

TERMS OF REFERENCE (TOR)

Provision of Qualified Third Party (QTP) Services for the Construction, Operation and Maintenance of the Generation, Distribution System and Billing and Collection for the QTP Service Areas of NOCECO:

1. BACKGROUND

Under Section 2 (a) of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA), declared that it is the policy of the state to ensure and accelerate the total electrification of the country. Likewise, in Section 23 of EPIRA states that a distribution utility shall have the obligation to provide distribution services and connections to its system for any end-user within its franchise area consistent with the distribution code. Furthermore, Section 59 of EPIRA states that the provision of electric service in remote and unviable villages that the franchised utility is unable to service for any reason shall be opened to other qualified third parties.

Based on the Department of Energy (DOE) Department Circular No. DC -2019-11-0015, prescribing the Revised Guidelines for qualified third party (QTP), Section 2.3 provides, that all unviable areas, which the DU cannot serve for whatever reason, are declared open for participation by QTPs.

2. SCOPE OF WORK

In line with the EPIRA and DOE Department Circular No. DC 2019-11-0015 and in order to accelerate total electrification and spur economic growth in unviable areas, the National Electrification Administration (NEA), in consultation with the electric cooperatives (ECs) shall issue the Terms of Reference for the Conduct of the Bidding of QTPs for the Unviable Areas of the ECs.

The project involves the Generation and Distribution Facilities including the Operations and Maintenance, Billing and Collection for the specific area in an efficient and sustainable at the least-cost manner, operating under a 24/7 electricity service for a period of twenty (20) years and upon approval by the Energy Regulatory Commission (ERC).

The proponent should include technical specifications as a minimum requirement for the supply and delivery as stated in the Invitation to Bid, as follows:

A. Generation System:

- Plant Capacity (kW) (Broken down for renewable & for conventional)
- Plant Type new (conventional, renewable, hybrid, type of technology/ies)
- Dependable Capacity
- Date of Commercial Operations
- Contract Period 20 years
- Technical Parameters

- Nominal Voltage
- o No. Of Phase
- Take-off structures, if necessary, etc.

B. Distribution System:

For the design, operations & maintenance, refer to the existing Distribution System Manual of the NEA. The design, operations and maintenance shall conform to the Distribution Systems Manual of NEA, Philippine Small Grid Guidelines, Philippine Distribution Code, and the Philippine Electrical Code.

3. QTP SERVICE AREAS

No.	City/Municipality	Barangay	Sitio	Number of Households		
1	Kabankalan	Tan-awan	Um abay, Tara, Pangkulan, Manulaya, Malagapas, Kam bu-alaw, Kalapin-an, Kalangkang, Bunsad, Buko, Baye, Bahi, Atimon, Amihan	885		
2	Kabankalan	Carol-an	Tambo-an, Pandan, Nayang, Manlawa-an, Mambid (Mambig), Malansa, Mabaho, Lid- up, Estacahan, Casid-an, Cansunog (Casunog), Bunyod, Bunlas (Hinugpa-an), Bugmac (Bugwak), Bonbon and Anahaw	360		
3	Himamaylan	Buenavista	Sangkil, Sebucawan, Ponglo, Plasanan, Pisok, Panictican, Olot, Olitao, Napindahan, Mata, Marcopa, Maraya, Kangliking, Guihubon, Dul-asan, Dauhan, Curo-curo, Cansermon, Candiis, Calapi, Calang- Calang, Cabanga-an, Bugtangan, Bugta, Bugo, Buco, Bolasot, Baye, Balatogan, Bagtic, Aranawan, Amaga, Alimucon and Alangilan	720		
4	Cauayan	Tambad	Sino-ayan, Mambulanon, Malipantaw, Malabago, Landodong, Labhid, Bigong and Bayabas	454		
5	Binalbagan	Bi-ao	Uyanan, Pinaliran, Nagaba-an, Malalag, Kapahuan and Ilag (Lag-it)	323		
6	Binalbagan	Am ontay	Tangkuban, Namutang, Nabirasan, Nabilog, Malagikhik, Guihoban, Crossing Aya and Carangawan	507		
	TOTAL 3,249					

4. PLANT TYPE

Brand New and unused (Conventional, Renewable or hybrid)

5. GENERATION SOURCES

All bidders shall adopt least-cost and most efficient technology options. In determining the QTP, preference shall be given to the bidder that can offer the least-cost technologies utilizing renewable energy sources. (Sec. 15.1.5 DOE Department Circular DC2019-11-0015)

6. TARGET COMMERCIAL OPERATION DATE (COD)

Not later than six (6) months from the effective date (Section 3.1 of the QSC template) provided that all conditions of the Commercial Operations Period (COP) are met. (Section 4.2 of the QSC template)

7. CONTRACT PERIOD

Contract shall be twenty (20) years commencing on the Commercial Operation Date (COD).

8. POWER STATION/PLANT LOCATION

Should be located near the load center of the target Sitios.

9. QUALITY AND RELIABILITY COMPONENTS

All proposals shall be referred to the Philippine Small Grid Guidelines (PSGG) and Philippine Distribution Code (PDC) Requirements.

10. ALLOWED DOWNTIME FOR SCHEDULED PREVENTIVE AND CORRECTIVE MAINTENANCE

Seven-hundred twenty (720) hours per year. Systems Reliability must be 100% available in the months of April, May, June, November and December.

To ensure system reliability, proposals should provide back-up power in the event of component failure or (N+1 redundancy).

11. TARIFF STRUCTURE

Tariff Structure	Conventional (Power Plant A)	Renewable Energy Technology (Power Plant B)	Blended (indicate % energy mix)
Capital Recovery Fee (Including Distribution Line and Losses with Transformer) Fixed O &M	CRR of plant A in Php/kW-month x CC in kW of A FOMR of Plant A in Php/kW-month x CC in	CRR of plant B in Php per kWh x kWh supplied by plant B FOMR of Plant B in Php by plant B	per kWh x kWh supplied
Variable O&M	kW of plant A VOMR of Plant A in Php per kWh x kWh supplied by plant A	VOMR of Plant B in Php pe kWh x kWh supplied by plant B	
Fuel & Lube (Pass through cost) Indicative only and is based on current, LFO, and LO price to be announced during the pre-bid conference	F&L of Plant A in Php per kWh x kWh supplied by plant A		
Total Fee	Fee A=CRR of plant A x contracted capacity in kW of A + FOMR of A x contracted capacity in kW of A	Fee B= CRR of B c kWh supplied by plant B + FOMR of B x kWh supplied by Plant B	

Note: Proposals shall change the Contracted Capacity into Estimated Sales

12. FORM OF PAYMENT

Payment shall be in a form of check in Philippine Pesos

13. BID SECURITY

Bid Proposal shall be secured using the Bid Securing Declaration. (Annex B)

14. PERFORMANCE SECURITY

To guarantee the faithful performance by the winning bidder of its obligation under the QSC, upon receipt of Notice of Award, it is required to post a Performance Bond in a form and amount in accordance to the Bid Documents.

15. YEARS OF EXPERIENCE ON SIMILAR OR COMBINED TECHNOLOGIES (TRACK RECORD)

Bidders shall have a minimum one (1) year successful operation on either/both for distribution and/or power generation facilities being offered.

In case the required years of experience is not met, the bidder may opt to submit a detailed plan on how it intends to operate and maintain the generating facilities in accordance with the Philippine Small Grid Guidelines and Distribution Code, existing industry standards and applicable Philippine laws. The detailed plan must contain at least two (2) options by which the bidder shall operate and maintain the generating facilities as well as the experience and technical capability of the persons, whether natural or juridical, who will operate and maintain the generating facilities. Each option must contain the following:

- Executive Summary
- Description of the plan for the operation and maintenance of generating facilities.
- Proposed table of organization including job descriptions, technical qualifications and experience of the management and technical team.
- Environmental and social obligations compliance programs.
- Such other matters that may be required by NOCECO

16. EXPERTISE REQUIREMENTS AND QUALIFICATIONS

The key professionals and respective qualifications of the operation and maintenance personnel which shall also be included in the Bid Documents, are as follows:

Project Manager

The Project Manager shall be a licensed Civil/Electrical/Mechanical Engineer with at least two (2) years of professional experience on similar and comparable projects. The Project Manager should have a proven record of managerial capability through relevant project management of similar magnitude.

Technical Experts

A technical expert shall be a licensed Civil/Electrical/Mechanical Engineer with at least two (2) years of relevant experience in operation and maintenance of power supply and distribution.

Technical Staff

A technical staff shall be a licensed Civil/Electrical/Mechanical Engineer with at least two (2) years of relevant experience that are similar in nature and complexity.

Safety Officer

The safety officer must be an accredited safety practitioner by the Department of Labor and Employment (DOLE) with relevant experience that are similar in nature and complexity.

17. GROUNDS FOR TERMINATION

- a. Events of Default
- b. Non-fulfillment to Commercial Operation Date
- c. Certain Events of Force Majeure
- d. Expiration of Term
- e. Upon Mutual Agreement
- f. Change in Circumstances
- g. Other Circumstances indicated in the Bid Documents

- h. Failure to secure Regulatory Permits, Renewable Energy Service Contracts and similar Permits issued by Local and National Government
- Failure to apply for application for Authority to Operate (ATO) to Energy Regulatory Commission (ERC), forty-five (45) days after signing of the QTP Service Contract due to the bidder's default.

18. EVENTS OF TAKE –OVER BY THE EC

- a. Any events of Grounds for Termination (Reference section 8.4 and 8.5 of the QSC Template)
 - a.1 Due to QTP Breach. NOCECO takes over the systems/facilities at any given time and may provide compensation of the assets based on the depreciated cost.
 - a.2 Termination of contract. Upon expiration of QSC, the assets shall be endorsed to NOCECO at no cost.
- b. NOCECO takes over the systems/facilities at any given time and may provide compensation of the assets based on the depreciated cost.

19. PENALTY ON DELAYED COMMERCIAL OPERATION DATE

In the event that the Commercial Operation Date is not fulfilled and if the delay is due to QTP's default, not exceeding ninety (90) days, then NOCECO, by notice to QTP, impose a penalty of 1/10th of 1% of the Performance Security for every day of delay, provided that the total amount of penalties shall not exceed the amount indicated in the Performance Security.

20. PLANT OUTAGE

Plant outages shall be in accordance to the ERC Resolution No. 10, Series of 2020, A Resolution Adopting the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units

21. FORCE MAJEURE

Force Majeure shall be: Acts of God or other natural calamities, i.e., earthquakes, floods, tidal waves, volcanic eruptions, meteorological disasters, or accidents, explosions or fires caused by any of the above and/or by a third party beyond the control of the Parties, including strikes or lockouts or other industrial action by workers or employees of a Party, and which are unforeseeable or which, though foreseen, are inevitable.

The following political or governmental occurrences:

Acts of war, whether declared or not, embargoes;

Acts of terrorists, public disorders, insurrection, rebellion, sabotage, riots or violent demonstrations; and

Any action or failure to act by any Government Authority, including without limitation, expropriation, compulsory acquisition, the denial of or delay in the granting of any Government Consent which the Parties have agreed to waive for an agreed to time period past the Effective Date, the failure of any such Government Consent once granted to remain in full force and effect or to be renewed on substantially similar terms, and any delay in the importation of equipment or supplies into the Philippines resulting from any action or failure to act by Governmental Authority of the Republic of the Philippines, provided that in any of these cases, the affected Party complied with the timely and full submission of requirements published by the Government Authority.

22. TAKE-OFF STRUCTURE

The SUPPLIER shall provide step-up power substation as may be required to safely convey the full output of the Power Station and to satisfy the requirements of the Philippine Grid Code (PGC).

23. REGULATORY APPROVALS

Bids shall comply with the regulatory requirements of the national agencies (i.e. BIR, DOE, NEA, DENR, ERC, NCIP, SEC, SSS, HLURB, NWRB, PHILHEALTH AND PAG-IBIG).

24. ELIGIBILITY CRITERIA (are these the legal, financial and technical requirements in Annex A of the DOE Circular? Kindly provide details

25. TRANSFER OF OWNERSHIP

All assets, facilities and technology systems acquired shall be transferred at no cost to NOCECO after the expiration of the QSC. (Section 5.1.6 of the QSC template)

26. BID CURRENCY

All price offer shall be in Philippine Peso

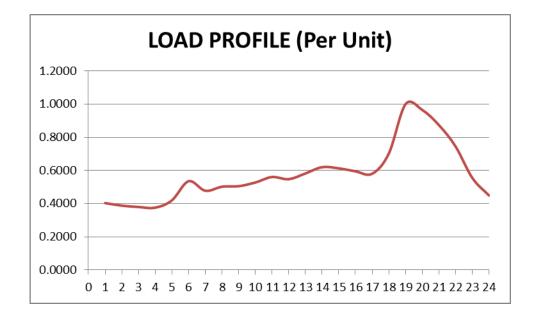
Section IV. Specifications:

GENERAL DATA

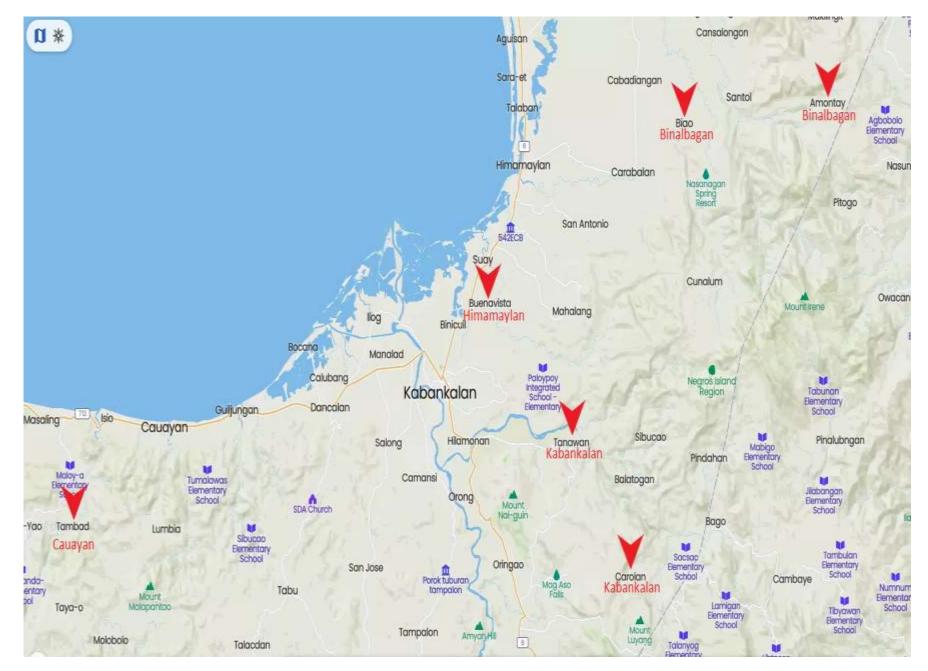
No.	City/Municipality	Barangay	Sitio	Number of	Geographica	l Coordinates	Potential
NO.	City/Multicipality	Darangay	5100	Households	Latitude	Longitude	Renewable
1	Kabankalan	Tan-awan	Umabay, Tara, Pangkulan, Manulaya, Malagapas, Kambu-alaw, Kalapin-an, Kalangkang, Bunsad, Buko, Baye, Bahi, Atimon, Amihan	885	9.9534	122.9005	Solar, Hydro, Wind, Biomass
2	Kabankalan	Carol-an	Tambo-an, Pandan, Nayang, Manlawa-an, Mambid (Mambig), Malansa, Mabaho, Lid-up, Estacahan, Casid-an, Cansunog (Casunog), Bunyod, Bunlas (Hinugpa-an), Bugmac (Bugwak), Bonbon and Anahaw	360	9.9010	122.9491	Solar, Hydro, Wind, Biomass
3	Himamaylan	Buenavista	Sangkil, Sebucawan, Ponglo, Plasanan, Pisok, Panictican, Olot, Olitao, Napindahan, Mata, Marcopa, Maraya, Kangliking, Guihubon, Dul-asan, Dauhan, Curo-curo, Cansermon, Candiis, Calapi, Calang- Calang, Cabanga-an, Bugtangan, Bugta, Bugo, Buco, Bolasot, Baye, Balatogan, Bagtic, Aranawan, Amaga, Alimucon and Alangilan	720	9.9832	122.9363	Solar, Hydro, Wind, Biomass
4	Cauayan	Tambad	Sino-ayan, Mambulanon, Malipantaw, Malabago, Landodong, Labhid, Bigong and Bayabas	454	9.9056	122.5598	Solar, Hydro, Wind, Biomass
5	Binalbagan	Bi-ao	Uyanan, Pinaliran, Nagaba- an, Malalag, Kapahuan and Ilag (Lag-it)	323	10.0953	123.0122	Solar, Hydro, Wind, Biomass
6	Binalbagan	Amontay	Tangkuban, Namutang, Nabirasan, Nabilog, Malagikhik, Guihoban, Crossing Aya and Carangawan	507	10.1366	123.0744	Solar, Hydro, Wind, Biomass
		TOTAL		3,249			

LOAD PROFILE:

TIME	LOAD PROFILE (Per Unit)		
1	0.4034		
2	0.3879		
3	0.3798		
3 4 5 6	0.3757		
5	0.4197		
6	0.5355		
7	0.4776		
8	0.5020		
9	0.5053		
10	0.5273		
11	0.5607		
12	0.5477		
13	0.5819		
14	0.6202		
15	0.6129		
16	0.5949		
17	0.5803		
18	0.7025		
19	1.0000		
20	0.9650		
21	0.8737		
22	0.7441		
23	0.5550		
24	0.4491		
LOAD FACTOR	57.93%		

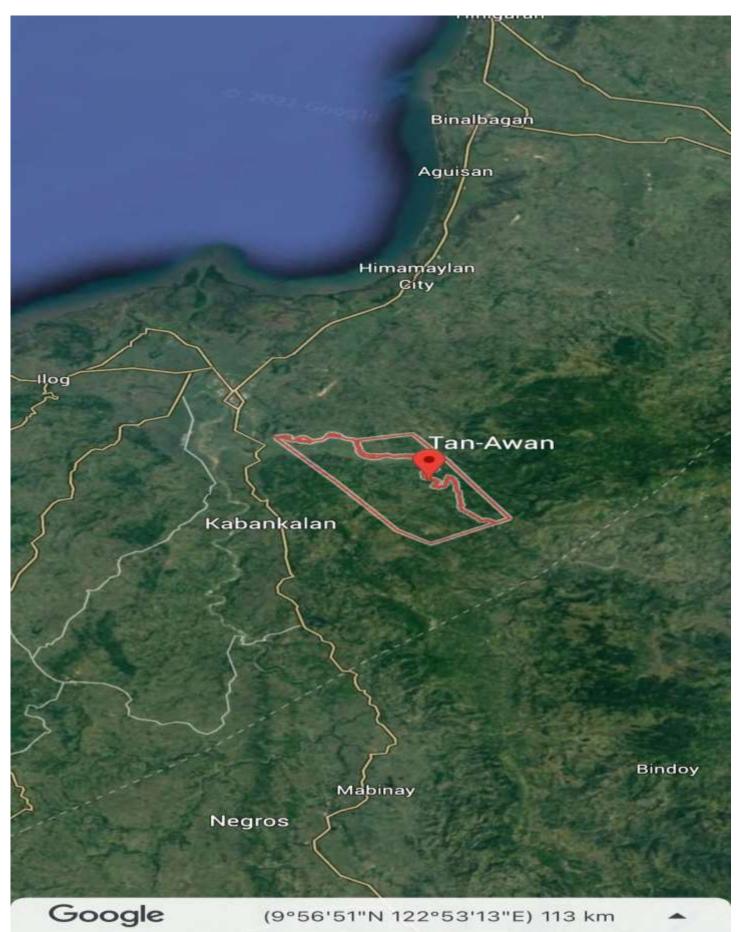


GEOGRAPHICAL MAP OF QTP SERVICE AREAS

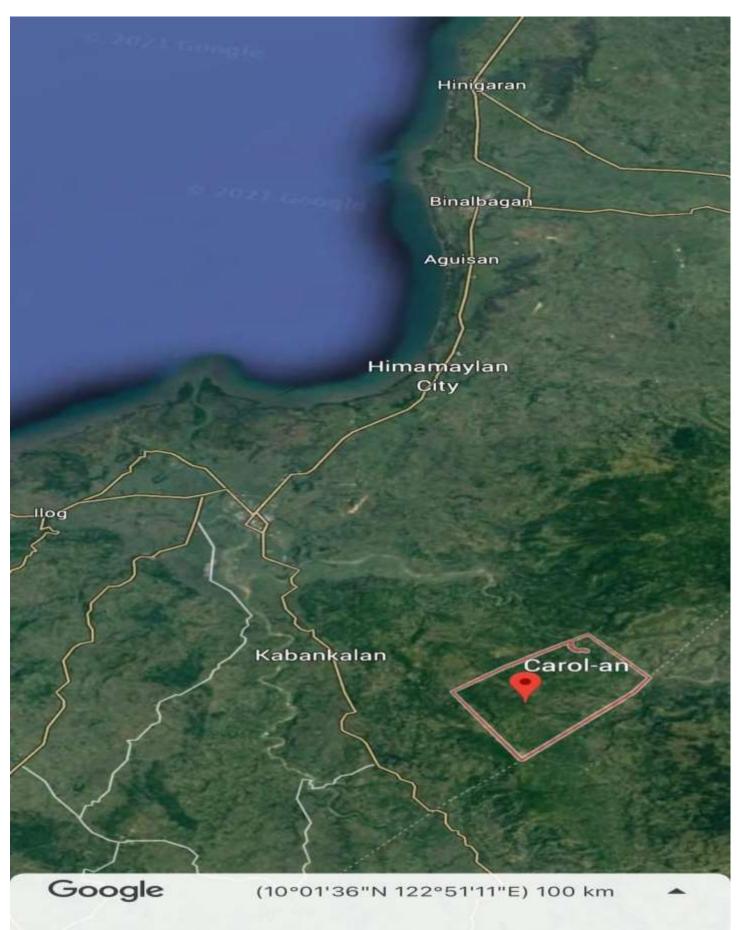


GEOGRAPHICAL LOCATION OF 6 BRGYS IN VARIOUS CITIES/ MUBICIPALITIES FOR QTP BIDDING

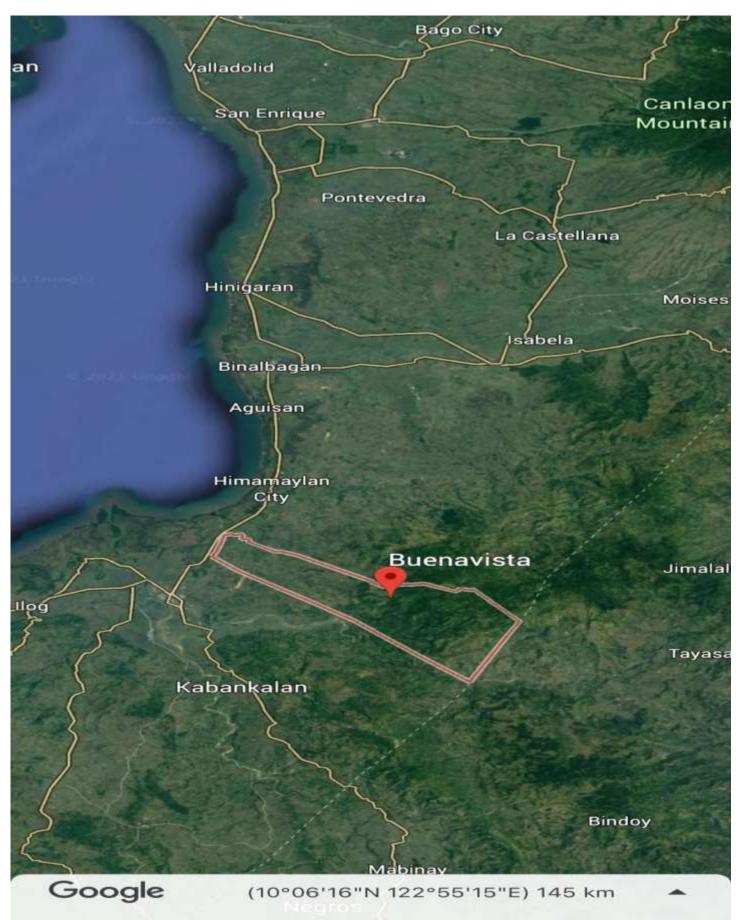
GEOGRAPHICAL LOCATION: BARANGAY TAN-AWAN, KABANKALAN CITY, NEGROS OCC.



GEOGRAPHICAL LOCATION: BARANGAY CAROL-AN, KABANKALAN, NEGROS OCCIDENTAL

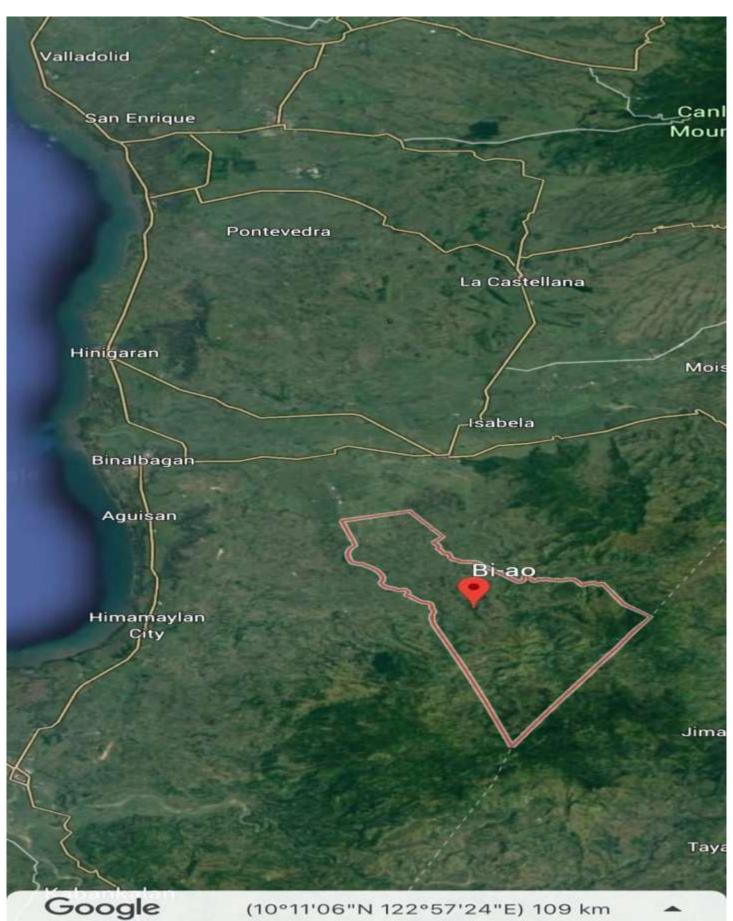


GEOGRAPHICAL LOCATION: BARANGAY BUENAVISTA, HIMAMAYLAN, NEGROS OCCIDENTAL

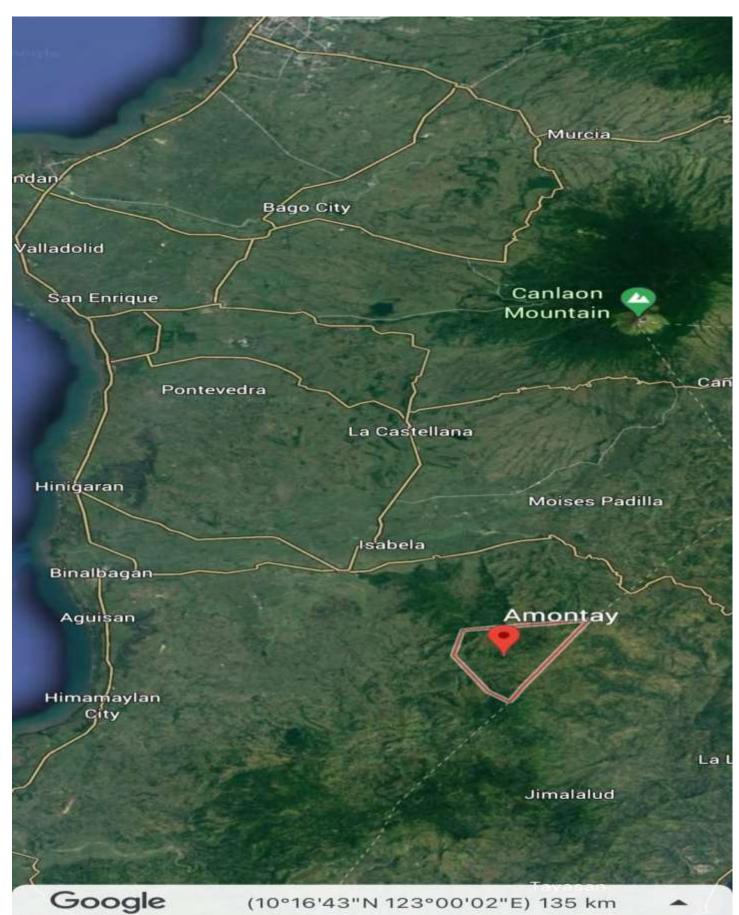


GEOGRAPHICAL LOCATION: BARANGAY TAMBAD, CAUAYAN, NEGROS OCCIDENTAL





GEOGRAPHICAL LOCATION: BARANGAY BI-AO, BINALBAGAN, NEGROS OCCIDENTAL



GEOGRAPHICAL LOCATION OF: BARANGAY AMONTAY, BINALBAGAN, NEGROS OCCIDENTAL