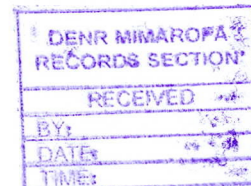




Republic of the Philippines
Department of Environment and Natural Resources
Provincial Environment and Natural Resources Office
MIMAROPA Region

Bgy. Sta. Monica, Puerto Princesa City, Palawan

E-mail: penropalawan@denr.gov.ph
Telfax No. (048) 433-5638 / (048) 433-5638



April 13, 2023

MEMORANDUM

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

THRU : The OIC, ARD for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : **REPORT ON THE ATTENDED GREEN ECONOMY MODEL (GEM) PROGRAM ASSESSMENT AND PLANNING CUM VALIDATION HELD AT THE PROTECTED AREA MANAGEMENT OFFICE (PAMO) CONFERENCE ROOM OF EL NIDO MANAGED RESOURCE PROTECTED AREA (ENMRPA), MASAGANA, EL NIDO, PALAWAN**

Respectfully forwarded is the memorandum dated March 22, 2023 of CENRO Taytay, Palawan along with the report re: the above subject and attached copy of reviewed and updated Master Plan of GEM El Nido.

Please be informed that the said activity was conducted on March 1-3, 2023 which was facilitated by the Assistant Regional Director for Management Services, Donna Mayor-Gordove, CESO IV together with OIC Chief, Planning and Management Division, and GEM Monitoring Officer participated by PAMO-ENMRPA staff and the team leaders of the Technical Working Group (TWG).

Further, the objective of the said activity is to assess and validate the implementation of 2021 and 2022 Work and Financial Plan as well as the CY 2022-2024 GEM Master Plan for El Nido.

This serves as **Means of Verification (MoV)** for target activities under Strategy 6. Review and Updating of GEM Master Plan in GEM CY 2022 (Continuing Appropriation).

For information and record.



FELIZARDO B. CAYATOC

**DENR-PALAWAN
PENRO-RECORDS
RELEASED**

By *[Signature]*
Date: **17 APR 2023** *23-1041*



COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE

by the National Highway, Poblacion, Taytay, Palawan 5312

Contact No.: 09265059335 (Globe) / 09121713889 (Smart)

Email address: cenro.taytay@denr.gov.ph

DENR PENRO
PALAWAN RECORDS
RECEIVED

March 22, 2023

MEMORANDUM

BY: [Signature]
DATE: 11-30-2023 ON 23-2857

FOR : The Provincial Environment and Natural Resources Officer- Palawan

FROM : The Community Environment and Natural Resources Officer

SUBJECT : **ACCOMPLISHMENT REPORT ON ACTIVITY** *fr*
Green Economy Model (GEM)

Activity: Green Economy Model (GEM) Program				
Performance Indicator: GEM Master Plan reviewed and updated with report submitted				
Frequency of submission: 1 st Quarter				
Current submission: Memo report of FT II/GEM Focal Lanie Jane A. Rey dated March 14, 2023 (CN 1869 in the eDATS) submitting the report re: attended GEM assessment and planning cum validation on March 1-3, 2023 at PAMO-ENTMRPA Conference Hall, Barangay Masagana, El Nido, Palawan.				
Attachment: 1. Photo documentation (2 pages) 2. GEM El Nido Master Plan CY 2022 to 2024 (28 pages)				
Gender & Development (GaD) data	Male = 6	Female = 6	LGBTQ+ = 0	Prefer not to say = 0
Age Grouping	60 and above	18-59	17 and below	TOTAL
	0	12	0	12
Environmental Management System (EMS Compliance)	<div>✓ Compliant to 5S organization techniques (SORT – keep only necessary items, SET IN ORDER – arrange items to promote efficient workflow, SHINE – clean the work area so it is neat and tidy, STANDARDIZE – set standards for a consistently organized workplace and SUSTAIN – maintain and review standard)</div> <div>✓ No single use of plastic</div> <div>✓ PENRO Memo No. 2023-001 dated February 21, 2023</div>			

This is our **Means of Verification (MoV)** on the activity. Please confirm your receipt hereof. Thank you.

DENR CENRO
TAYTAY, PALAWAN
RELEASED

BY: [Signature]
DATE: MAR 23 2023 CN 1201

Copy furnished:
PAMO-ENTMRPA

CONRADO M. CORPUZ



March 14, 2023

MEMORANDUM

FOR : The Community Environment and Natural Resources Officer
Taytay, Palawan

FROM : Forest Technician II / Green Economy Model (GEM) Focal
El Nido, Palawan

SUBJECT : **REPORT ON THE ATTENDED GREEN ECONOMY MODEL (GEM) PROGRAM ASSESSMENT AND PLANNING CUM VALIDATION HELD AT THE PROTECTED AREA MANAGEMENT OFFICE (PAMO) CONFERENCE ROOM OF EL NIDO MANAGED RESOURCE PROTECTED AREA (ENMRPA), MASAGANA, EL NIDO, PALAWAN**

DENR CENRO
TAYTAY PALAWAN
RECEIVED
DATE: 3-30-23 ON 1869

This pertains to the target GEM CY 2022 (Continuing Appropriation) Review and Updating of GEM Master Plan under Strategy 5. Institutional Mechanism for El Nido, Palawan.

Please be informed that on March 1-3, 2023, the undersigned together with the team leaders of the Technical Working Group (TWG) on the implementation of GEM in El Nido, Palawan per Regional Special Order No. 333, series of 2022, dated October 24, 2022, participated in the conduct of the GEM program assessment and planning cum validation held at the Protected Area Management Office (PAMO) Conference Room of El Nido Managed Resource Protected Area (ENMRPA), Masagana, El Nido, Palawan. It was attended by a total of twelve (12) personnel composed of six (6) male and six (6) female from DENR MIMAROPA Region, PENRO Palawan, EMB-PEMU, MGB embedded, CENRO Taytay and PAMO –ENMRPA. The activity was facilitated by Assistant Regional Director for Management Services Donna Mayor-Gordove, CESO IV together with OIC Chief, Planning and Management Division Jonas Paolo M. Saludo and GEM Monitoring Officer Nicko T. Ibañes. The objective of the activity is to assess and validate the implementation of FY 2021 and 2022 Work and Financial Plan as well as the CY 2022-2024 GEM Master Plan for El Nido.

On March 1, 2023, the activity started with a preliminaries followed by levelling off of issues and concerns encountered during the implementation of the targets under FY 2021 and FY 2022 Work and Financial Plan. Issues raised include improper waste segregation at the Municipal Sanitary Landfill (Dumpsite), not regularly collected solid waste in MRFs and provision of subsidy for household regarding connection cost on STP by the Municipal Local Government Unit of El Nido will not be possible since the management of the STP was fully turned over to the Provincial Government of Palawan, among others. Further, the undersigned presented the accomplishments of GEM El Nido from Calendar Year 2018 to 2022. She mentioned that due to late downloading of fund, some targets under CY 2022 Current Work and Financial Plan were not able to accomplished and requested for continuing on CY 2023.

On March 2, 2023, the activity focused on the review of GEM El Nido Master Plan, its Objective Tree and Matrix Indicators for CY 2022-2024. Emerging issues identified include ground water contamination, unregulated use of domestic water supply and provision of livelihood within Protected Area, hence, come up with three goals to address the issues and concerns in El Nido. Some strategies, outputs and activities were revised considering the current situation of El Nido. The coverage of GEM implementation based on the updated master plan will be the El Nido Managed Resource Protected Area focusing the 10 coastal



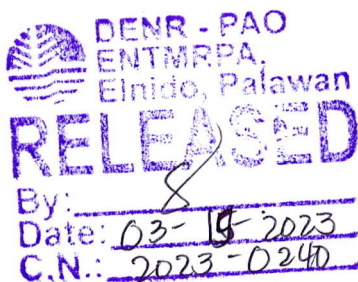
barangays such as Maligaya, Masagana, Buena Suerte, Corong-Corong, Villa Libertad, Pasadena, Bucana, Manlag, Aberawan, Bebeladan which directly drain in El Nido and Bacuit Bay.

Further, on March 3, 2023, the team conducted an ocular inspection of five (5) outfalls within El Nido Town such as Corong-Corong Outfall, El Nido Estero Outfall, Masagana Outfall 1, Masagana Outfall 2 and Cabugao Outfall which all failed on fecal coliform test per EMB. The team also checked the STP cluster tanks constructed in Corong-Corong, Masagana, Maligaya and Buena Suerte, all in El Nido, Palawan. It was observed that some pipes laid in the beach areas are expose. Hence, mapping of sub-surface structures using GPR is necessary to detect and locate underground pipes/structures. Afterwards, the team returned to the venue for finalization of the updated master plan.

Attached is the reviewed and updated Master Plan of GEM El Nido.

This serves as our Means of Verification (MoV) of the target.

For information and record.




LANIE JANE A. REY



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources
EL NIDO-TAYTAY MANAGED RESOURCE PROTECTED AREA
Calle Real, Barangay Masagana, El Nido, Palawan, 5313
Tel No.: 048 716 0674
Email: entmrpa@gmail.com

PHOTODOCUMENTATION



**GREEN ECONOMY MODEL (GEM) PROGRAM ASSESSMENT AND PLANNING CUM
VALIDATION HELD AT THE PROTECTED AREA MANAGEMENT OFFICE (PAMO)
CONFERENCE ROOM OF EL NIDO MANAGED RESOURCE PROTECTED AREA
(ENMRPA), MASAGANA, EL NIDO, PALAWAN FROM MARCH 1-3, 2023**



Republic of the Philippines
Department of Environment and Natural Resources

MIMAROPA Region

Community Environment and Natural Resources

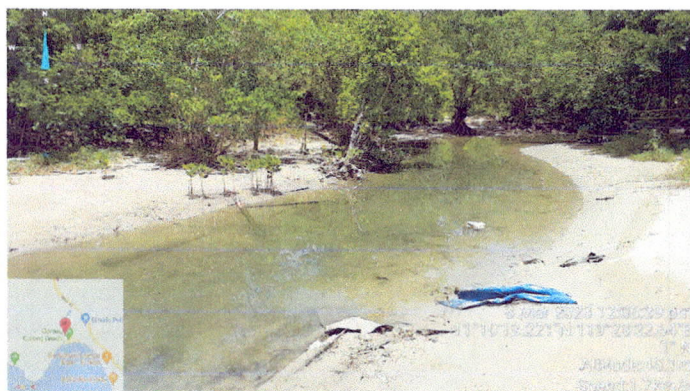
EL NIDO-TAYTAY MANAGED RESOURCE PROTECTED AREA

Calle Real, Barangay Masagana, El Nido, Palawan, 5313

Tel No.: 048 716 0674

Email: entmrpa@gmail.com

PHOTODOCUMENTATION



GREEN ECONOMY MODEL (GEM) PROGRAM ASSESSMENT AND PLANNING CUM
VALIDATION HELD AT THE PROTECTED AREA MANAGEMENT OFFICE (PAMO)
CONFERENCE ROOM OF EL NIDO MANAGED RESOURCE PROTECTED AREA
(ENMRPA), MASAGANA, EL NIDO, PALAWAN FROM MARCH 1-3, 2023

GREEN ECONOMY MODEL (GEM)

EL NIDO MASTER PLAN

CY 2022 TO CY 2024

INTRODUCTION

Green Economy refers to a low-carbon, resource-efficient, and socially-inclusive economic system that substantially reduces environmental risks and ecological scarcities. One of the main tools in realizing the transition toward a green economy is the adoption of a **Green Economy Model (GEM)**, which according to the United Nations Environment Programme (UNEP), is “a powerful tool that establishes a relationship between policy targets and relevant economic, environmental, and social dimensions”.

In the Philippine context, three guiding principles and policies (Figure 1) have led to the inception of GEM.

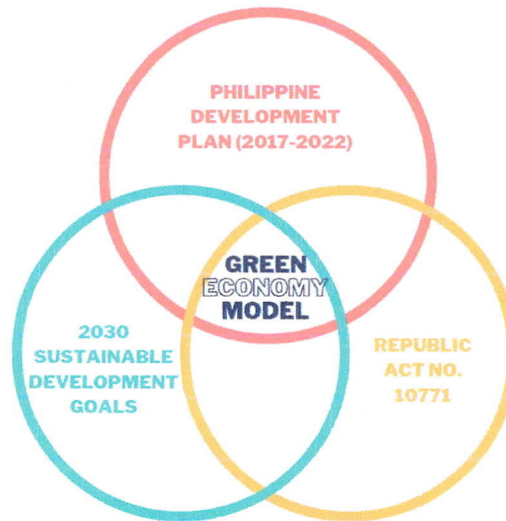


Figure 1. Concepts that lead to the inception of GEM.

1. Republic Act no. 10771 otherwise known as the “Philippine Green Jobs Act of 2016”, promotes the creation of green jobs;
2. Philippine Development Plan (PDP) 2017-2022 which is geared towards the realization of the long-term vision of *AmBisyon Natin 2040*: “*Isang matatag, maginhawa, at panatag na buhay para sa lahat*”, in pursuit of inclusive development; and
3. Sustainable Development Goals of 2030, which serve as the guiding principle of the Department’s paradigm shift toward sustainable development.

In 2017, former DENR Secretary Regina Paz Lopez issued the DENR Administrative Order (DAO) No. 2017-08 entitled “*Guidelines in Operationalizing the Transition of the DENR’s Programs and Projects into Green Economy Model (GEM)*”, which served as guidelines for the shift of the agency’s programs and projects to GEMs.

One of the main mechanisms of this program is the creation of green jobs. Green job is defined as employment that contributes to the betterment of the quality of the environment and improved human well-being. This job implements resource efficiency, minimizes or completely avoids waste generation, reduces carbon emissions and pollution, and aids in the protection of ecosystems and biodiversity. Further, this

contributes to the improvement of human well-being by fostering a safe workplace, providing just compensation, placing a high regard on workers' rights, providing social protection for families, and promoting social dialogues. Essentially, the creation of green jobs is geared toward inclusive growth and poverty reduction in the local community, while also giving heavy importance to environmental health.

The target beneficiaries of the program, as stated in DAO 2017-08, are interested households and existing community enterprises that are residing near or within the proposed project sites. The interested participating members are eligible to have tenurial rights and will gain access to resource-based programs and projects of the agency.

GEM as a Mitigating Response to Climate Change

The vulnerability of the Philippines to climate-related risks increases the likelihood of various sectors to experience long-term impacts on the economy, sustainable development, social equity, and national security. To address this concern, the *Philippines Green Jobs Act* was passed into law in 2016 to boost the promotion of sustainable growth and decent job creation while simultaneously, developing resilience towards climate change impacts, by incentivizing enterprises that create green jobs (International Labor Organization, n.d.).

According to the Department of Trade and Industry (DTI), micro-, small, and medium enterprises (MSMEs) can aid in climate change mitigation by reducing the emission of greenhouse gases. This effort may start from the following:

- Natural Resource Management
- Energy Efficiency Management
- Waste Management
- Wastewater Management
- Solid Waste Management
- Transport Management
- Raw Materials Management

General Objective:

This master plan was formulated to operationalize the transition of the DENR MIMAROPA's programs and projects into GEMs by the year 2024, particularly in the municipalities of Puerto Galera, Oriental Mindoro, Coron, Palawan, and El Nido, Palawan, following the provisions of DAO 2017-08.

Specifically, it aimed to:

1. Identify the status of the water quality of the prominent ecotourism sites of each municipality;
2. Determine the factors that contributed to the deterioration of the water quality of the three municipalities;
3. Identify programs and strategies to accelerate the rehabilitation of degraded ecosystems and promote the protection of the environment through collaborations and partnerships among and between the DENR, the LGU, and the local community; and

4. Formulate a plan of action consisting of the programs and strategies in preparation for the creation of a viable nature-based community enterprise, where households are at the forefront of creating value-added environmental products and rendering services for the rehabilitation of ecosystems.

LEGAL PROFILE

Governing Laws

Republic Act No. 9003: Ecological Solid Waste Management Act of 2000

It provides the necessary policy framework, institutional mechanism, and mandate to the local government units (LGUs) to achieve 25% waste reduction through establishing integrated solid waste management plans based on the 3Rs (reduce, reuse and recycling).

Presidential Decree No. 1067 s., 1976: Water Code of the Philippines

ARTICLE 51. *The banks of rivers and streams and the shores of the seas and lakes throughout their entire length and within a zone of three (3) meters in urban areas, twenty (20) meters in agricultural areas and forty (40) meters in forest areas, along their margins, are subject to the easement of public use in the interest of recreation, navigation, floatage, fishing and salvage. No person shall be allowed to stay in this zone longer than what is necessary for recreation, navigation, floatage, fishing or salvage or to build structures of any kind.*

DAO No. 2021-07: Guidelines on the establishment of Legal Easement along the Seas, Rivers, Lakes, Esteros, and Creeks

Section 5.1 *For Urban Areas – All cities and urban municipalities shall adopt a 3-meter easement zone over those areas classified as agricultural lands. Forest lands shall adopt a 40-meter easement zone, even if it is part of an urban area.*

Section 5.2 *For Rural Areas – Rural municipalities shall adopt a 20-meter easement zone for agricultural lands, and a 40 meters easement zone on forest lands. In case where rural municipalities are upgraded into urban, their easement shall be adjusted consistent with Section 5.1 of this Order upon approval of their new Comprehensive Land Use Plans (CLUP). The existing easements as reflected in the old DENR Cadastral Map shall likewise be updated.*

Section 5.3 *For National Parks/Protected Areas – All National Parks/Protected Areas, whether in urban or rural areas, shall adopt a 400 meter easement zone, taking into consideration the provisions of Section 18 (v) of RA 11038 or the ENIPAS Law, and Rule 24.4 of DAO 2019-05*

Republic Act No. 9275: Philippine Clean Water Act of 2004

An Act providing for a Comprehensive Water Quality Management and for Other Purposes which shall pursue a policy of economic growth in a manner consistent with the protection, preservation and revival of the quality of our fresh, brackish and marine waters.

Presidential Decree No. 705 s., 1975, as amended "Forestry Code of the Philippines"

Section 78. Unlawful Occupation or Destruction of Forest Lands and Grazing Lands. – Any person who enters and occupies or possesses, or makes kaingin for his own private use or for others, any forest land or grazing land without authority under a license agreement, lease, license or permit, or in any manner destroys such forest land or grazing land or part thereof, or causes any damage to the timber stand and other products and forest growth found therein, or who assists, aids or abets any other person to do so, or sets a fire, or negligently permits a fire to be set in any forest land or grazing land, or refuses to vacate the area when ordered to do so, pursuant to the provisions of Section 53 hereof shall, upon conviction, be fined in an amount of not less than five hundred pesos (P500.00), nor more than twenty thousand pesos (P20,000.00) and imprisoned for not less than six (6) months nor more than two (2) years for each such offense, and be liable to the payment to ten (10) times the rental fees and other charges which would have accrued has the occupational and use of the land been authorized under a license agreement, lease, license or permit: Provided, That in the case of an offender found guilty of making kaingin, the penalty shall be imprisonment for not less than two (2) nor more than four (4) years and a fine equal to eight (8) times the regular forest charges due on the forest products destroyed, without prejudice to the payment of the full cost of production of the occupied area as determined by the Bureau: Provided, further, That the maximum of the penalty prescribed herein shall be imposed upon the offender who repeats the same offense and who commits the same offense and double the maximum of the penalty upon the offender who commits the same offense for the third time.

In all cases the Court shall further order the eviction of the offender from the land and the forfeiture to the government of all improvements made and all vehicles, domestic animals and equipment of any kind used in the commission of the offense. If not suitable for use by the Bureau, said vehicles, domestic animals, equipment and improvements shall be sold at public auction, the proceeds of which shall accrue to the Development Fund of the Bureau.

In case the offender is a government official or employee, he shall, in addition to the above penalties be deemed automatically dismissed from office and permanently disqualified from holding any elective or appointive position.

Commonwealth Act No.141: Public Land Act of 1936

The provisions of this Act shall apply to the lands of the public domain; but timber and mineral lands shall be governed by special laws and nothing in this Act provided shall be understood or construed to change or

modify the administration and disposition of the lands commonly called "friar lands" and those which, being privately owned, have reverted to or become the property of the Commonwealth of the Philippines, which administration and disposition shall be governed by the laws at present in force or which may hereafter be enacted.

EL NIDO, PALAWAN

I. SITUATIONER

The diverse terrestrial and marine resources, lagoons, powdery white sand beaches, and unique scattered islands, made the municipality of El Nido a prime destination for both local and foreign tourists. This even served as an alternative itinerary for when Boracay went into a total shutdown for rehabilitation in 2018.

The sudden influx of tourists generated higher income and created more employment opportunities for the municipality. However, this also posed several threats to the municipality's natural environment. Due to poor land use planning, high number of wastes generated and improperly discharged by the establishments, and lack of sewage treatment facilities, among others, the crystal-clear waters of El Nido had a significant increase in water pollution levels.

To counter these negative impacts, and impede the further degradation of the municipality's environmental quality, DENR and EMB MIMAROPA created the *Task Force El Nido Challenge* by virtue of DENR Regional Memorandum Order No. 2018-1003. This was followed by the issuance of DENR Regional Special Order (RSO) No. 2018-567 for the creation of a Regional Investigation and Technical Team; and DENR RSO No. 2019-624 for the formulation of a Regional Inter-agency Rehabilitation and Audit Task Force.

II. STATUS OF WATER QUALITY IN BACUIT BAY AND OTHER TOURIST ISLANDS IN EL NIDO, PALAWAN

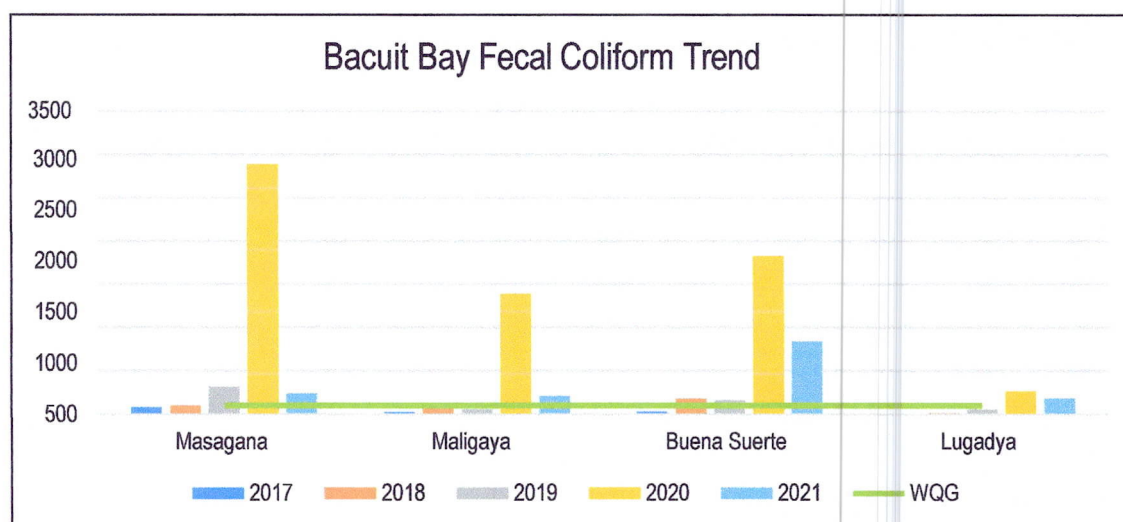


Figure 16. Trend of fecal coliform levels in Bacuit Bay, from years 2017 to 2021.

Table 7. Fecal coliform concentrations in Bacuit Bay, from years 2017 to 2021.

STATION	2017	2018	2019	2020	2021	WQG
Masagana	87	104	315	2,890	246	100
Maligaya	26	65	62	1,390	214	100
Buena Suerte	35	182	166	1,829	841	100
Lugadya	5	14	60	267	187	100

It was noted that during CY 2020, every station failed the standard for class SB water (>100MPN/100mL). For the Bacuit-El Nido Bay WQMA, only the stations Lugadya and Vanilla Cove Beach III met the fecal coliform criterion for CY 2022 during the month of June.

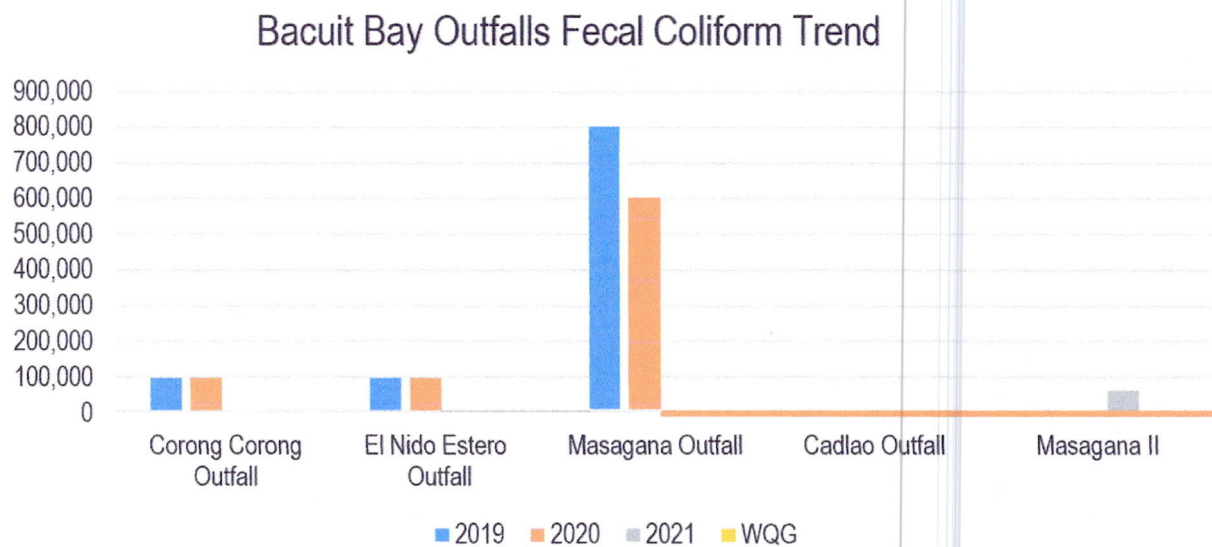


Figure 17. Trend of fecal coliform levels in the outfalls of Bacuit Bay, from years 2019 to 2021.

The same trend is evident in Bacuit Bay Outfalls (>100MPN/100mL). For CY 2022, the outfalls have a rising concentration of fecal coliform.

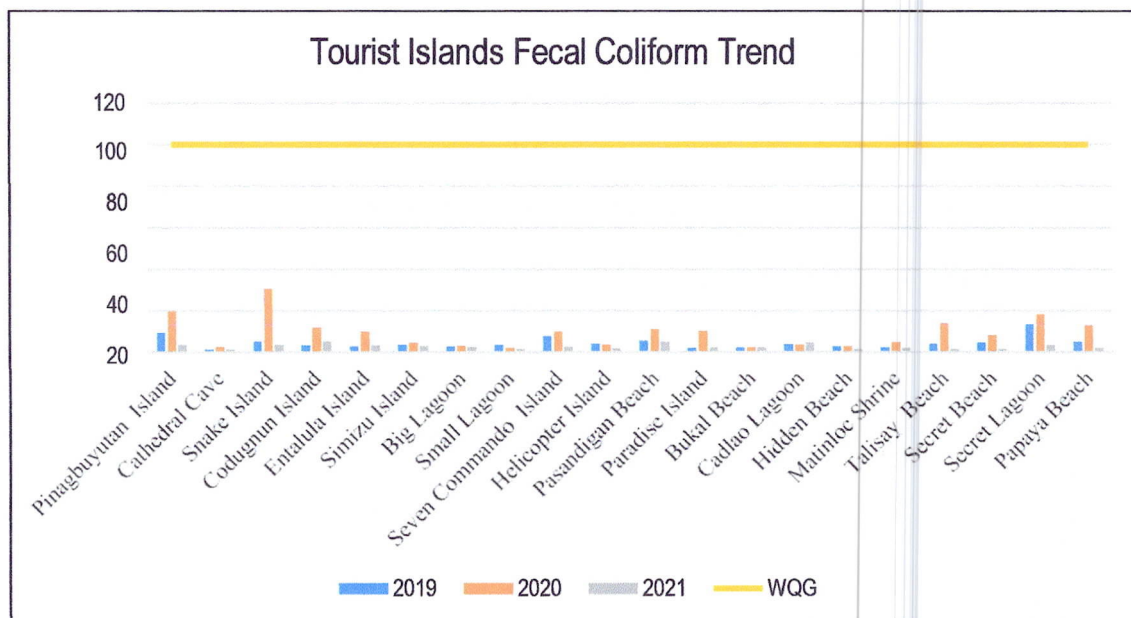


Figure 18. Trend of fecal coliform levels in the tourist islands of El Nido, Palawan, from years 2019 to 2021.

For the twenty (20) tourist islands in El Nido, every station met the requirements for class SB waters from CY 2019 to CY 2021 (<100MPN/100mL).

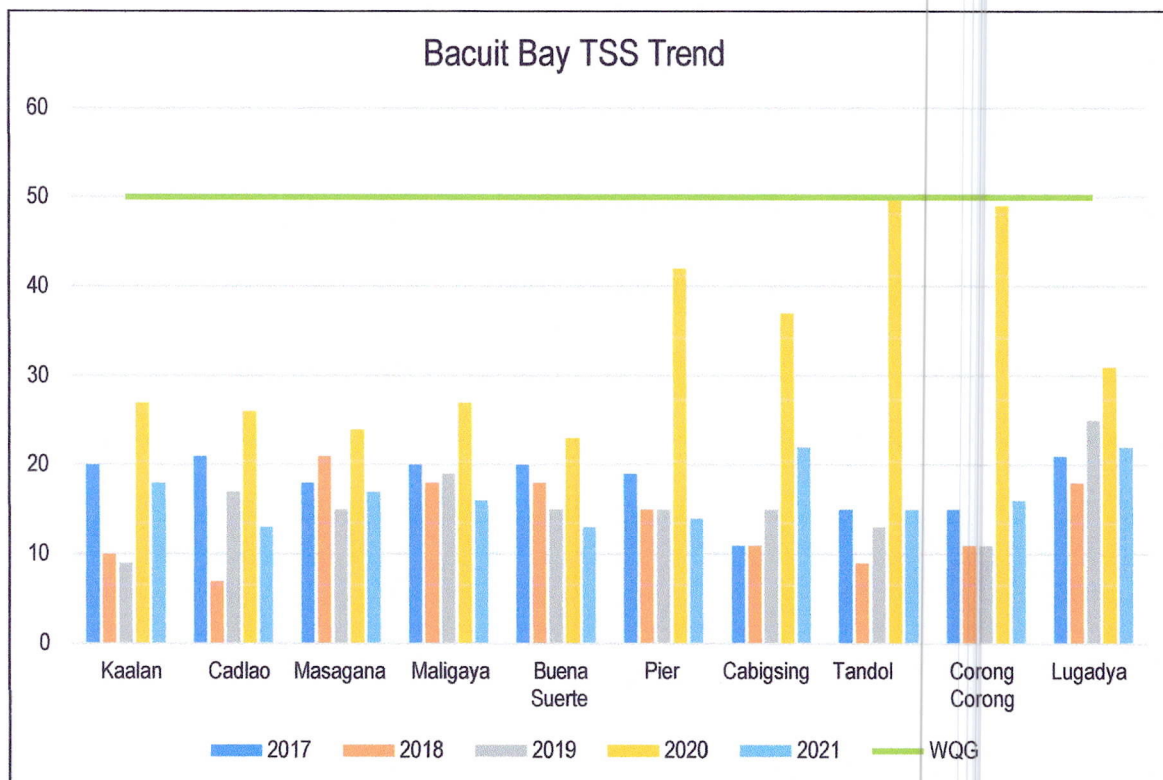


Figure 19. Trend of total suspended solids in Bacuit Bay, from years 2017 to 2021.

In terms of total suspended solids, all the stations passed the criteria for class SB waters from CY 2017 to 2021 (<50mg/L).

PROBLEM TREE ANALYSIS

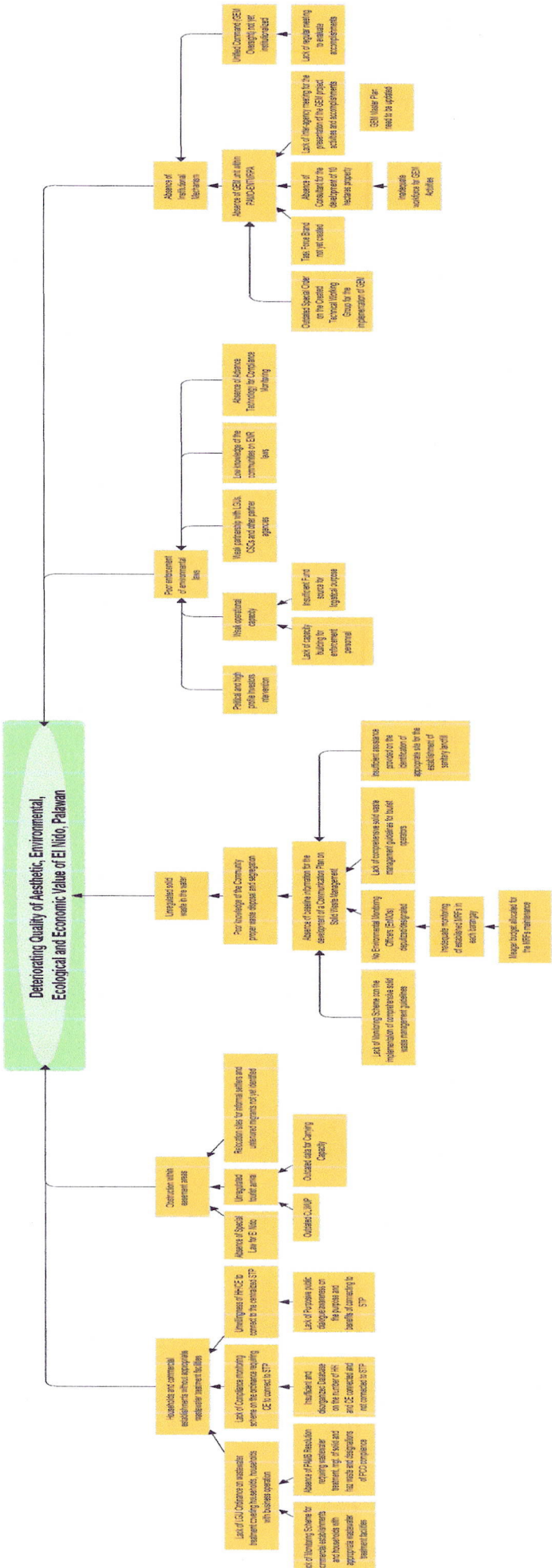


Figure 20. Problem Tree Analysis 1: Current Environmental Condition of El Nido, Palawan.

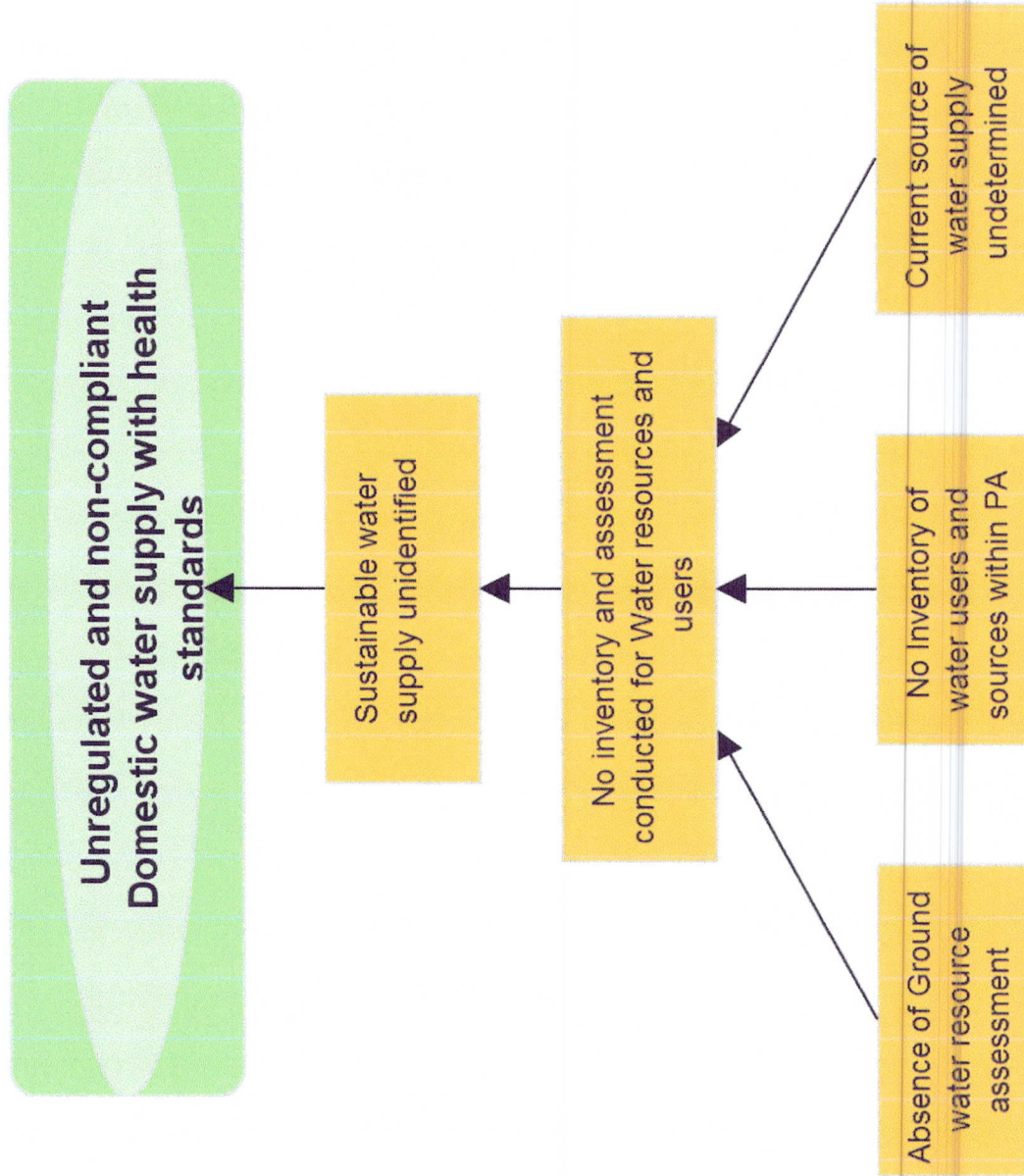


Figure 21. Problem Tree Analysis 2: Current Environmental Condition of El Nido, Palawan.

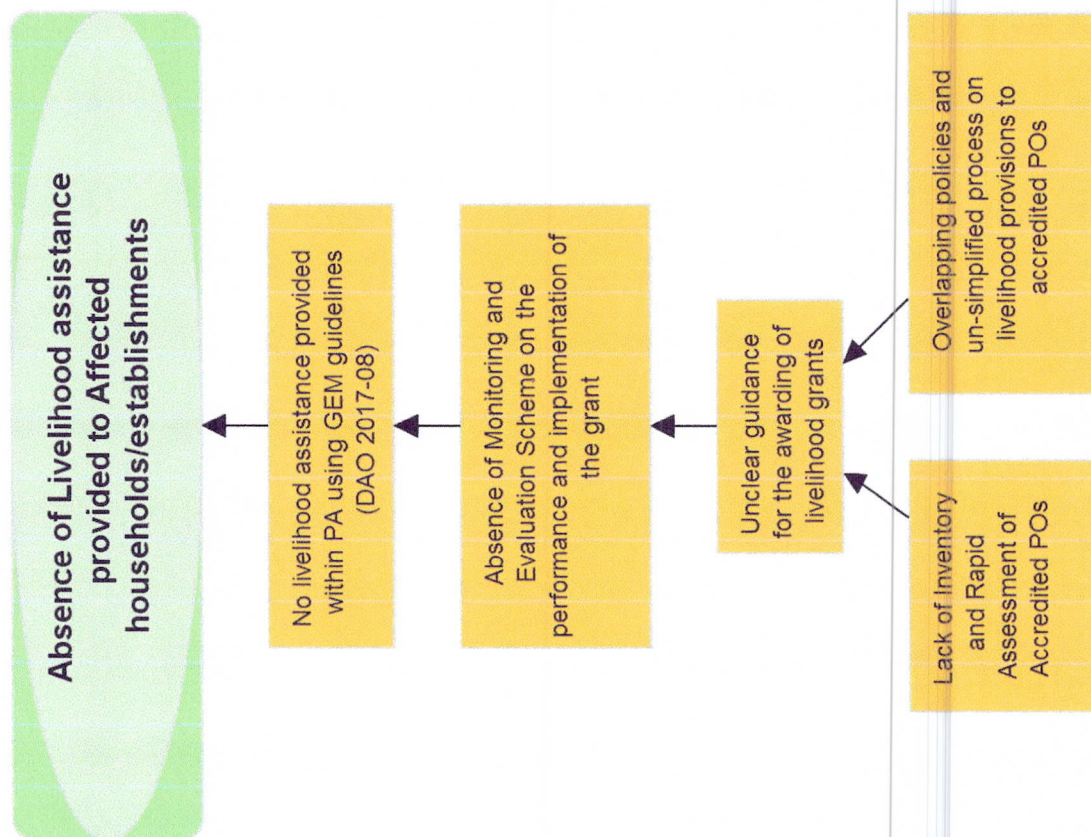


Figure 22. Problem Tree Analysis 3: Current Environmental Condition of El Nido, Palawan.

Underutilized Water Treatment Facilities

There are four (4) sewage treatment plant (STP) facilities that are existing and are under construction. The first facility is located in Barangay Villa Libertad and within the SLF compound of the municipality. This is currently operating with a capacity that can only process 20-30 cubic meters per day (CMD) of septage. Despite the construction of additional STPs, several constraints arise such as 1) the lack of interest among the end-users such as business establishments and households due to the possible additional expenses needed to connect to the STPs; 2) lack of information dissemination about the importance of STPs, and 3) the unfair policy for the establishments with own STPs as they are required to connect to the centralized STP.

Structures and Establishments within the easement

A total of 2,846 structures had encroached on the easement and occupied the forestland with 887 issued Notices to Vacate (NTV). Out of these, 86 structures were demolished and 24 households were relocated. As per environmental compliance of EMB MIMAROPA, 303 structures were inspected with 253 Notices of Violation and 16 Cease and Desist Orders issued.

For the four barangays within El Nido proper (Barangays Buena Suerte, Corong-Corong, Maligaya and Masagana), a total of 2,417 of combined commercial establishments and households were surveyed. About nine hundred forty-seven (947) commercial establishments and 1,470 households were recorded. The surveyed commercial establishments are around 39.18% while the households are nearly 60.82% of the total inventoried establishments in the four barangays. Further, CENRO Taytay also initiated on June 2019 the inventory of commercial establishments in Barangay Bucana headed by CENRO Allan Valle. The team inventoried 267 establishments within the 40-m easement and 124 structures within the 20-m easement composed of 363 households and 28 commercial establishments. Ninety-three percent (93%) of the inventoried structures in Bucana are residential/households. Out of inventoried establishments, there are 357 and 23 Notices of Violations and Orders to Vacate issued to households and commercial establishments, respectively.

Presence of Solid Waste in Water

The municipality has a category 1 sanitary landfill (SLF) located in Barangay Villa Libertad, with an area of four hectares. The site also hosts the Material Recovery Facility (MRF) and composting facility. While there is an existing SLF in the municipality, other barangays that are not being serviced by the garbage collection system are still practicing the open pit and burning system. Moreover, the rapidly increasing local population and tourist arrivals lead to improper waste management, hence, the current facility cannot handle the residual waste of the municipality.

Poor Enforcement of Environmental Laws

The poor enforcement of environmental laws has been attributed to the following: 1) lack of political will; 2) weak operational capacity due to limited manpower and logistics, and 3) threat from the affected communities and lack of community participation.

I. MASTER PLAN

VISION AND MISSION

Vision

A renowned municipality with exceptional biodiversity, healthy ecosystem, and resilient, nature-conserving communities and businesses; effectively governed toward inclusive and sustainable development.

Mission

To establish a prime ecotourism destination with a resilient economy, through strategic collaboration with partner stakeholders and communities for a better quality of life with sustained natural resources.

PROGRAMS AND STRATEGIES

The GEM Master Plan aims to improve the aesthetic, environmental, ecological, and economic value of El Nido, Palawan by accomplishing the following:

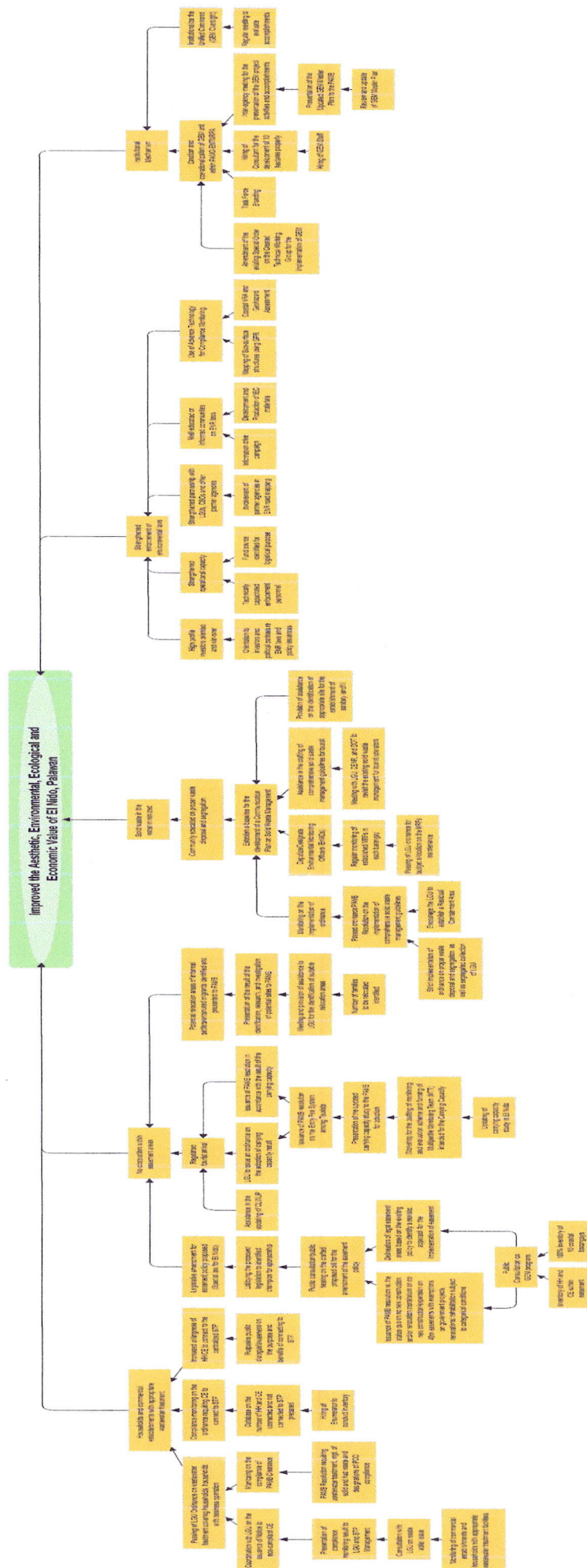


Figure 22. GOAL 1 : Objective Tree Analysis of El Nido, Palawan.

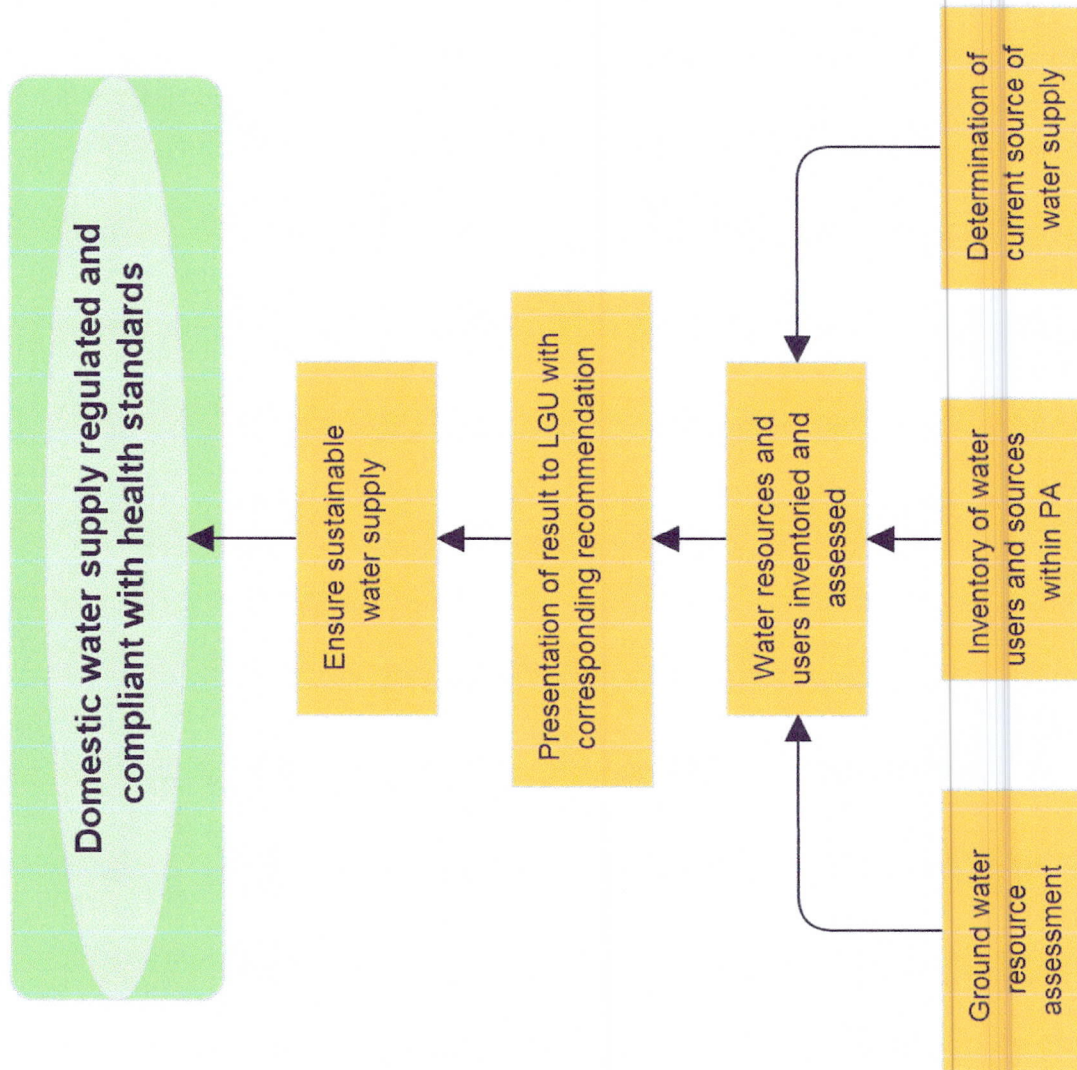


Figure 24. GOAL 2 : Objective Tree Analysis of El Nido, Palawan.

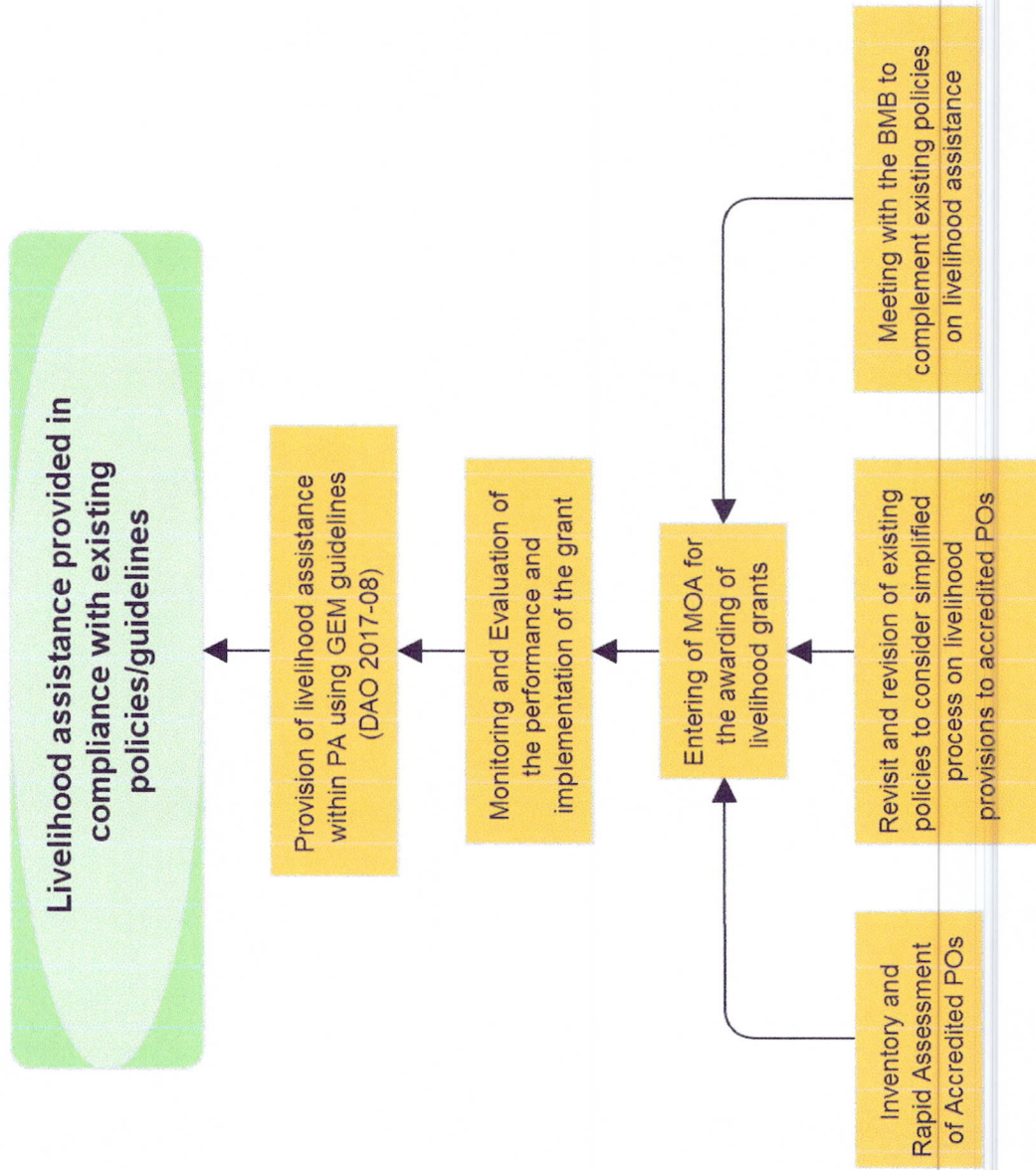


Figure 25. GOAL 3 : Objective Tree Analysis of El Nido, Palawan.

The STP facility located in Barangay Villa Libertad is currently being expanded to accommodate 400-600 CMD. A second much bigger facility is currently in the last phase of construction. This second facility called the centralized STP is composed of the central processing plant in Sitio Batbat, Barangay Villa Libertad and cluster tanks and sub cluster tanks distributed in Barangays Buena Suerte, Corong-corong, Maligaya and Masagana (Palawan-news, 2020). This facility's expected capacity is 2,500 CMD (Business Mirror, 2018). It is expected to be finished by the middle of 2021. Based on the projections of the Municipal Engineer Office, a household generates around 0.39 CMD while big commercial establishments generate around 26 CMD. The households and other establishments without their own STPs can connect to the cluster's tanks when the centralized STP is fully operational. To increase the willingness of the community to connect to the STPs, a subsidized connection fee will be proposed, IEC about its benefits will be conducted and a fair policy will be implemented.

To strengthen the easement implementation, the amendment, harmonization, and passing of the Special Easement Law for the Municipality will be conducted. Aside from that, the adoption of its carrying capacity must also be prioritized to regulate the number of tourist arrivals in the area. Clearing obstruction in the shorelines and legal easement would preserve legal easement for public use in the interest of recreation, navigation, flotage, fishing, and salvage. The implementation should be done in accordance with existing laws, rules, and regulations.

To reduce the presence of solid waste in the water bodies, strict implementation of the Solid Waste Management Act shall be done. The establishment of SLF and maintenance of Material Recovery Facilities (MRFs) will also help in the reduction of solid wastes.

The strengthening of the enforcement of ENR laws will be done by strengthening the municipality's operational capacity through developing skilled personnel, intensification of IEC campaigns for both the policy-makers and communities, and strengthening partnerships with other stakeholders such as LGUs, CSOs, and other partner agencies.

The livelihood and enterprise development component of the GEM Strategic Master Plan shall be carried out through the following steps, per DAO 2017-08:

a) Community Enterprise Focus Group Discussion (FGD)

The main goal of this step is to identify the *community enterprise* to be formed. This shall be guided by a *social entrepreneur* who has experience in running a business that is related to the envisioned community enterprise. Under this step, a sure market potential shall be identified, and proper pricing and cost-benefit distribution shall be agreed on. The expected output of this process is a document (written in the community's dialect) that contains the roles and responsibilities of each Participating Member Household (PMH) including the product prices.

Existing community enterprises or local livelihoods that are found to be in line with the objective and criteria of DAO 2017-08 may also be identified and tapped under this step, for possible adoption and enhancement.

b) Creation of a Community Enterprise

The community enterprise shall be composed of a minimum of fifteen (15) PMHs, and shall be officially registered with the concerned government agency. In this step, the production processes, standards, and benefit-cost sharing shall be agreed upon by the members. The expected output of this process is a *Household Agreement* that identifies the roles and responsibilities of each household and the DENR. If necessitated, issuance of a tenurial instrument shall also be carried out under this step.

c) Formation of Community's Management Service Center (CMSC)

A CSMC shall be registered with the Securities and Exchange Commission (SEC) and be created for each municipality/congressional district where community enterprises exist. The role of a CMSC is to provide administrative and management support to all PMHs. They shall also serve as a depository of the household database, where all ongoing activities and actual accomplishments are lodged, to serve as a basis for the release of payments.

These activities shall be guided by a GEM master plan, and be supervised by a GEM unit

Activity 1		Purposive public dialogue/awareness on the purpose and benefits of connecting to STP/ construction of water-tight septic tank in the 10 coastal barangays (Maligaya, Masagana, Buena Suerte, Corong-Corong, Villa Libertad, Pasadena, Bucana, Manlag, Aberawan, Bebeladan) – 3 rd Q -4 th Q (50k each)	Purposive public dialogue/awareness on the purpose and benefits of connecting to STP/ construction of water-tight septic tank in the 10 coastal barangays (Maligaya, Masagana, Buena Suerte, Corong-Corong, Villa Libertad, Pasadena, Bucana, Manlag, Aberawan, Bebeladan)
Strategy 2	No obstruction within easement areas		
Output 1	Drafted the proposed amendment for easement policy (Special Law for El Nido)		
Activity 1	Issuance of PAMB resolution re: the status quo on no new construction and/or renovation moratorium on no new construction/expansion on 40m easements with exemptions on government projects, renovations/ rehabilitation subject to categorical conditions	Lobbying the proposed legislation to identified champion for sponsorship (PAMB -Congressman)	
Activity 2	Delineation of legal easement areas based on the existing policy to identify a realistic approach for the implementation of easement		
Activity 3	Public Consultation on GEM program (ideal easement – greatly affected by easement policy) – Barangays Masagana, Maligaya, Corong2, Buena Suerte, Villa Libertad, Bebeladan		
Activity 4	Inventory of HH and CE within easement to determine the realistic figure and affected establishments considering their basis of occupation (this will also serve as a basis for Special Law Creation) – (With Hiring of Enumerator)		
Activity 5		Public consultation/public hearing on the drafted proposed bill for the amendment of the easement	

		policy (21 Barangay of ENTMRPA) c/o PAMO charged to IPAF - PASA	
Activity 6		100% inventory of 10 coastal barangays <i>(Additional: hiring of enumerators) 120k based on KAP costing (1.2M) – (20-30 enumerators (13,500) – 3rd – 4th Q</i>	
Output 2	Regulated tourist arrival		
Activity 1	Assistance in the updating of CLWUP	Updating of carrying capacity study in El Nido (8M – 3 rd)	Issuance of PAMB resolution on the Entry Fee System among Tourists
Activity 2		Presentation of the updated carrying capacity study to the PAMB for adoption c/o contractor	Issuance of PAMB resolution in accordance with the result of the carrying capacity
Activity 3			LGU to issue an ordinance on the adoption of carrying capacity result
Activity 4			Workshop for the crafting of monitoring and evaluation scheme and forming of Multipartite Monitoring Team (MTT) intended for the Carrying Capacity
Output 3	Potential site for relocation areas of informal settlers/untenured migrants identified and presented to PAMB		
Activity 1	Conduct of meeting with the LGU for the identification of suitable relocation areas	Presentation of the result of the identification, research, and investigation of potential sites to PAMB	
Activity 2	Assistance provided for the identification of relocation areas for landless communities within easement areas	Number of families to be relocated identified (Based on record)	
Strategy 3	Minimized amount of solid waste in the water bodies		
Output 1	Community educated on proper waste disposal and segregation		
Activity 1	Conduct of regular monitoring of established MRFs in each barangay	LGU to pass an ordinance for budget allocation on the MRFs maintenance c/o IEC	
Activity 2	Holding of meeting with LGU, DENR, and DOT to revisit the existing solid waste	<i>Assistance in the crafting of comprehensive solid waste management guidelines for</i>	Passed ordinance/PAMB Resolution on the implementation of

	management for tourist operators with consideration of human waste disposal	tourist operators (including repair and maintenance of boat) for clarification	comprehensive solid waste management guidelines
Activity 3	Provision of assistance on the identification of appropriate site for the establishment of sanitary landfill	Provision of assistance on the suitability of identified sites for the establishment of a sanitary landfill c/o MGB++ (15,000) -3 rd Q	
Activity 4		Come-up with an alternative waste management scheme for hard to reach areas <ul style="list-style-type: none"> Waste characterization Training (Bebeladan- EMB) - 50k, 4th Q) 	
Activity 5		Strict implementation of ordinance on proper waste disposal and segregation as well as segregated collection of LGU	Establish a baseline for the development of a Communication Plan on Solid Waste Management c/o EMB
Activity 7		Deputize/Designate Environmental Monitoring Officers (EnMOs) c/o EMB	
Activity 8		Encourage the LGU to establish a Residual Containment Area c/o EMB	
Activity 6			Monitoring on the implementation of ordinance on proper waste disposal and segregation as well as segregated collection of LGU C/o Unified command
Strategy 4	Strengthened enforcement of environmental laws		
Output 1	High profile investors oriented and political intervention controlled/managed		
Activity 1	Conduct orientation to investors and political partners re ENR laws and policy issuances	Conduct orientation to investors and political partners re ENR laws and policy issuances (Continuing 2022 WFP)	Conduct orientation to investors and political partners re ENR laws and policy issuances
Output 2	Strengthened Operational Capacity		

Activity 1		Capacity building on ENR Laws to enforcement personnel (C/O IPAF) - justify	Capacity building on ENR Laws to enforcement personnel
Activity 2		Submission of request for funding and/or proposal for logistical support c/o MES	
Output 3	Strengthened partnership with LGUs, CSOs, and other partner agencies on the implementation of ENR laws		
Activity 1		Involvement of partner agencies in ENR road mapping -100k (invite facilitator)	
Output 4	Communities are well-educated or informed on ENR Laws		
Activity 1	Conduct of information drive to communities to disseminate ENR laws and policies	Conduct of information drive to communities to disseminate ENR laws and policies (Continuing 2022)	Conduct of information drive to communities to disseminate ENR laws and policies
Activity 2	Develop, produce and distribute posters, flyers/ brochures to properly inform the general public of ENR laws and regulations (STP, Septic Tank and Water quality) Continuing 2022		Develop, produce and distribute posters, flyers/ brochures to properly inform the general public of ENR laws and regulations
Output 5	Use of advance technology for compliance monitoring		
Activity 1	Mapping of sub-surface structures using GPR	Mapping of sub-surface structures using GPR	
Activity 2		Conduct of Coastal VRA and Geohazard Assessment (for presentation to LGU and issuance of LGU appropriate zoning ordinance)	
Strategy 5	Institutional mechanism		
Output 1	Creation and operationalization of GEM unit within PAMO-ENTMRPA		
Activity 1	Hiring of Consultant for the development of 10 hectares property		
Activity 2	Hiring of GEM Staff *GIS specialist * Community Development Officer * Data Manager * Office Support Staff	Hiring of GEM Staff *GIS specialist * Community Development Officer * Data Manager * Office Support Staff	Hiring of GIS specialist
Activity 3	Creation of SEEW at (Solid Waste Management, Easement Recovery, Enterprise		Meeting on the operationalization of SEEWat

	generation, Water quality improvement - SEEWat)		
Activity 4	Review and update of GEM Master Plan		Review and update of GEM Master Plan
Activity 5	Amendment of the existing Special Order on the Created Technical Working Group for the implementation of GEM		
Activity 6		Hiring of legal researcher for the crafting of the proposed legislation of special law for El Nido and other functions <i>(To be targeted under IPAF-RIA of ENTMRPA)</i>	Hiring of legal researcher for the crafting of the proposed legislation of special law for El Nido and other functions <i>(To be targeted under IPAF-RIA of ENTMRPA)</i>
Activity 7		Presentation of the Updated GEM Master Plan to the PAMB ExeCom for approval c/o ARD Donna	Presentation of the Updated GEM Master Plan to the PAMB ExeCom for approval
Activity 8		Conduct of inter-agency meeting for the presentation of the GEM project activities and accomplishments (quarterly) c/o PAMO	Conduct of inter-agency meeting for the presentation of the GEM project activities and accomplishments (quarterly)
Activity 9			Procurement of speed boat c/o IPAF
Output 2	Institutionalize the Unified Command (GEM Oversight)		
Activity 1		Regular meeting to evaluate accomplishments (Quarterly or as the need arises) c/o GEM Team	
GOAL 2: Domestic water supply regulated and compliant with health standards			
Strategy 1	Ensure sustainable water supply		
Output 1	Water resources and users inventoried and assessed and result presented to LGU with recommendation		
Activity 1		Conduct/update ground water resource assessment (c/o MGB+++ Unified team) <ul style="list-style-type: none"> • Deep well, water pump 	Presentation of result to LGU with corresponding recommendation
Activity 2		Determine current source of water supply in El Nido (include in the 100% inventory)	Presentation of result to LGU with corresponding recommendation

Activity 3		Inventory of water users and sources within PA (include in the 100% inventory)	Presentation of result to LGU with corresponding recommendation
GOAL 3: Livelihood assistance provided in compliance with existing policies/guidelines			
Strategy 1	Ensure the provision of livelihood assistance		
Output 1	Provision of livelihood assistance within PA using GEM guidelines (DAO 2017-08)		
Activity 1	Meeting with the BMB to complement existing policies on livelihood assistance	Revisit and revision of existing policies to consider simplified process on livelihood provisions to accredited POs c/o Inventory	
Activity 2	Inventory and Rapid Assessment of Accredited POs outside ENTMRPA for selection of livelihood provisions		Entering of MOA for the awarding of livelihood grants
Activity 3			Monitoring and Evaluation of the performance and implementation of the grant

Institutional Arrangement and Mechanism

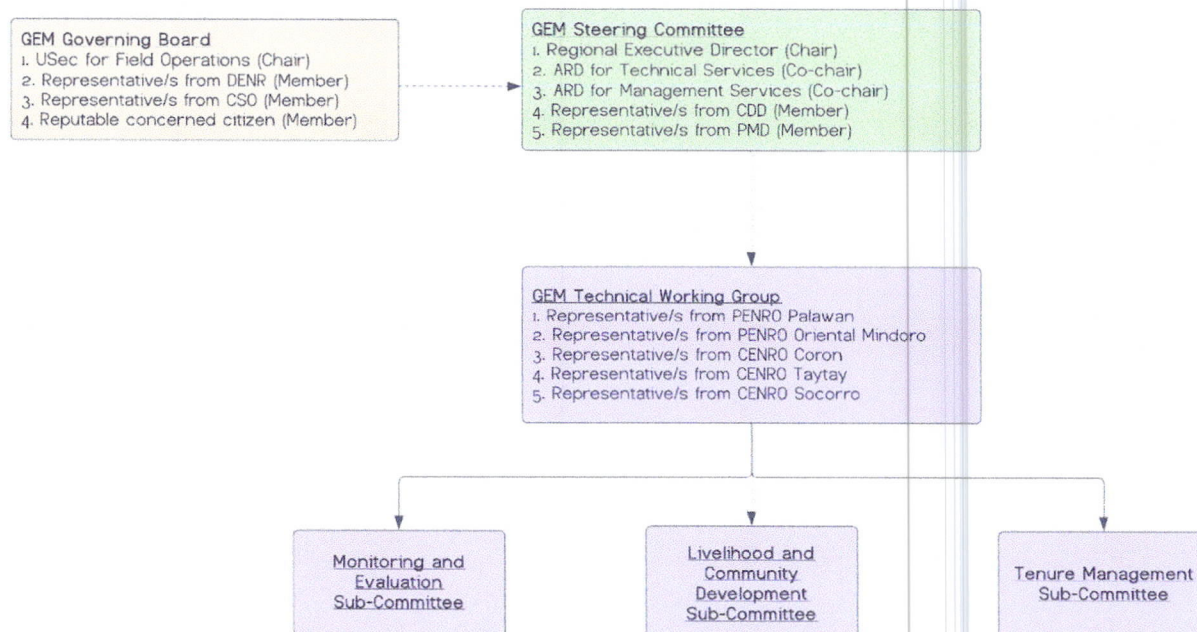


Figure 22. Organizational Structure for the implementation of GEM.

The DENR will create a **GEM Governing Board** composed of the following members:

Chair: Undersecretary for Field Operations

Members: Representative/s from DENR (as appointed by the Secretary)
Representative/s from Civil Society Organization/s
Reputable concerned citizen

GEM Steering Committee

Chair: Regional Executive Director

Co-Chair: Assistant Regional Director for Technical Services
Assistant Regional Director for Management Services

Members: Representative/s from Conservation and Development Division
Representative/s from Planning and Management Division

GEM Technical Working Group

Members: Representative/s from PENRO Palawan
Representative/s from PENRO Oriental Mindoro
Representative/s from CENRO Coron, Palawan
Representative/s from CENRO Taytay, Palawan
Representative/s from CENRO Socorro, Oriental Mindoro

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Table 8. Matrix Indicator for the GEM of El Nido, Palawan

	YEAR 1 (2022)	YEAR 2 (2023)	YEAR 3 (2024)
GOAL 1: Improve the Aesthetic, Environmental, Ecological and Economic Value of El Nido, Palawan			
Strategy 1	Households and commercial establishments with appropriate wastewater treatment facility (e.g hygienic septic tank (Water-tight), communal cluster tank and STP)		
Output 1	LGU Ordinance on wastewater treatment covering households, households with business operation		
Activity 1	Database on the number of HH and CE connected and not connected to STP	Consultation with LGU re: activities on the need to address wastewater issues and passing of LGU ordinance – GEM Focal, CENRO and Inventory Team – 2 nd Q - 50,000	Monitoring of commercial establishments and households with appropriate wastewater treatment facilities (<i>Addtl Activity: Hiring of enumerators</i>)
Activity 2	Hiring of Job Order to conduct an inventory of connected and not connected HH and CE to STP		
Activity 3		To include in the PAMB clearance the compliance of wastewater treatment, mgt. of solid and haz waste and designations of PCO –c/o PASu (MoV: PAMB resolution)	Monitoring on the compliance of PAMB Clearance
Activity 4		Compliance monitoring on the ordinance requiring CE to connect to STP within 4 barangays in El Nido based on record (20,000) – 3 rd	Compliance monitoring on the ordinance requiring CE to connect to STP within 4 barangays in El Nido
Activity 5		Presentation of compliance monitoring result to LGU and STP Management with corresponding recommendation/s (50,000) – 3 rd	Presentation of compliance monitoring result to LGU and STP Management with corresponding recommendation/s
Activity 6		Coordination with LGU on the issuance of Notice to non-compliant CE – 3 rd Q	Coordination with LGU on the issuance of Notice to non-compliant CE
Output 2	Increased willingness of HH/CE to connect to the centralized STP/ construct water-tight septic tank		