrove planting materials and mud crabs to affected coastal areas	Provided mangrove planting materials and mud crabs to affected coastal areas	BPEMO- GF	DENR/BFAR- GAA
	Coral planting and sea ranching	BPEMO/DENR/BFAR/OPA	2,000,000			2,000,000	2,000,000			2,000,000	2,000,000			2,000,000	6,000,000	-	-	6,000,000	Rehabilitated damaged coral ecosystems	Rehabilitated damaged coral ecosystems	Rehabilitated damaged coral ecosystems	BPEMO/OPA- GF	DENR/BFAR- GAA

Local Disaster Risk Reduction and Management Plan

Bohol Province



		Create new Marketing and communication plan for recovery	BPTO/DOT/NM	5,000,000			5,000,000			500,000	500,000			500,000	6,000,000	-	-	6,000,000	Marketing and communication plan implemented	Marketing and communication plan implemented	Marketing and communication plan implemented		DOT/NM-GAA
Sinhole		Conduct of post-disaster damage assessment	PDRRMO, PDANA members	300,000			300,000			300,000	300,000			300,000	900,000	-	-	900,000	100% of incidents provided with post-disaster damage assessment	100% of incidents provided with post-disaster damage assessment	100% of incidents provided with post-disaster damage assessment	Prov'l DRRM F	
		Cash for work activities (emergency assistance to disaster survivors)	OPSWD	500,000			500,000			500,000	500,000			500,000	1,500,000	-	-	1,500,000	100% of incidents provided with Cash for work activities (emergency assistance to disaster survivors)	100% of incidents provided with Cash for work activities (emergency assistance to disaster survivors)	100% of incidents provided with Cash for work activities (emergency assistance to disaster survivors)	OPSWD	

Local Disaster Risk Reduction and Management Plan

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	Identification of relocation sites	PDRRMO, PEO, PPDO	100,000			100,000	100,000			100,000	100,000			100,000	300,000	-	-	300,000	100% of needed relocation sites have been identified	100% of needed relocation sites have been identified	100% of needed relocation sites have been identified	Prov'l DRRM F	
	Support to LGUs in the acquisition of relocation sites	PPDO, PDRRMO, OPSWD, PEO		3,000,000		3,000,000	3,000,000			3,000,000	3,000,000			3,000,000	-	9,000,000	-	9,000,000	10% of the total amount given to the selected LGU	10% of the total amount given to the selected LGU	10% of the total amount given to the selected LGU	Prov'l DRRM F	
	Conduct of post-disaster damage assessment	PDRRMO, PDANA members	300,000			300,000	300,000			300,000	300,000			300,000	900,000	-	-	900,000	100% of incidents provided with post-disaster damage assessment	100% of incidents provided with post-disaster damage assessment	100% of incidents provided with post-disaster damage assessment	Prov'l DRRM F	
	Cash for work activities (emergency assistance to disaster survivors)	OPSWD	500,000			500,000	500,000			500,000	500,000			500,000	1,500,000	-	-	1,500,000	100% of incidents provided with Cash for work activities	100% of incidents provided with Cash for work activities	100% of incidents provided with Cash for work activities	OPSWD	

Local Disaster Risk Reduction and Management Plan

Bohol Province



																			(emer gency assist ance to disast er surviv ors)	(emer gency assist ance to disast er surviv ors)	(emer gency assist ance to disast er surviv ors)			
	Identific ation of relocati on sites	PDRRMO, PEO, PPDO	100, 000			100, 000	100, 000			100, 000	100, 000			100, 000	300, 000	-	-	300, 000	100% of neede d relocat ion sites have been identifi ed	100% of neede d relocat ion sites have been identifi ed	100% of neede d relocat ion sites have been identifi ed	Prov'l DRRM F		
	Support to LGUs in the acquisi tion of relocati on sites	PPDO, PDRRMO, OPSWD, PEO		3,000 ,000		3,00 0,00 0	3,000 ,000			3,00 0,00 0			3,00 0,00 0	-	9,00 0,00 0	-	9,00 0,00 0	10% of the total amou nt given to the select ed LGU	10% of the total amou nt given to the select ed LGU	10% of the total amou nt given to the select ed LGU	Prov'l DRRM F			
	Rehabil itation of damag e water sources	PDRRMO, PEO, PPDO		15,00 0,000		15,0 00,0 00	20,00 0,000			20,0 00,0 00			25,0 00,0 00		25,0 00,0 00	-	60,0 00,0 00	-	60,0 00,0 00	All dama ge water source s are rehabil itated	All dama ge water sourc es are rehabil itated	All dama ge water sourc es are rehabil itated	MEO, MPDO, NEDA, JICA NDRR MFund, PSF	
	Provisi on farm inputs to affected farmers	PDRRMO, OPA		10,00 0,000		10,0 00,0 00	15,00 0,000			15,0 00,0 00			20,0 00,0 00		20,0 00,0 00	-	45,0 00,0 00	-	45,0 00,0 00	All affect ed farmer s in LGU's	All affect ed farmer s in LGU' s	All affect ed farmer s in LGU' s	MEO, MPDO, NEDA, JICA NDRR MFund, PSF, NEDA	

Local Disaster Risk Reduction and Management Plan
Bohol Province



	Provision of alternative livelihoods	PDRRMO, OPA		20,000,000		20,000,000		25,000,000		25,000,000		30,000,000		30,000,000	-	75,000,000	-	75,000,000	All affected farmers in LGU's	All affected farmers in LGU's	All affected farmers in LGU's	MEO, MPDO, NEDA, JICA, NDRR MFund, PSF, NEDA
	Cash /Food for work program	PDRRMO, DOLE, OPSWD		25,000,000		25,000,000		30,000,000		30,000,000		35,000,000		35,000,000	-	90,000,000	-	90,000,000	All affected farmers in LGU's	All affected farmers in LGU's	All affected farmers in LGU's	DSWD, DOLE,
RIL	Rehabilitation of damaged infrastructures per municipalities	PDRRMO, PEO, LGU		50,000,000.00		50,000,000		60,000,000.00		60,000,000		70,000,000		70,000,000	-	180,000,000	-	180,000,000	48 LGU's	48 LGU's	48 LGU's	DPWH, NEDA, NDRR MFund, PSF, JICA
	Re-settlement of affected families per LGU	PDRRMO, PEO, LGU		70,000,000.00		70,000,000		80,000,000.00		80,000,000		90,000,000		90,000,000	-	240,000,000	-	240,000,000	48 LGU's	48 LGU's	48 LGU's	DPWH, NEDA, NDRR MFund, PSF, NHA
	Post incident Evaluation (PIE) and documentation of best practices, lessons, problems	P/C/MLGU	48,000.00		48,000	57,600.00		57,600	69,120		69,120	174,720	174,720	-	-	174,720						5% LDRR MF



	encountered, challenges and recommendations																						
	Review and Updating of DRRM H Plan	P/C/MLGU	216,000.00			216,000	259,200.00			259,200	311,040			311,040	786,240	-	-	786,240	1 plan revised and updated	1 plan tested	1 plan tested	5% LDRR MF	
	Stress debriefing of the responders/ Care for the Carers	P/C/MLGU	80,000.00			80,000	96,000.00			96,000	115,200			115,200	291,200	-	-	291,200	24 carers debriefed	24 carers debriefed	24 carers debriefed	5% LDRR MF	
	Psychosocial interventions for the victims	P/C/MLGU	500,000.00			500,000	600,000.00			600,000	720,000			720,000	1,820,000	-	-	1,820,000				5% LDRR MF	
	Continuous monitoring of health conditions of the affected population (ex. Surveillance)	P/C/MLGU	500,000.00			500,000	600,000.00			600,000	720,000			720,000	1,820,000	-	-	1,820,000	48 LGUs monitored	48 LGUs monitored	48 LGUs monitored	5% LDRR MF	
	Repair of damaged facilities and	P/C/MLGU/DPWH	5,000.00			5,000.00	6,000.00			6,000.00	7,200.00			7,200.00	18,200.00	-	-	18,200.00				5% LDRR MF	

Local Disaster Risk Reduction and Management Plan

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	lifelines																						
	Replenishment of utilized resources	P/C/MLGU	1,000,000.00			1,000,000.00	1,200,000.00			1,200,000.00	1,440,000.00			1,440,000.00	3,640,000.00	-	-	3,640,000.00					5% LDRR MF
	Recognition of responders	P/C/MLGU	500,000.00			500,000.00	600,000.00			600,000.00	720,000.00			720,000.00	1,820,000.00	-	-	1,820,000.00	1 PIR	1 PIR	1 PIR		5% LDRR MF



Annex 6: Results Based M & E

Hazard	Targets	PPA's	Baseline	PPA Outputs	Indicator	Means of Verification	In-Charge of Monitoring/Data Gathering	Method of Gathering	Frequency	M&E Data Users	Resources Needed	Source of Funds
Drought	Corella, Cortes, Balilihan, Loboc, Danao, Getafe, Ubay, Buenavista, San Miguel, Dagohoy	Rehabilitation of damage water sources								PPDO, PDRM O	logistical supplies, Honorarium	PDRRM Fund-Rehabilitation and Recovery Program
	All Agricultural Towns (45 Municipalities)	Provision farm inputs to affected farmers								PPDO, PDRM O	logistical supplies, Honorarium	PDRRM Fund-Rehabilitation and Recovery Program
		Provision of livelihoods								PPDO, PDRM O	logistical supplies, Honorarium	PDRRM Fund-Rehabilitation and Recovery Program
	7 Watershed Areas (Inabanga, Pilar, Danao, S-Bullones, Dagohoy, Loboc, Bilar, Duero G-Hernandez, San Miguel, Alicia, Candijay, Talibon, Guindulman, Pilar, Carmen, Balilihan, Catigbi-an, Batuan, Getafe, Buenavista, Clarin, Sagbayan)	Provision of alternative livelihoods									PPDO, PDRM O	logistical supplies, Honorarium



FLOODING, TYPHOON, SEVERE WIND	Support to the reduction of population at risk to flooding, typhoon, severe wind Loboc, Candijay, Inabanga, Antequera, Garcia-Hernandez, Lila, Cortes, Sierra Bullones, Loay, Alburquerque; With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon With Island Barangays: Getafe, Talibon, Bien Unido, Pres. CPG, Loon, Ubay, Tubigon, Baclayon	Determine number of families / households whose livelihood/ main source of income were affected;	_ families with appropriate alternative livelihood		No. of assisted/evaluated appropriate livelihood interventions;	Pictures, Validation Report	LGUs	Survey, Interview, Field Visits	Yearly	LGUs	Transportation, Communication, IT Equipment	5% DRRM Fund
	Assess and evaluate appropriate livelihood interventions;					Pictures, Validation Report		Survey, Interview, Field Visits	Yearly		Transportation, Communication, IT Equipment	5% DRRM Fund
	Provision of alternative livelihood intervention to expedite recovery					Pictures, Validation Report		Survey, Interview, Field Visits	Yearly		Transportation, Communication, IT Equipment	5% DRRM Fund
	Linkage with counterpart National Agencies, NGOs, etc					Pictures, Validation Report		Survey, Interview, Field Visits	Yearly		Transportation, Communication, IT Equipment	5% DRRM Fund
	Support to the reduction of agricultural areas at risk to Flooding, Typhoon, Severe Wind											
	Candijay (AF), Alicia, Guindulman (AF)	Provision of farm inputs to farmers and farmer associations			No. of farmers and farmer associations provided with assistance	Documentation	LGUs	Site Visit, Interview, Report	Semi-Annual II	LGUs	Transportation, Communication, IT Equipment	General Fund
	Pilar, Batuan, Bilar, Carmen, Balilihan, Catigbian, Garcia-	Determine number of target farmers and			No. of Assessment Report with evaluation	Documentation	LGUs	Site Visit, Interview, Report	Semi-Annual II	LGUs	Transportation, Communication, IT Equipment	General Fund



	Hernandez, Jagna, Sierra Bullones, Dana	farmer associations										
		Assess and evaluate appropriate farm inputs		No. of programs funded		Pictures, Validation Report	LGUs, PAG-ASA, MGB why PAGASA and MGB?	Survey, Interview, Field Visits	Yearly	LGUs, PAG-ASA, MGB why PAGASA and MGB?	Transportation, Communication, IT Equipment	5% DRRM Fund
		Linkage with counterpart National Agencies, NGOs, etc		No. of programs funded		Pictures, Validation Report	LGUs, PAG-ASA, MGB why PAGASA and MGB?	Survey, Interview, Field Visits	Yearly	LGUs, PAG-ASA, MGB why PAGASA and MGB?	Transportation, Communication, IT Equipment	5% DRRM Fund
			1.5 Linkage with counterpart National Agencies, NGOs, etc.	No. of partners	48 LGUs	Documentation	LGUs	Site Visit, Interview, Report	Semi-Annual	LGUs	Transportation, Communication, IT Equipment	General Fund
Health	1 PLGU	Post incident Evaluation (PIE) and documentation of best practices, lessons, problems encountered, challenges and recommendations	PIE conducted every after health emergency or disaster	# of PIE conducted every after disaster	PHO	documentation	PHO	Document Review	Annual	PHO, DOH, PDRRMO	Meals and Snacks	LDRRMF
	All LGUs	Review and Updating of DRRMH Plan	All DRRMH Plan reviewed and updated	# of DRRMH Plan reviewed and updated	PHO	DRRMH Plan	PHO	Document Review	Annual	PHO, DOH, PDRRMO	Meals and Snacks	LDRRMF



	All responders	Stress debriefing of the responders	Stress debriefing conducted to all responders	percentage of responders who undergone stress debriefing	PHO	documentation	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Meals and Snacks	LDRRMF
	Priority Victims	Psychosocial interventions for the victims	Psychosocial interventions conducted to all priority victims	percentage of priority victims who undergone psychosocial interventions	PHO	documentation	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Meals and Snacks	LDRRMF
	All LGUs	Continuous monitoring of health conditions of the affected population (ex. Surveillance)	Health conditions of affected populations are monitored	# of LGUs with affected populations being monitored	PHO	Reports	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Communication allowance and transportation	LDRRMF
	All LGUs	Repair of damaged facilities and lifelines	damaged health facilities are repaired	Percentage of damaged health facilities repaired	PHO	Reports	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Infra repair funds	LDRRMF
	All LGUs	Replenishment of utilized resources	all logistics are replenished	percentage of logistics replenished	PHO	Inventory	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Funds for purchase	LDRRMF
	All LGUs	Recognition of responders	responders are recognized	percentage of responders recognized	PHO	Documentation	PHO	Document Review	Annual	PHO, DOH, PDRR MO	Meals and Snacks	LDRRMF



Annex 7: Institutional PLGU LDRRMC and LDRRMO Organization Structures

With this Vision and Mission, the Provincial Government of Bohol thru Gov. Arthur C. Yap has issued Executive Order No. 10 series of 2019 on the Reconstitution and Strengthening of the Provincial Disaster Risk Reduction and Management Council (PDRRMC) of the Province of Bohol to ensure the coherent, integrated, proficient and responsible emergency management system in the province and coordinate and implement projects and activities on civil protection, standard humanitarian assistance and disaster management.

The PDRRMC's composition is as follows:

Erico Aristotle C. Aumentado	-	Chairperson
Dionisio Victor A. Balite	-	Executive Vice Chairperson
Ms. Vina Antopina DOST	-	Vice Chairperson on Disaster Prevention and Mitigation
Dir. Jerome Gonzales DILG	-	Vice Chairperson on Disaster Preparedness
Ms. Carmelita M. Tecson OPSWD	-	Vice Chairperson on Disaster Response
Atty. John Titus J. Vistal PPDO	-	Vice Chairperson on Disaster Rehabilitation and Recovery

Further, the Heads or Designated Representatives of the following offices and organizations shall compose the different DRRM Pillars:

Disaster Prevention and Mitigation	Disaster Preparedness	Disaster Response		Disaster Rehabilitation and Recovery	
PDRRMO	PDRRMO	PDRRMO	GO	PDRRMO	GO
GO	GO	TaRSIER 117	OPSWD	PPDO	DOH
DOST	OPV	PHO/Hospitals	OPV	PHO/Hospitals	
OCD	OPA	OPA	PEO	OPA	OPV
PPDO	DILG	PGSO	PMO	PGSO	PMO
PHIVOLCS	OCD	DPWH 1, 2, 3	OCD	PEO	AFP
PAGASA	PHIVOLCS	DSWD NATIONAL	DOH	Bohol Bankers Assn	
SP	PAGASA	NFA	PNP	DPWH 1, 2, 3	
DEPED	DEPED	AFP	BFP	DA-7	
BFP	AFP	BOHOL TRI-MEDIA	PRC	BOHOL TRI-MEDIA	
BOHOL TRIMEDIA	PNP	DEPED	PCG	DSWD NATIONAL	
DENR	BFP	BANGON	BALDRRMO	PCG	
BISU	BOHOL TRI-MEDIA	PHIL MARITIME	UN-OCHA	BANGON	
OPV	LIGA NG MGA	BOHOL CONTRACTORS ASSN		BOHOL	

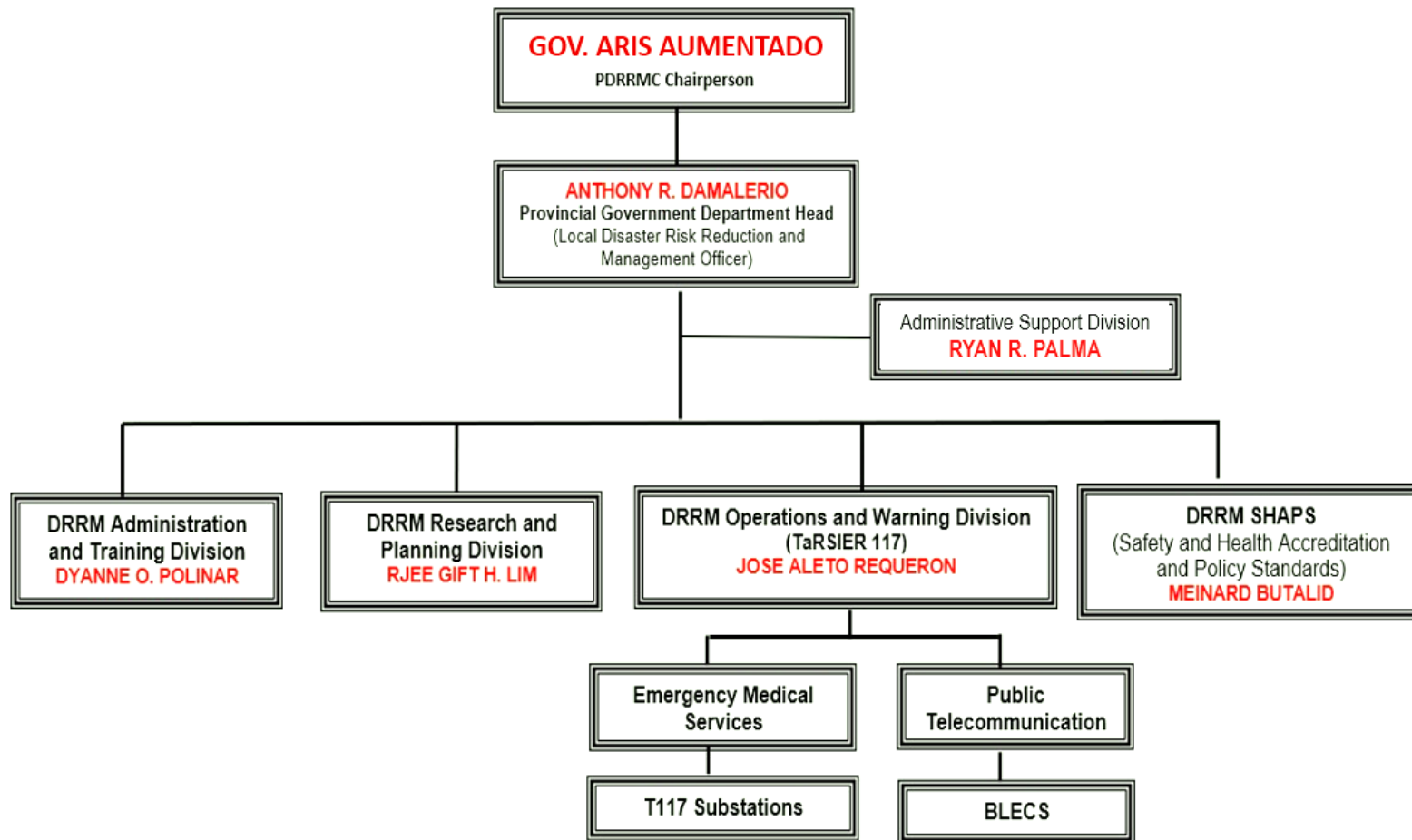


<p>OPA PCG BEMO DPWH BALDRRMO BANGON Phil Mine Safety and Environment Association - Bohol Phil Institute of Civil Engineers United Architects of the Phils-Bohol Sangguniang Panlalawigan Committees on Social Services; Peace & Order and Public Safety; Environment and Natural Resources</p>	<p>BARANGAY BANGON PRC PCG BALDRRMO MDRRMC BDRRMC TaRSIER 117 TELCOS Phil Institute of Civil Engineers (PICE) United Architects of the Phils-Bohol (UAP) League of Municipalities of the Phils – Bohol Chapter</p>	<p>BCCI MDRRMC Bohol Medical Society DTI Bohol Nurses Association Local Power/Water/Communications Utilities (Generation, Transmission (NGCP), Distribution e.g., BLCI, BOHECO, BWUI etc) Local & International Humanitarian Aid partners (UNDP, UNICEF, MERLIN, IOM, ETC) Local & Intl NGOs in Bohol Bohol Goodwill Volunteers, Inc. JCI Chocolate Hills JCI Boholana Kisses Phil Mine Safety and Environment Association – Bohol Phil Institute of Civil Engineers United Architects of the Phils-Bohol TELCOS – Globe, Smart, Sun Bus Operators & Drivers Assn Bohol Bankers Association Tzu Chi Foundation World Vision CHARL</p>	<p>IMAP-Bohol BAHRR CONTRACTORS ASSN BALDRRMO MDRRMC BCCI TELCOS International Humanitarian Aid Partners (UNDP, UNICEF, MERLIN, IOM, etc) Local and International NGOs in Bohol Phil Mine Safety and Environment Association – Bohol Phil Institute of Civil Engineers United Architects of the Phils-Bohol</p>
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Moreover, a Local Disaster Risk Reduction and Management Office was created by virtue of Provincial Ordinance NO. 2016-010 to serve as Secretariat and assist the LDRRMC in the implementation of disaster management plans.

PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT OFFICE





FUNCTIONS AND RESPONSIBILITIES OF THE PROVINCIAL DRRM OFFICE

1.1. General Functions of the Office

The PDRRMO within its territorial jurisdiction, shall be responsible for setting the direction, development, implementation, and coordination of disaster risk reduction and management programs, and shall perform the following functions and those that may be authorized by the PDRRMC.

1.2 Functions of the Administration and Training Division

- Organize and conduct training, orientation, and knowledge management activities on DRRM at the local level;
- Identify, assess and manage the hazards, vulnerabilities and risks provincewide that involve the most vulnerable sectors (women, children, senior citizens, and PWD);
- Identify and implement *cost-effective* risk reduction measures and strategies;
- Disseminate information and raise public awareness about those hazards, vulnerabilities, and risks;
- Take all necessary steps on a continuing basis to maintain, provide, or arrange the provision of, or to otherwise make available, suitably-trained and competent personnel for effective civil defense and DRRM in its area;
- Organize, train, equip and supervise the local emergency response teams and the accredited community disaster volunteers (ACDVs), ensuring that humanitarian aid workers are equipped with basic skills to assist mothers to breastfeed;
- Implement policies, approve plans and programs of the LDRRMC consistent with the policies and guidelines laid down in RA 10121
- Promote and raise public awareness of, and compliance with RA 10121 and legislative provisions relevant to the purpose of the latter;
- Implement policies, approve plans and programs of the LDRRMC consistent with the policies and guidelines laid down in RA 10121.
- Train the most vulnerable sectors (women, children, senior citizens, and PWD) in DRRM, especially in disaster preparedness.
- Does other administrative-related functions.

1.3 Functions of the Research and Planning Division

- Design program and coordinate DRRM activities, consistent with the NDRRMC's standards and guidelines;
- Facilitate and support risk assessments and contingency planning activities at the local level;
- Consolidate local disaster risk information which includes natural hazards, vulnerabilities, and climate change risks, and maintain a local risk map;
- Conduct research and development initiatives on DRRM;
- Formulate and implement a comprehensive and iterated Local DRRM Plan (LDRRMP) in accordance with the national, regional, and provincial framework, and policies on DRR in close coordination with the Local Development Council (LDC);
- Prepare and submit to the Local Sanggunian through the Local DRRM Council and the LDC the annual LDRRMO Plan and budget, the proposed programming of the LDRRMF, other dedicated DRRM resources, and other regular funding source/s and budgetary support of the LDRRMO or BDRRMC;
- Maintain a database of human resource and their capacities, equipment, directories, and location of critical infrastructures such as hospitals and evacuation centers; and
- Conduct research and development initiatives on DRRM-CCA in coordination with other agencies;



- Serve as the Secretariat and executive arm of the Local DRRM Council (LDRRMC);
- Recommend through the LDRRMC the enactment of Local Ordinances consistent with RA 10121;
- Prepare and submit, through the LDRRMC and the LDC, the report on the utilization of the LDRRMF and other dedicated DRRM resources to the local COA, copy furnished the Regional Director of the Office of the Civil Defense (OCD) and the local government operations officer of the DILG; and
- Involve the most vulnerable sectors (women, children, senior citizens, and persons with disability (PWD) in risk assessment and planning.

1.4 Functions of the Operations and Warning Division

- Operate a multi-hazard early warning system, linked to DRR to provide accurate and timely advice to national or local emergency response organizations and to the general public, through diverse mass media, particularly radio, landline communications, and technologies for communication within rural communities;
- Conduct continuous disaster monitoring and mobilize instrumentalities and entities of the LGUs, C50s, private groups and organized volunteers, to utilize their facilities and resources for the protection and preservation of life and properties during emergencies in accordance with existing policies and procedures;
- Develop, strengthen, and operationalize mechanisms for partnership or networking with the private sector, C50s, and volunteer groups;
- Respond to and manage the adverse *effects* of emergencies and carry out recovery activities in the affected area, ensuring that there is an efficient mechanism for immediate delivery of food, shelter and medical supplies for women and children, endeavor to create a special place where internally-displaced mothers can find help with breastfeeding, feed and care for their babies and give support to each other;
- Respond to and manage the adverse *effects* of emergency and carry out recovery activities to the most vulnerable areas especially to the vulnerable sectors (women, children, senior citizens, and Persons With Disability (PWD));
- Establish linkage and/or network with other LGUs for DRR and emergency response purposes;
- Establish a provincial, city or municipal, and barangay DRRM Operations Center;
- Coordinate other DRRM activities;
- Give early warning to the most vulnerable sectors (women, children, senior citizens, and PWD) to respond to their needs.

In summary, the PDRRMC participants during the Local Disaster Risk Reduction Management Planning workshop saw that the key recommendations to attain a vision of building back Bohol better include the following key and basic DRRM reforms:

1. Good, accessible and accurate database system from data capture, to data processing and data storage and retrieval;
2. A legislated, well-supported and financed Provincial Disaster Risk Reduction Management Plan at all level that is monitored and assessed periodically;
3. A functional, financially supported, legislated and well-resourced / staffed Provincial Disaster Risk Reduction Management Office at all levels;
4. Pervasive disaster consciousness, awareness, prevention, preparedness and response institutionalized at the community level and supported by the civil society and private / business sector; and



5. A DRRM Governance Training Center that continually builds capacities of local governments and communities to plan, prevent, mitigate, prepare and effectively respond to disasters and undertake post disaster rehabilitation and recovery actions.



Annex 8: PDRRMC Resolution No. 2, Series 2022



Republic of the Philippines
PROVINCE OF BOHOL
City of Tagbilaran



PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

EXCERPT FROM THE MINUTES OF THE SECOND FULL COUNCIL MEETING OF THE PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL (PDRRMC) OF BOHOL HELD ON NOVEMBER 28, 2022 AT THE CEREMONIAL HALL OF THE NEW CAPITOL BUILDING, TAGBILARAN CITY, BOHOL, PHILIPPINES

In Attendance: Majority of the Regular Members

RESOLUTION NO. 02 Series of 2022

A RESOLUTION APPROVING AND ADOPTING THE PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2025 AND APPROVING THE PROGRAMS AND ACTIVITIES FOR FUNDING IN THE 2023 LOCAL DISASTER RISK REDUCTION AND MANAGEMENT FUND TO GUIDE THE DISASTER RISK REDUCTION-RELATED PROGRAMS AND PROJECTS OF THE PROVINCE OF BOHOL

WHEREAS, one of the priority agenda during the full council meeting was the presentation and approval of the Provincial Disaster Risk Reduction and Management Plan 2023-2025 including the various programs and activities for inclusion in the 2023 Local Disaster Risk Reduction and Management (LDRRM) Fund;

WHEREAS, that the Provincial Disaster Risk Reduction and Management Plan is a comprehensive result of the conducted Local DRRM Planning Workshops last April 25-27, 2022 and August 17-19, 2022 assisted by the Japan International Cooperation Agency (JICA) and Office of the Civil Defense VII together with the concerned agencies from the four thematic areas of DRRM;

WHEREAS, that part of the annual budget of the Provincial Government of Bohol is the 5% Local Disaster Risk Reduction and Management Fund (LDRRMF) in the amount of One Hundred Sixty-Nine Million Seven Hundred Seventy-Three Thousand Six Hundred Sixty-Four Pesos and Fifty Centavos (169,773,664.50);

WHEREAS, the Provincial Disaster Risk Reduction and Management Council (PDRRMC) in its Second Full Council Meeting has agreed and approved the various programs and activities for inclusion and appropriation in the 2023 LDRRM fund, to wit:



Republic of the Philippines
PROVINCE OF BOHOL
City of Tagbilaran



PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

70% Pre-Disaster Program	-	P 118,841,565.15
30% Quick Response Fund (QRF)	-	P 50,932,099.35
TOTAL	-	P 169,773,664.50

WHEREFORE, upon motion of the Provincial Budget Officer Peter Ross Retutal seconded by Jovencia B. Ganub of the Bohol Provincial Environment Management Office, be it resolved as it is hereby resolved by the Provincial Disaster Risk Reduction and Management Council in a meeting duly convened to pass

A RESOLUTION APPROVING AND ADOPTING THE PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2025 AND APPROVING THE PROGRAMS AND ACTIVITIES FOR FUNDING IN THE 2023 LOCAL DISASTER RISK REDUCTION AND MANAGEMENT FUND TO GUIDE THE DISASTER RISK REDUCTION-RELATED PROGRAMS AND PROJECTS OF THE PROVINCE OF BOHOL

RESOLVED further to provide copies of this Resolution to the Sangguniang Panlalawigan and to the PDRRMC members and other sectors concerned, for their information, support and cooperation.

UNANIMOUSLY APPROVED.

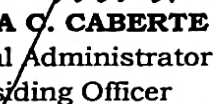
I hereby certify to the correctness of the foregoing Resolution.


ANTHONY R. DAMALERIO
PDRRMO-Secretariat

ATTESTED:

ERICO ARISTOTLE C. AUMENTADO
Governor
PDRRMC Chairman

By Authority of the Governor:


ASTERIA C. CABERTE
Provincial Administrator
Presiding Officer

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Annex 9: RDRRMC Certification for FY 2023



Republic of the Philippines
REGIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL
Region VII
Government Command and Control Center,
BGEN Benito N Ebuena Airbase, Sangi Road, Brgy. Pajo, Lapu-Lapu City
Tel. No. (032) 236-0473 Mobile No. 0917-704-1070
Email Address: region7@ocd.gov.ph

CERTIFICATION

TO WHOM IT MAY CONCERN:

THIS IS TO CERTIFY THAT the **Disaster Risk Reduction and Management (DRRM) Plan 2023-2025** of **PROVINCE OF BOHOL** has been duly reviewed and found that the DRRM programs, projects and activities are appropriate to the hazards of the said Local Government Unit (LGU). The Sanggunian-approved Annual Investment Plan (AIP) for DRRM-CCA of the above-mentioned LGU is seen consistent to their LDRRM Plan reviewed.

In compliance to Local Budget Memorandum Circular No. 85, s. 2022, this Certification is valid for **FY 2023** only to support DBM's requirement for budget authorization purposes.

Done this **02th** day of **December 2022** in Lapulapu City, Philippines.


TASHUANA A. VILLAFLOR
OCD VII


ADRIAN D. CRUZ
DOST VII


LEO S. PASILANG
DILG VII


LILIBETH A. CABIARA
DSWD VII


JONATHAN GAVINO R. ORILLO
NEDA VII

Approved By:


DIR. SEGUNDO S. BOLO
Chairperson, RDRRMC/OCD Regional Director