## BIRD'S NEST RESOURCES CORPORATION

# PROJECT DESCRIPTION FOR **SCOPING**

# Mompong River Restoration Project Municipality of Sablayan, Occidental Mindoro



Version 1.0

Date 08-August-2022

Prepared by GreenDevelopment Sustainable Solutions, Inc.



## Mompong River Restoration Project

#### **Document Information**

Title	Project Description for Scoping (PDS)
Prepared for	Bird's Nest Resources Corporation (BNRC)
	Bencom, Building, Barangay Phil-am, Quezon City, Philippines
Prepared by	GreenDevelopment Sustainable Solutions, Inc.
	3F Unit 8, Arcade 1 Building, 68 Don Alejandro Roces Ave, Quezon City 1103
	info@greendevsolutions.com
	+632 8362 4933

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	CG Petalcorin	JT Magdato	JJA Abella	

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#### **EIA COVERAGE SCREENING CHECKLIST (ECSC)**

## Purposes of the Screening Checklist:

- 1. Self-Screening Form by the Proponent (unofficial, for guidance purposes)
- Screening Validation Form by the EMB (official; signed copy may be transmitted to banks, economic/industrial zone administrators, other users who request EMB validation or any entity EMB may want to inform)
- 3. Site Inspection Report Form by the EMB for ECC/CNC applications
- 4. Site Inspection Report Form by the EMB for suspected or reported projects operating without ECC

A. SCREENING FOR EIA COVERAGE AND REQUIREMENTS				
1. Purpose of Screening	Proponent Self-Screening for [√] <b>ECC</b> , [ ] CNC, [_] ECC Amendment			
2. Project Name	Mompong River Restoration Project			
3. Project Location	Municipality of Sablayan			
4. Proponent Name	Bird's Nest Resources Corpora	ation		
Proponent Address	Bencom, Building, Barangay P	hil-am, Quezon City, Philippines		
Contact Person Name	Alfredo R. Tolentino			
Proponent Means of	Telephone Number: +632 8706			
Contact	Email address: birdsnest.resour			
5. EIS Consultant and	GreenDevelopment Sustainable	·		
Contact Information	(02) 8362 4933; email: info@g	Oon Alejandro Roces Ave, Quezon City Tel. Nos.		
10. Project's Component &	EIS-BASED	reendevsolutions.com		
Categorization	CATEGORY B			
Categorization	PROJECT			
12. Project Group based	Single Project:			
on Type of Threshold	[√] Group 1 (ECP in ECA/NE0	CA)		
Only	[] Group II (NECP in ECA),			
	[] Group III (NECP in NECA)			
	[_] Group IV (Co-located			
	Project in ECA/NECA)			
	☐ Group V (Unclassified			
40 FIA Damant Tura	Projects)			
13. EIA Report Type	[√] <b>EIS</b> [_] PEIS [] EPRMP [_] PEPRMP	[_] IEER		
17. Processing/ Endorsing Authority	EMB CO Director  Refer to Table 3	] EIAMD Chief		
18. Application Deciding		MB CO Director [] DENR Secretary		
Authority	[7]	Д = =,		
SIGN-OFF PAGE FOR PR	OJECT PROPONENT			
Project Proponent		Date of Signing		
Alfredo R. Tolentino				
Received by EMB: Signature over Printed Name		Date of Receipt :		
Remarks by EMB				
SIGN-OFF PAGE FOR EMB (For Purposes #2,3,4)				
Prepared by EMB Regional Office_ Signature over Printed Name  Date of Signing				
Remarks by EMB Regional	Remarks by EMB Regional Office			
Remarks by EMB Central C	Office			

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## **Project Description for Scoping**

## BIRD'S NEST RESOURCES CORPORATION

## Mompong River Restoration Project

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#### 1. BASIC PROJECT INFORMATION

## 1.1. Project Information

Project Name	Mompong River Restoration Project
Project Location	Municipality of Sablayan, Occidental Mindoro
Project Type	River Dredging Project
Project Area	Mompong River
Estimated Total Volume to be Dredged	42,746,263.43 cu.m
Average Design Depth	10 meters
Estimated Project Duration	5 years
Project Cost	Php 136,810,347.00

#### 1.2. Profile of the Proponent

Name of Proponent	Bird's Nest Resources Corporation (BNRC)		
Proponent's Address	Bencom, Building, Barangay Phil-am, Quezon City, Philippines		
Authorized Signatory / Representative	President & CEO		
Contact Person /	Alfredo R. Tolentino		
Position	President		
Contact Information	Telephone : +632 8706-7888/8529-6868		
	Mobile : +63 939 862 2483		
	Email : birdsnest.resourcescorp@yahoo.com		

- Bird's Nest Resources Corporation (BNRC) aspires to become one of the Philippines' leading natural resources development companies. The company engages in the exploration, development, and operation of mineral and guarry resources around the country.
- <sup>2</sup> BNRC promotes the implementation of the best available techniques and best environmental practices, as well as the generation of employment and economic growth in both urban and rural areas. In cooperation with the local and national governments, the company ensures that the benefits of mining extend beyond the life of the mine itself so that the extractive operation has a positive impact on the natural environment and social community.
- Sharing the vision for sustainable development, the company promotes sustainable production and extraction of mineral resources, and production of construction aggregates, prioritizing environmental protection and the safety and health of its employees above all, while consistently delivering economic growth to its stakeholders, clients, and the community.
- <sup>4</sup> BNRC aims to prospect or explore ores, minerals, and quarry resources, and acquire, operate, or develop mineral and quarry properties of all kinds, including water rights. The company has filed applications to legally conduct its mining and quarrying activities including but not limited to

applications for Mining Permits, Exploration Permits, and Government Seabed Quarry permits from pertinent government agencies.

## 1.3. Reference and Guidelines for the EIA Study

- The primary reference and guideline in undertaking this Environmental Impact Assessment (EIA) study are the DENR AO 2003-30 (Implementing Rules and Regulations of the Philippine Environmental Impact Statement System), which follows the recommended format and outline for the contents of the said manual.
- Scoping is the stage in the EIS System where information and project impact assessment requirements are established to provide the Proponent and the stakeholders with the scope of work and terms of reference for the EIS. Scoping sessions and consultations with EMB and the Review Committee and resource persons will take place at the EIA level, respectively, which will provide essential inputs and context for identifying and assessing environmental impacts and the drafting of the Project's environmental management plan.

### 1.4. EIA Project Categorization

Under the EMB MC 2014-005 (Revised Screening Guidelines for Coverage Screening and Standardized Requirements under the Philippine Environmental Impact Statement System) and EMB MC 2020-27 (Project Threshold for Extraction of Non-Metallic Resources Applying for Environmental Compliance Certificate) the Project is classified in Category B - defined as a Non-Environmentally Critical Project (ECP) to be processed in the EMB Regional Office. The ECC application requires the conduct of the Environmental Impact Assessment (EIA) study and the preparation of an Environmental Impact Statement (EIS).

#### 2. PROJECT DESCRIPTION

## 2.1. Project Location and Area

Bird's Nest Resources Corporation enters into agreements for river restoration through dredging and conventional sand and gravel quarrying activities. The survey area is located in the Municipality of Sablayan the central part of Occidental Mindoro which is geographically situated between N 12°47' and 120°47'E. It is bounded in the north by the municipality of Santa Cruz and the Municipalities of Baco, Naujan, Victoria, and Socorro all in Oriental Mindoro province; to the east by the municipalities of Pinamalayan, Gloria, Bansud, Bongabong, and Mansalay also in Oriental Mindoro; to the south by the municipality of Calintaan; and to the west by the Mindoro Strait. The survey area covers 4 barangays of Sablayan: Tuban, Sta. Lucia, San Nicolas and Malisbong. A list of the host barangays is provided in **Table 1**. A location map of the proposed project is shown in **Figure 1**.

Table 1. List of Host Barangays

Municipality	Barangay
Sablayan	Tuban
	Sta. Lucia
	San Nicolas
	Malisbong

### 2.2. Project Rationale

- According to MIMAROPA Regional Development Plan 2011-2016 in terms of flooding hazards, the major hotspot areas in the region are the provinces of Occidental Mindoro, Oriental Mindoro, and Marinduque. This includes the municipality of Sablayan where the Mompong River is located that usually overflows during excessive rainfall. The floodplain and delta of the Mompong River are also highly susceptible to deltaic flooding during the period of incessant rainfall.
- The Mines and Geosciences Bureau-MIMAROPA (MGB-MIMAROPA) together with the Occidental Mindoro Provincial Government Environment and Natural Resources Office (PGENRO) conducted an assessment of possible River Dredging Zones (RDZ). Based on the Mompong River's extensive width from the riverbank to the other, the river is characterized as heavily silted. The inner bends of the river channel are heavily accumulated by eroded sediments that form numerous point bars and island bars. This is because of the erosion of sediments from the outer bend comprising a cut bank and the deposition of sediments on the inner bend making up the point bars. The deposits have varying sizes from mud- to cobble-sized sediments. Dredging the delineated river dredging zones will mitigate the flooding hazards in nearby communities to the delta or locally termed as 'Wawa', RDZ was assigned to further give way to the volumes of water that are expected to pass through. The total area of the recommended RDZ is 532 hectares.
- Mompong River watershed is listed as one of the critical watersheds in Mindoro Occidental that supplies water and irrigation for the locals. With the steady rise of population in the area and the impacts of climate change, the frequency of flooding along the stretch of the river posed a threat to the safety of the locals and the economy. It is therefore vital to take action to prevent this threat and to promote economic growth and development within the locality.
- The main purpose of the dredging project is to increase the capacity of discharge flowing and to minimize the amount of silt accumulated in the river mouth.

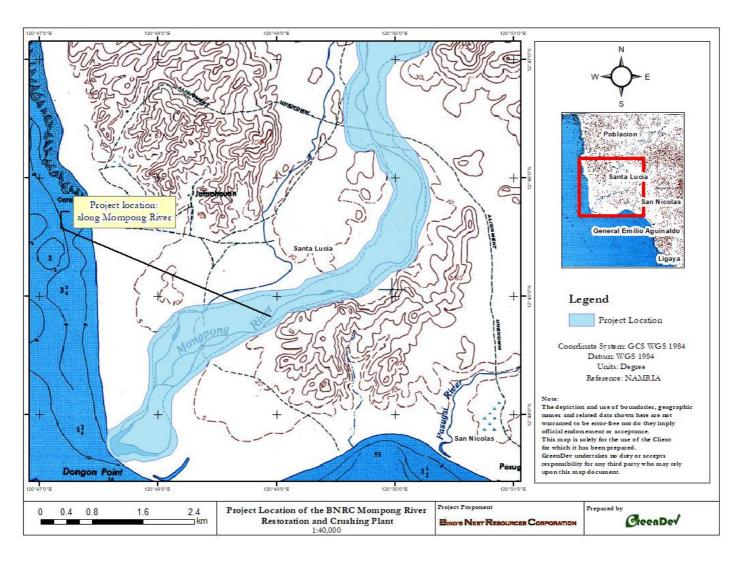


Figure 1. Project Location

## 2.3. Technology Selection/ Operation Process

- The type of dredging that will be utilized depends on the current physical configuration of the river. For shallow and very silted riverbeds, wet and dry dredging methods such as backhoe, grab buckets and other suitable mechanical dredgers are employed. At the offshore 100 meters from the shoreline, all the way upstream of the river 500 meters beyond the shoreline, marine or cutter suction dredgers may be employed.
- A cutter suction dredger or sand-pumping vessel will be used for this operation. The sand content of the area is about 70% that is easier to choose a pumping method or cutting directly, considering there is gravel in the sand, a filter is required to be installed on the pump head of the sand-pumping vessel. As the water depth at the river estuary is 4.8m, the 5m dredging depth is considered for the initial dredging operation. The depth to be dredged from the river estuary to the upstream is 5 meters deep to form the passage for further dredging operation. Thus, the estimated dredging quantity near the river estuary is around 3800000 m³ (76ha x 5m = 3800000 m³).
- When the estuary is dredged to the area where a large amount of material is mixed sand and gravel, sand pumping vessels and cutting suction dredgers cannot be used to continue the operation. The upstream channel could meet the operation condition of excavator and dump trucks, so excavators and dump trucks are used for dredging in this section. Excavators and dump trucks could start the operation from the center of the river to both sides of the river. A temporary shipping port will be set up at the depth of 10m on the southeast side of the estuary, and a crushing and screening plant will be set up behind the temporary shipping dock. The dredging quantity is around 30,000,000m<sup>3</sup>

## 2.4. Project Components

The estuary dredging is mainly carried out by ships and the personnel is mainly the sip crew. The upstream course beyond 500m distance from the river estuary, the dredging is mainly operated by excavators and dump trucks. Table 2 shows the personnel and equipment to be used in the operation.

**Table 2. General Project Components** 

Series No.	Ship and Personnel	Quantity
1	Cutter-suction dredger with a capacity of 2500m <sup>3</sup> /h	1
2	Cutter-suction dredger operator	8
3	Pipeline workers	6
4	Tug boat	2
5	Tug boat operator	12
6	Self-propelled belt vessel with a capacity of 5000m <sup>3</sup>	5
7	Belt boat operator	30
8	Hydraulic Excavator	10
9	Mechanical loader	4

Series No.	Ship and Personnel	Quantity
10	Dump truck with a capacity of 20m <sup>3</sup>	40
11	Crushing Equipment	1
12	Electric Generator	3
13	Quartering hammer	1
14	Administrative Staff	3
15	Technician	2
16	Qualify inspector	1
17	Material management staff	3
18	General worker	10
19	Pick-up	3

## 2.4.1. Equipment Specification

The estimated annual extraction using a dredging vessel is about Eight Million Four Hundred Thousand (8,400,000) cubic meters of river sand.



Figure 2. Cutter Suction Dredger

## **Table 3. Dredger Specifications**

Dredger Specifications							
Main Dimension							
a) Length O.A	100.0 m						
b) Breadth mid	16.8 m						
c) Depth mid	4.8 m						
d) Draught	3.3 m						
Dredging Capacity	2500 m³/h						
Dredging Depth	63 m. – 25.0 m						
Inboard Dredge Pump							
a) Capacity	8000 m³/h						
b) Head	63 m., 1 set, single wall						
Submersible Pump							
a) Capacity	8100 m³/h						
b) Head	23 m., 1 set, single wall						
Inboard Dredging Pump Diesel Engine	G8300, 2426Kw @ 630 rpm, 1 set						
S.D.P. Diesel Engine	G6300, 1470Kw @ 600 rpm, 2 sets						
Main Generator Set	250Kw @ 1500 rpm, 3 sets						
Harbor Generator Set	90Kw @1500 rpm, 1 set						
Cutter Head							
a) Diameter	2520 mm						
b) Height	.1540 mm						
c) Power	900Kw						
d) Drive Type	Hydraulic motor (1200Kw @ 33 rpm, 1 set)						
Suction Pipe Diameter	750 mm						
Discharge Pipe Diameter	700 mm						
Spuds and Carriage							
a) Weight	60t x 2						
b) Length	37 m						
c) Diameter  GreenDevelopment Sustainable Solutions, Inc.	1200 mm						

Dredger Specifications						
d) Cylinder Stroke	6.0 m					
Anchor Boom	2 sets					

#### 2.4.2. Water and Electricity Supply

- There is no need to consider the supply of water and electricity during the dredging operation at the river estuary. Fresh water for personnel is transported from land to ships for use. Fresh water used in the crushing plant is directly extracted from the river, and bottled water for personnel will be purchased. Diesel generators are used to supply electricity for the crushing plant.
- Transformers, switches, circuit breakers, and other auxiliary equipment are installed in an open yard supported by structural steel frameworks laid on a reinforced concrete foundation.

## 2.5. Yearly Mine Production

The yearly production schedule table shows the annual production of Six Million cubic meters (6,000,000 m³) equivalent to a monthly of Seven Hundred Fifty Thousand (750,000 m³) of river dredge material. The company will use a cutter suction dredger offshore and dredging area 500 meters above the shoreline attaining the production of 4,500,000 cubic meters to 6,000,000 cubic meters in the first year. The succeeding years at 6,000,000 m³ per year may be accomplished with conventional sand and gravel quarrying.

Table 4. Yearly Mine Production Schedule using Dredging Vessel

Mine Production Schedule								
Year	1	2	3	4	5			
Million Cubic	6.4	6.4	6.4	6.4	6.4			
Meter								

- The dredged sand has an estimated production cost of Php 192.40/cubic meter. This estimated production cost includes the staff/crew personnel salaries for the vessel, barge, fuel, lubricants, freshwater requirement, and port/management charges. The corresponding estimated production cost per annum for Four Million Five Hundred Thousand (4,500,000) cubic meters yearly production is Php 865,736,000.00.
- The commercial production of river sand concentrates is estimated to commence after the successful dry run of the dredging vessel and approval of the Dredging Permit application with a yearly production as shown above table.

#### 2.6. Project Development Plan

The extraction/dredging of river sand will simply utilize a cutter dredging vessel with loading/storage barges on the side. These are locally available cutter suction vessels. The vessel will pump the river sand from the river segment area and will be loaded to the holding barges for transport to the approved unloading area.

#### 2.6.1. Dredging Development Plan

- The cutter suction dredging vessel will be used for the operation to extract/pump 42, 746, 263 cubic meters (mineral/sand reserve) of river raw sand with a daily production of 30,000 cubic meters of river sand.
- The dredging production schedule was based on using a 2500 cubic meter per hour capacity of Cutter Suction Dredger. The dredging vessel will operate 12 hours a day for 300 days a year of operating days.

#### 2.6.2. The sequence of Dredging/Quarrying

The yearly production of 64,000,000 cubic meters of river sand will be dredged in 5 years starting from east to west starting from downstream to upstream of the polygon.

#### 2.6.3. Process Plant

- Dredging vessels will extract the raw materials through a suction hose connected to the vacuum pump with a cutter suction head. The pump produces a vacuum that pulls the materials into the suction hose. For extraction of compacted materials, if any, dredgers have a cutter head at the end of the suction tube. The cutter head is used to loosen the materials and feed them to the opening of the suction tube.
- In an ideal condition, the estimated extraction rate of the vessel is 30,000 cubic meters per day of river sand which will pump into the loading barges for stockpiling and later will be shipped once the loading barges are in full storage capacity.

#### 2.7. Organization and Line of Responsibilities

<sup>29</sup> BNRC will hire and deploy a total of 47 employees for this Mompong River Dredging Project. The management and admin will consist of 11 personnel, while the cutter suction vessel and barge operation will require 36 personnel.

#### 2.7.1. Management and Administrative Personnel

The total number of management and admin personnel is 11. The management and admin personnel consist of the President, VP-Operations and Project Development, Chief Finance Officer, HR Manager, Purchasing Manager, Accounting Head, HR Assistant, Site Purchasing and Inventory Assistant, Environmental Officer, Accounting and Admin Assistant, Safety Officer, and Mining Engineer/Operations Manager.

## 2.7.2. Vessel and Barge Operations Workforce & Support Group

The vessel operations workforce consists of a Dredging Supervisor, Maintenance Supervisor Equipment Operator, Dredge Master, 1<sup>st</sup> Officer, 2<sup>nd</sup> Officer, 3<sup>rd</sup> Officer, 4<sup>th</sup> Officer, Docking and Rigging Foreman, Dredgerman Foreman, Welder, Electrician, Warehouseman/Lubeman, Data Encoder, Checker, Communication Equipment Operator Dredgeman, Checker/Spotter and Utility Personnel.

#### 2.7.3. Management

The total number of management and admin personnel is 12. The management and admin personnel consist of the President, VP-Operations and Project Development, Chief Finance Officer, HR Manager, Purchasing Manager, Accounting Head, HR Assistant, Site Purchasing and Inventory

Assistant, Environmental Officer, Accounting and Admin Assistant, Safety Officer, and Project Manager.

#### 2.7.4. Exploration

The exploration and drill barge will be manned by a Captain with maritime experience and crew plus periodic visits of a Mining Engineer Consultant and Geologist.

#### 2.7.5. River Quarrying Mining

A Mining Engineer, Maintenance/Mechanical Manager, and Geologist together with an Equipment Mechanic/Technician shall be part of the mining or dredging team.

## 2.7.6. Engineering

The team will also function as the engineering team which is composed of a Mining Engineer, Mechanical/Maintenance Engineer, and Geologist together with an Equipment Mechanic/Technician who shall be part of the mining or dredging team

#### 2.7.7. Administration

The Administration shall consist of an Office Manager for the field and Administrative Staff, a Finance Manager, and support staff.

#### 2.7.8. Environmental and Social

The Environmental and Social Team shall be composed of Mining Engineer/Operations Manager, Safety, Health, and Environmental Officer, and Administration Manager and Staff.

#### 2.7.9. Safety and Health

The Safety, Health, and Environmental Officer shall conduct a SHE orientation on daily basis. The SHE Officer shall create a Safety and Health program about the nature of business.

#### 2.7.10. Maintenance

Repair and Maintenance Crew shall be headed by a Maintenance Supervisor and will report directly to the Operations Manager on the Predictive and Preventive Maintenance of the vessel as well as support equipment.

#### 2.7.11. Security

<sup>40</sup> A well-trained security officer shall head and supervise hired Security Guards from the privately licensed security agency.

#### 2.7.12. Sablayan Office

The assigned officer in Sablayan shall be completely staffed for purpose of managing, supervising, and overseeing the smooth flow of dredging operation.

#### 2.8. Operation Cost Computation

River dredging has been one of the emerging industries in our country due to the demand for reclamation materials and construction materials that can be derived from river channels with a

voluminous amount of river sand deposits. The targeted volume to be dredged in Mompong River is 42,774,404.03 cubic meters. **Table 5** shows the cost for monthly direct mining and processing.

**Table 5. Direct Mining Cost** 

Particulars	Monthly Cost (PHP)
Operating Cost	136,030,347
Administrative Cost	780,000
TOTAL	136,810,347

#### 2.8.1. Mining and Processing Maintenance Cost

The dredging maintenance cost of the dredging vessel per month is one percent (1%) of the total operating cost which is Php 1,360,303.47.

#### 2.8.2. Total Dredging Cost

Table 6 shows the total quarrying and processing cost.

**Table 6. Mining and Processing Cost** 

Particulars Particulars	Annual Cost, (PHP)
Dredging Operations	357,209,600
Labor Operating Cost	12,662,000
TOTAL	369,871,600

#### 2.9. Environmental Facilities

#### 2.9.1. Anti-Fouling Curtain

Before the dredging operation of cutting suction dredger at the estuary, an anti-fouling curtain will be installed outside the 200m range of the hull to prevent the floating mud formed by stirring the seabed from flowing into the sea. Domestic garbage on ships is not directly discharged into the sea but is collected and regularly transported to a designated location on land for disposal.

#### 2.9.2. Wastewater Facility

The wastewater from the Crushing Plant is not directly discharged into the river or sea, it will be transported and processed in a centralized method after being collected in septic tanks and sewage collection tanks.

#### 2.9.3. Hazardous Waste Storage

The operation of the project shall conform with the applicable provisions of RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990) and its corresponding Implementing Rules and Regulations (e.g. Secure Hazardous Waste ID, etc.)

#### 2.10. Abandonment Phase

This phase will include the removal of all equipment and machinery used in the operations and taking these out of the project site. The MGB requires the decommissioning of the crushing plant, the abandonment phase is covered by the rehabilitation and decommissioning plan.

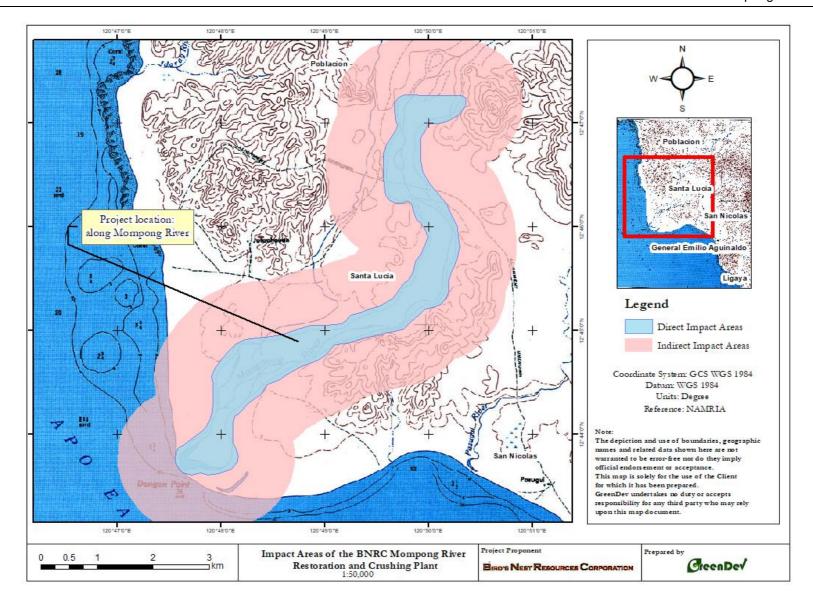
#### 3. PRELIMINARY IDENTIFICATION OF ENVIRONMENTAL IMPACTS

- The main purpose of the dredging project is to increase the capacity of discharge flowing and to minimize the amount of silt accumulated in the river mouth. Thus, to mitigate the effects of excessive flooding incidence in the area.
- Safety and public health hazards it is important in every project before the implementation for the safety and health of the public as well as the workers. Thus, some measures will be observed to meet this objective. During the operation phase, the company will require the strict implementation of standard safety measures to protect workers from accidents under existing legislation and regulations. Also, safety protocols and precautions will be continuously observed.
- <sup>49</sup> **Deterioration of Water Quality** –dredging activity can increase the water turbidity which can result in sedimentation. The crew will keep the edge of the suction pipe as close as possible to the riverbed to lessen the agitation of the sand which may cause the deterioration of the quality of water and the company will use mitigating measures to prevent siltation.
- Riverbank Stability The company will implement continuous monitoring of the stability of riverbanks within the Mompong River during its dredging operations. If needed, a proposed appropriate engineering measures to protect adjacent communities against river scouring, river erosion, and other impacts as part of the environmental aspects/effects of the operation.
- Potential impacts on air quality and noise- During the transportation of dredging materials, dust and noise are the main sources of nuisance, especially in the community near the project site.
- Benefits the main goal of the project is to mitigate flooding in the area by increasing the capacity of the river to carry more volume of water by changing its configuration through dredging. Thus, it helps to prevent the threat to the safety of the locals and to promote economic growth within the community.

## 3.1. Preliminarily Identified Impact Areas

- The study areas for the proposed project will consider both the direct and indirect impact areas. The delineation of the preliminary direct and indirect impact areas was based on the definition of these areas from the Revised Procedural Manual (DAO 2003-30) as follows:
  - "a) **Direct impact area (DIA)** is initially delimited during the Pre-EIA Study Stage as the area where ALL project facilities are proposed to be constructed/situated and where all operations are proposed to be undertaken. For most projects, the DIA is equivalent to the total area applied for an ECC.
  - b) Indirect Impact Area (IIA) during the pre-EIA Study can only be assumed or qualitatively estimated but may be guided by secondary data and information from key interviews of reliable local authorities, e.g., Based on a NAMRIA topographic map, an IIA can be the stretch of the river/s OUTSIDE the project area but draining the project site which can potentially transport Total Suspended Solids and other discharges from the Project towards downstream communities.
  - c) On the other hand, the **Regional Impact Zone** (**RIZ**) pertains more to the general area where the impact of the Project would be felt, such as the entire municipality, province, or region."

- As interpreted based on the Revised DAO 2003-03 and Section 10 of DAO 2017-15, **Figure 3** shows the preliminarily identified direct and indirect impact areas of the proposed Project.
  - Direct Impact Area (DIA) This shall cover the host barangays in **Table 1**. Most of the direct impacts are attributable to the construction, operational, and decommissioning phases such as:
    - Disturbances to vegetation, soil, water, and air quality
    - Noise generated by equipment and traffic movements
    - Public safety and hazards
    - Public amenity impacts
    - Pollution risks
  - Indirect Impact Area (IIA) The Indirect Impact Area (IIA) covers adjacent areas immediately outside of the primary impact area, mainly, those within the 500 to 1000 meters radius from the plant site. The IIA is perceived to be affected by some residual effects of the Project during construction and operations, notably, noise, pollution, transportation impacts. However, the Project could have a positive social-economic effect due to employment and livelihood opportunities to residents of the host and surrounding barangays.
- <sup>55</sup> The delineation of impact areas shall be revised based on the results of the EIA Study



**Figure 3. Preliminary Impact Areas** 

## 4. Information, Education, & Communication (IEC) Campaign

- As part of the social preparation process at pre-scoping, Information, Education, and Communication (IEC) are required before requesting a Public and Technical Scoping. IEC primarily identifies stakeholders and their related issues and concerns toward the project for Scoping proper. Bird's Nest Resources Corporation along with its consultant, GreenDevelopment Sustainable Solutions, Inc. has conducted an IEC campaign to the project's host communities in the Municipality of Sablayan (Brgys. Tuban, Sta. Lucia, San Nicolas, Malisbong).
- <sup>57</sup> However, due to the COVID-19 pandemic, the IEC campaign was done following the guidelines imposed by Inter-Agency Task Force (IATF), following the community quarantine guidelines. EMB MC 2020-30 or the Interim guidelines on public participation in the implementation of PEISS during the state of national public health emergency was also used as a guideline in conducting the IEC.
- The Municipality of Sablayan was under Modified General Community Quarantine (MGCQ) when the IEC campaign was conducted. In the MGCQ guidelines, mass gatherings for work-related activities are allowed but for a limited number of participants only (10 persons). This is why most of the IEC conducted are individually or in small groups usually on a house-to-house basis.
- Various stakeholders consisting of barangay officials, and representatives from different sectors such as the youth sector, senior citizens, working-class groups, and fisherman community are targeted for this IEC campaign.
- There are two (2) primary objectives of the conducted IEC, viz: (1) to inform the stakeholders about the proposed Mompog River Dredging and Construction of Crushing Plant project in their community and the EIA process for this project and (2) to gather concerns on related issues and comments and recommendations from the stakeholders.





Figure 4. IEC and Perception Survey Documentation

## 4.1. Summary of Issues, Concerns, and Responses

**Table 7** shows the summary of issues, concerns, and recommendations gathered from the stakeholders during the IEC campaign and are distributed into various categories. Responses of the proponent in each raised issue are also shown in this table.

Table 7. Summary of Issues, Concerns, and Responses

Issues and Concern	Response of Proponent
Project Description	
How would you dredge the river?	<b>BNRC:</b> The type of dredging that will be utilized depends on the current physical configuration of the river. For shallow and very silted river beds, wet and dry dredging methods such as backhoe, grab buckets and other suitable mechanical dredgers are employed. For deeper waters, marine or cutter suction dredgers may be employed.
How depth is the dredging?	<b>BNRC:</b> It will dredge 10 meters in depth along the river channel or as per approved in the Dredging Plan by the DPWH.
How long is the project duration?	<b>BNRC:</b> The estimated project duration is 5 years.
Water	
Will there be any negative impacts on the freshwater species during dredging activities?	<b>BNRC:</b> Baseline characteristics of the project area will be further assessed which includes the marine and freshwater ecology. To determine the possible negative impact of the project.
People	
What are the benefits our barangays could get from this project?	BNRC: BNRC shall provide the following benefits for the affected communities: Additional employment opportunities for the local communities. The provision of employment in rural areas will help ease the pressure on major cities due to the influx of migrating workers. Local communities will be the recipients of livelihood programs and skills development that can be used for economic gains, both technological and technical skills. Moreover, an increase in revenue and operating expenses of the company will also significantly increase the Social Development Management Program (SDMP).
Most of the residents here have been affected by the community quarantine, thus losing their jobs. Can we get hired for this project?	<b>BNRC:</b> The project shall provide significant employment and training opportunities for the residents.

#### 5. PERCEPTION SURVEY RESULTS AND ANALYSIS

- A perception survey was performed on the four direct impact barangays to determine the knowledge and sentiments of these communities towards the project. The perception survey was held last January 15 and 16, 2021 along with the information and education campaign (IEC) activities. Barangay health workers were tapped as enumerators, taking advantage of their superior knowledge of their communities and neighborhoods. These local health workers were oriented about the project description and trained on answering the designed survey instrument.
- A total of 348 respondents were interviewed on a face-to-face and one-to-one basis to gather basic information about their households and their views on the proposed project. Samples were taken from each purok or sitio of each host barangays to ensure that the survey would be as comprehensive as possible in terms of its reach. Sampling was done only during daylight hours and in light of safety and security considerations. The sample size was determined with a margin of error of ± 5 with a confidence level of 95%. Respondents were chosen in the following order of preferences:
  - Household head (who may be male or female but always a resident-household member who makes the major household decisions or is perceived to do so; the household head is usually the father but may also be the mother or the eldest child who is of majority age (18 years old);
  - Spouse of the household head;
  - Son or daughter who is at least 18 years old of the household head; or
  - Other relatives who are at least 18 years old of the household head.
- In general, the survey aimed to develop an actual appreciation of the communities' perceived ideas on the project and to serve as an avenue for the host communities to provide initial suggestions and recommendations to the project proponent.
- The survey includes the following: (1) Basic Demographic and Household Characteristics, (2) Household and Community Concerns, and (3) Perceptions about the project.

#### 5.1. Basic Demographic and Household Characteristics

#### **5.1.1.** Gender

There were generally more females (61.21%) than males (38.79%) who were interviewed for the survey. Among the four barangays, only Sta. Lucia posted a slightly higher number of male respondents than females.

Gender Malisbong San Nicolas % Sta Lucia Tuban Total Male 30 27.03 11 21.15 60 53.57 34 46.58 135 Female 81 72.97 41 78.85 52 46.43 39 53.42 213 Total 111 100.00 52 100.00 112 100.00 73 100.00 348

Table 8. Gender Profile of the Respondents

#### 5.1.2. Age

In terms of age, most respondents are within the range of 30-34 (16.09%). The least significant number of respondents was recorded both within the youngest (15-19) and the eldest range (>75) at 0.86%. As shown in **Table 9**, Malisbong and San Nicolas' respondents are mostly within the age range of 40-44, Sta. Lucia at 30-34, and Tuban at 35-39.

Age Malisbong San Sta Tuban Total **Nicolas** Lucia 15-19 1 1 0 1 3 0.90 1.92 0.00 1.37 20-24 7 3 5.77 9 8.04 5 6.85 24 6.31 25-29 7 6.31 3 5.77 8 7.14 10 13.70 28 30-34 16 14.4 10 19.23 19 16.96 15.07 56 11 1 16 5 14 35-39 14.4 9.62 12.50 14 19.18 49 1 40-44 17 15.3 12 23.08 18 16.07 3 4.11 50 2 45-49 13 11.7 4 7.69 15 13.39 11 15.07 43 1 50-54 7.69 5 7 10 9.01 4 4.46 9.59 26 55-59 9 8.11 4 7.69 5 4.46 6 8.22 24 60-64 6 5.41 4 7.69 12 10.71 4 5.48 26 65-69 6 5.41 1 1.92 5 4.46 0 12 0.00 70-74 2 1.80 0 0.00 1 0.89 1.37 4 1 1 1 1 >75 0.90 1.92 0.89 0 0.00 3 Total 111 100. 52 100.0 112 100.0 73 100.0 348

Table 9. Age Profile of the Respondents

#### 5.1.3. Civil Status

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Majority of the interviewed individuals in all barangays were married (73.28%), widow (7.47%), and single (6.90%). Highest number of separated respondents was recorded at Tuban (5.4%) while those who are in a live-in relationship were recorded at 4.60%. Only 2.01% present of the total respondents did not declare their civil status (**Table 10**).

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Civil Status	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Single	3	2.70	6	11.54	10	8.93	5	6.85	24
Married	83	74.77	40	76.92	80	71.43	52	71.23	255
Widow	11	9.91	4	7.69	8	7.14	3	4.11	26
Separated	1	0.90	0	0.00	3	2.68	4	5.48	8
Others	8	7.21	2	3.85	2	1.79	0	0.00	12
No Response	5	4.50	0	0.00	1	0.89	1	1.37	7
Common-law/ Live-in	0	0.00	0	0.00	8	7.14	8	10.96	16
Total	111	100.00	52	100.00	112	100.00	73	100.00	348

Table 10. Civil Status of the Respondents

#### 5.1.4. Highest Educational Attainment

As presented in **Table 11**, half of the respondents from the four barangays were able to enter primary schooling and almost 40% reached high school. Tuban and Malisbong posted the highest number of respondents who went through college at 16.44% and 11.71%, respectively.

Table 11. Highest Educational Attainment of the Respondents

Highest Educational Attainment	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
None	0	0	1	1.92	0	0	2	2.74	3
Elementary	37	33.33	22	42.31	70	62.5	45	61.64	174
High School	54	48.65	21	40.38	29	25.90	7	9.59	111
Vocational	7	6.31	2	3.85	2	1.79	7	9.59	18
College	13	11.71	6	11.54	11	9.82	12	16.44	42
Total	111	100.00	52	100.00	112	100	73	100.00	348

#### 5.1.5. Religion

Roman Catholicism (RC) is the predominant religion in all four impact barangays. This is followed by Iglesia ni Cristo (12.93%) which is also the only religion identified in Malisbong, aside from RC. Other religions present in the areas are enumerated in **Table 12**.

Table 12. Religious Affiliations of the Respondents

Religion	Malisbon g	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Roman Catholic	70	63.06	47	90.38	94	83.9	61	83.56	272
Protestant	0	0.00	1	1.92	4	3.6	2	2.74	7
Baptist	0	0.00	1	1.92	0	0.0	1	1.37	2
Iglesia Ni Cristo	41	36.94	2	3.85	2	1.8	0	0.00	45
Adventist	0	0.00	0	0.00	3	2.7	0	0.00	3
Born Again	0	0.00	0	0.00	1	0.9	4	5.48	5
Christian									
Four square	0	0.00	0	0.00	3	2.7	2	2.74	5
Sheperd of my	0	0.00	0	0.00	0	0.0	2	2.74	2
soul									
United Church of	0	0.00	0	0.00	0	0.0	1	1.37	1
Christ in the									
Philippines									
Others	0	0.00	1	1.92	5	4.5	0	0.00	6
(unspecified)									
Total	111	100.00	52	100.00	112	100.0	73	100.0	348
								0	

## 5.1.6. Length of Residency

Almost 30% of the respondents are residing in their respective barangays for about 31-40 and 41-50 years. This is also true for the respondents from Sta. Lucia and Tuban. Most of these residents are naturally born in the same areas of their current residency. At the barangay level, many respondents from Malisbong (28.83%) and San Nicolas (26.92%) have indicated that they are living in the same places for 41-50 years (**Table 13**).

Length of % San Nicolas % Sta Lucia % Tuban Malisbong Total Residency in the area (vears) 7 0-10 6.31 9 17.31 18 16.07 10 13.70 44 11-20 5.77 7 6.25 18 16.22 3 9 12.33 37 21-30 24 21.62 13 25.00 17 15.18 9 12.33 63 31-40 23 20.72 11 21.15 34 30.36 25 34.25 93 7 41-50 32 28.83 14 26.92 20 17.86 9.59 73 50 and above 5 1 4.50 1.92 13 11.61 11 15.07 30 2 2 No Response 1.80 1 1.92 3 2.68 2.74 8 100.00 100.00 100.00 100.00 Total 111 52 112 73 348

Table 13. Length of Residency of Respondents in Respective Communities

## 5.1.7. Household Size and Primary Source of Income

During the survey, each respondent was also asked about the total number of household members. The highest calculated household size was determined in San Nicolas at 5.3, followed by Malisbong and Tuban at 5.1, and Sta.Lucia at 4.8. The average household size for these barangays is 5.2. As presented in **Table 14**, nearly half of the respondents' primary source of income within their household comes from farming (45.9%). Other identified sources include retail businesses (14.66%), fishing (12.93%), and other informal jobs with no fixed tenure or pay (9.77%) such as scrap collectors, tricycle drivers, construction workers, laundry, etc.

Primary Source of Household Income	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Regular Employment	4	3.60	1	1.92	3	2.68	17	23.29	25
Contractual Employment	6	5.41	0	0.00	0	0.00	0	0.00	6
Retail Business	14	12.61	8	15.38	14	12.50	15	20.55	51
Fishing	1	0.90	10	19.23	33	29.46	1	1.37	45
Farming	70	63.06	18	34.62	42	37.50	30	41.10	160
Family Business	4	3.60	1	1.92	7	6.25	10	13.70	22
Remittances	1	0.90	0	0.00	4	3.57	0	0.00	5
Others, not specified	11	9.91	14	26.92	9	8.04	0	0.00	34
Total	111	100.00	52	100.00	112	100.00	73	100.00	348

**Table 14. Primary Source of Household Incom** 

## 5.2. Household and Community Concerns

In the four impact barangays, common household problems raised by the respondents are mostly focused on their socioeconomic conditions such as:

- Lack of livelihood opportunities and sustainable sources of income
- Financial instability
- Continuous increase in food and commodity prices
- Inaccessible healthcare services
- Impacts of the current pandemic
- On the other hand, pressing community problems that are identified during the survey are multifaceted issues which include the following:
  - Impacts of climate change
  - Immense flooding in the area
  - Inadequate water supply during dry seasons
  - Low crop production and altered cropping pattern
  - Poor waste management practice
  - Limited financial resources of the majority of the residents
  - Limited job opportunities for the locals
  - Slow development
  - Child labor
  - Early marriage and pregnancy
  - · Political disputes among officials
  - Inaccessible healthcare services
  - Impacts of the current pandemic

#### 5.3. Perception of the Project

As revealed by the results, more than half (67.24%) of the respondents were still uninformed about the project. None of the respondents from Malisbong were aware of it, whereas the highest level of project awareness was identified in Tuban at 45. 21%.

Table 15. Awareness of the Project

Project Awareness	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Aware	0	0.00	21	40.38	29	25.9	33	45.21	83
Unaware	88	79.28	30	57.69	76	67.9	40	54.79	234
No response	23	20.72	1	1.92	7	6.3	0	0.00	31
Grand Total	111	100.00	52	100.00	112	100.0	73	100.00	348

For the respondents who were affirmative when asked if they were aware of the project, 42.17% of them had learned the information from barangay officials and 28.92% from their neighborhoods. The other 25.30% had heard about the project from other sources that they do not want to disclose while the remaining 3.61% got their ideas from the initial IEC activities of the proponent (**Table 16**).

Table 16. Sources of	of Information
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Source of Information	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Neighbors	5	23.81	15	51.7	4	12.12	24
Barangay Officials	13	61.90	12	41.4	10	30.30	35
IEC Activities of the Proponent	0	0.00	1	3.4	2	6.06	3
Others, not specified	3	14.29	1	3.4	17	51.52	21
Total	21	100.00	29	100.0	33	100.00	83

According to **Table 17**, employment opportunities (28.82%), effective flood mitigating measures (22.60%), development of livelihoods and relevant business (19.98%), and road and other infrastructure improvements (18.34%) were the leading perceived project benefits by the respondents.

**Table 17. Perceived Project Benefits** 

Perceived Project Benefits	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Employment opportunities	106	21.33	40	34.19	64	41.29	54	36.73	264
Development of livelihoods and relevant businesses	106	21.33	27	23.08	17	10.97	33	22.45	183
Influx of tourists	78	15.69	2	1.71	4	2.58	4	2.72	88
Road and other infrastructure improvements	108	21.73	21	17.95	23	14.84	16	10.88	168
Effective flood mitigating measures	98	19.72	27	23.08	43	27.74	39	26.53	207
Others, not specified	1	0.20	0	0.00	4	2.58	1	0.68	6
Total	497	100.00	117	100.00	155	100.00	147	100.00	916

Aside from the discussed project benefits, the respondents are also expecting adverse impacts during project implementation. These impacts include issues on health and safety (42.54%) and environmental degradation (35.07%). Concerns from the former were anchored on the possibilities of drowning due to changes in river depth and health-related problems due to the increase in the level of air and noise pollutants during mobilization of equipment and actual operation. For the latter, disturbance of faunal species and their habitat (both in land and water) and change in freshwater quality were considered.

Anticipated Adverse Project Impacts	Malisbong	%	San Nicolas	%	Sta Lucia	%	Tuban	%	Total
Health and safety concerns	1	3.33	36	39.13	27	48.21	50	55.56	114
Environmental degradation	29	96.67	23	25.00	9	16.07	33	36.67	94
Waste management issues	0	0.00	9	9.78	14	25.00	6	6.67	29
Loss of livelihood	0	0.00	23	25.00	6	10.71	1	1.11	30
Others	0	0.00	1	1.09	0	0.00	0	0.00	1
Total	30	100.00	92	100.00	56	100.00	90	100.00	268

- Overall project impression was asked to each respondent by rating their general perception towards it. The rating was guided by the question, "Do you think the project is geared towards the betterment of the community? Kindly rate your impression from 1-10, where "10" means that the project is generally promising while "0" means that the project is nonsense at all."
- According to the computed average ratings, respondents from Malisbong generally perceived the project as beneficial and promising since it was seen as an effective measure to mitigate flooding problems and a magnet of employment opportunities for the locals. For San Nicolas and Tuban, a neutral grade of 5 was given due to the respondents' mixed sentiments on the project's benefits and adverse impacts. The said impression may also be attributed to the respondents' lack of knowledge and deeper understanding of the project. The same remark is also true for the calculated rate, 6, in Sta. Lucia. The slightly skewed rating for the latter may also be linked to the comments, "Although I have not much knowledge on the project, I think the positive impacts will come through if proper implementation will be managed and observed." Therefore, continuous IEC and public consultation activities should be done to fully further the stakeholders' understanding and appreciation of the project. The detailed rating justifications are summarized in **Table 19.**

Table 19. General Comments on the Project

Reasons for High Ratings	Reasons for Low Ratings
<ul> <li>Flood mitigation</li> <li>Erosion control</li> <li>Employment opportunities</li> <li>Boost local economy</li> <li>Possible improvement of roads and other infrastructure</li> <li>Entails significant positive impacts when properly implemented</li> </ul>	<ul> <li>Disturbance in the livelihood of fisher folks and farmers</li> <li>Entry of private entities into the communities</li> <li>Scarcity of sand and gravel after project implementation</li> <li>Saline intrusion</li> <li>Disturbance of faunal species</li> <li>Lack of consultation and knowledge on the project</li> <li>Changes in river depth may cause health and safety issues</li> </ul>



## BIRD'S NEST RESOURCES CORPORATION

P.O. Box No. 13866, ORTIGAS CENTRAL POST OFFICE BUILDING, F. ORTIGAS AVENUE ORTIGAS CENTER PASIG CITY, PHILIPPINES 1605
Tel. No. (+63) 916-688-8317; (632)706-5980

BNRC aspires to become one of the Philippines leading natural resources development company. The company engages in the exploration, development, and operation of mineral and quarry resources around the country.

The company has filed applications for Mining Permits, Exploration Permits and Government Seabed Quarry Permit from pertinent Government Offices.



## MOMPONG RIVER RESTORATION PROJECT

The main goal of the project is to mitigate flooding extent in the area by increasing the capacity of the river to carry more volume of water by restoring the natural configuration of the river by precision dredging and mechanical excavation.

Sharing the vision for sustainable development, BNRC promotes the implementation of the best available techniques and best environmental practices, as well as the generation of employment and economic growth in both urban and rural areas. In cooperation with the local and national government, the company ensures that the benefits of the project has a positive impact on the natural environment and social community.

PROJECT NAME:	Mompong River Restoration and Construction of Crushing Plant
PROPONENT	Bird's Nest Resources Corporation
PROJECT TYPE	River Dredging and Mechanical Excavation
LOCATION	Municipality of Sablayan, Occidental Mindoro
TARGET DREDGING PERIOD	5 years

## 2500m<sup>a</sup> Cutter Suction Dredger





#### PROOF OF INTERVIEW CONDUCTED

NAME	OFFICE/ BARANGAY	CONTACT NUMBER	SIGNATURE
Robondo V. Parag	Tuban	09070991021	my
ORNA M. BANDOLIN	TUBAN	0935 9745601	Jan Spl C
ELIZALDE G. MAR	A TUBAN	09532955899	Cyton
ROY L TIBAYAN	time AN	09128936111	12/1
Romme/ B B Muce	1 1	09214674314/	100
Welly T Garlit	TuBAN	09366743 794	
A CYON 90 Price	tubas	69474384189	aff.
JOENEN L. Justo	TUBON	09169858243	Acto
Ma Tuesa C. Dans	Tulon (BHW)	09304282341	Jefues
Elsa L. Manzani	Tuban (MW)	09461652192	denangani
Adelaida C. Percz	Tuban (BHW)	09 500759408	afering
		(09974233052) BHW. Prus. Onii)	

## ENVIRONMENTAL IMPACT ASSESSMENT | MOMPOG RIVER DREDGING AND CONSTRUCTION OF CRUSHING PLANT

#### PROOF OF INTERVIEW CONDUCTED

NAME	OFFICE/ BARANGAY	CONTACT NUMBER	SIGNATURE
HONIEZA R. MASE	STA LUGA	09578+54168	Jan
JESUS Q AGUILAR	STA LUCIA	0948874552	Alm
DEXTER R. LASTRA	afes weis	09168926269	(Ilai to
RECENALDED, XIANS	Ha lung	09755283916	A
Rufis & Lastra	Sta Laura	0997 487 0014	of all
Ama 7. Pajemno	Stalvia BHW	0906 903 8293	Piemur
Hon P. Jastra	Statucia BHW	09059116661	Flastra
Celoria H. Raminez	Str lucia BHW	09031973650	Haynes

13

#### PROOF OF INTERVIEW CONDUCTED

NAME	OFFICE/ BARANGAY	CONTACT NUMBER	SIGNATURE
Robert E. Narciso	SANNICOLAS	09354882445	72
MARK PHILL MARTHER	SAN NICOLAS	09619446200	33
BETTY C GAMAR	CXH NICOUXS	09532956078	
MAYN B ROJA	SEN HICOLAS	04847 13040	SAZ-
Gloria G Gnada (BHW)	Som Nicolas	09359349073	N
Fena j. samar/BHN	Sm Nicolas	09264364908	3/8
analisa A. Cuesta	San Nicolas		A. Cuerta

#### PROOF OF INTERVIEW CONDUCTED

NAME	OFFICE/ BARANGAY	CONTACT NUMBER	SIGNATURE
Tan Jimmy	Maliobry PB	0921 081 9962	#
Rico day samente	Malistone Kay	0975 6580 440	Coarnes &
TEDDORICO C. SAMONTE	malisbond kag	0975 1165 096	1 mt
NONTO F. DAVA	MALISAONG Ray	09168795390	A
Rogael M. SamouTe	- Malisbong kag	09386328897	Bayer!
Milagros M Barmen	Malisbong		Auren
Gualdine D. Poblete	Malisbory	09500703481	1
bedg V. Polisporo	Malisbong	09067775600	Holison
JEFFRY P. VILLA	Malisbon	0906 93 79 155	A
ARMANDO B DALUGOUC	Marispene	6916 880 -9868	Security 1

## **ANNEX C**

Perception Survey Questionnaire

SOCIOEC	ONOMIC AND F	PERCE	PTION SURVEY	FORM	SOCIOECONOMIC AND PERCEPTION SURVEY FORM
1.0 GEOGRAPH	CAL CONTEXT	Γ			4.3 Saan gawa ang inyong bahay?
1.1 Barangay		1.2			☐ Purong kahoy/kawayan
Barangay		Sitio			☐ Purong semento☐ Iba't-ibang materyales (tulda, yero,plastic, at iba pa)
1.3 Munisipyo			stanya sa og River		☐ Magkahalong kahoy at semento
		(km)- E	stimate		☐ Magkahalong iba't-ibang materyales at kahoy
					□ Nipa  4.4 Facilities sa bahay
2.0 DEMOGRA	PHIC INFORMA	ATION			Toilet facilities
2.1 Pangalan?					Electricity
	APELYIDO	١	PANGALAN	MI	Source of drinking water
2.2 Kasarian					Source of domestic water Predominant cooking fuel
□ Lalake □	Babae				Treadminant cooking laci
2.3 Katutubo					Mga Pagpipilian:
			angan 🗆 Bisa	aya	Para sa toilet facilities:
	ukoy:				1–none 2–open pit 3–close pit
2.4 Wika	U				Para sa electricity: 1-available 2-none
☐ Tagalog ☐ ☐ Iba pa, pakitu			-		Para sa source of drinking water:
2.5 Edad noon					1–Rain water 2–Piped water 3-Deep well 4-Spring 5- Mineral/Bottled Para sa source of domestic water:
2.6	g nunng kaaraw	vali r	<del></del>		1–Rain water 2–Piped water 3-Deep well 4-Spring
2.7 Civil Status					Para sa predominantly used cooking fuel
☐ Single ☐ K		Bvudo	☐ Hiwalav		1- Fuelwood 2-Kerosene 3-LPG 4- Electric
☐ Iba pa, pakitul	-		-	_	4.5 Sino po ang pangunahing nagtatrabaho sa inyong
2.7 Ilan po kayo					pamamahay?
2.8 Relihiyon		.,			□ Asawang lalaki
☐ Roman Catho	lic □ Protestar	nte 🗆	Baptist		☐ Asawang babae
☐ Iglesia ni Crist			•		☐ Anak na lalaki☐ Anak na babae
☐ Iba pa, pakitul	юу:			_	☐ Lalaking kamag-anak
2.9 Pinakamata	as na Natapos	sa Pag	-aaral		□ Babaeng kamag-anak
□ None □ Ele	mentary   Hig	h Schoo	ol		□ lba pa, pakitukoy:
□ College □ I	Post-Graduate				4.6 Magkano po sa tingin niyo ang <u>buwanang kita</u> sa inyong pamamahay?
3.0 MIGRATION	SETTLEMENT	HISTOR	RY		4.7 Magkano po sa tingin niyo ang <u>buwanang gastos</u> sa inyong
3.1 llang taon na	no kayona naka	atira ca ir	nyong barangay?	)	pamamahay?
5.1 hang taon na	po kayong naka	1111 30 II	nyong barangay		
3.2 Kung kayo p	o ay dayo, ano	ng lugar	r po ang inyong	pinagmulan?	4.8 Ilan po ang myembro ng pamilya na may edad:
					0-14 years old?
4.0 HOUSEHO	I D/COMMUNIT	.A. C.II.	AD A CTEDISTIC	e HEALTH	15-64 years old? 65 years old and above?
SYSTEMS, AND				S, HEALTH	4.9 Anu-ano ang limang karaniwang sakit ng mga myembro ng
4.1 Ano po ang	ivong pangur	nahing	pinagkakakitaa	n? Pwedena	pamilya ?
sumagot ng mai			ļg		
· `	trabaho				
	r Pribado/Gobye ctual na Trabaho				4.10 May namatay na po ba sa inyong pamilya sa nakalipas na
	ida/ Paglalako	0 /3ub -c	ontractor		limang taon? Ano po ang naging sanhi?
□ Pangin					
□ Pagsas □ Negosy	aka o ng Pamilya				
□ Remitta	ances galing OF		√ na Kamag-anal		4.44 Soon keye numurunta unana maanaka usulta S
□ Iba pa,	pakitukoy:				4.11 Saan kayo pumupunta upang magpakonsulta?
4.2 Paano niy	o po ilalaraw	an ang	g inyong baha	y at lupang	□ Barangay Health Center □ Municipal/Rural Health Center
tinitirikan nito? Pag-mamay-	ari ng hahay				☐ Provincial Hospital
-	an ng banay ari ng lupa na tir	nitirikan	ng bahav		□ Private Clinic
-	pagmamay-ari				□ Private Hospital □ Albularyo
	, ,		Squatter		☐ Iba pa. pakitukov



## ENVIRONMENTAL IMPACT ASSESSMENT | MOMPOG RIVER DREDGING AND CONSTRUCTION OF CRUSHING PLANT

SOCIOECONOMIC AND	PERCEPTION SURVEY FORM	S	OCIOE	CONOMIC	C AND PERC	EPTION SU	RVEY FORI	М
	vang gamot ang iniinom ng bawat	5.4 Ano p	oo sa ti		o ang potens			
4.12 Saan niyo binibili ang mg			Epek Dago Pagk Iba p	tto sa kalid dag na bas sawala ng p a, pakituko nga kasalu	ilusugan at sa ad ng hangin ura pangkabuhay: py: kuyang isyu ng pamamaha	, tubig at lupa an , problema,		—— in na
□ Pagtatapon sa ilog □ Iba pa, pakitukoy  4.14 Mayroon po bang mga pi sa inyong barangay sa	y ( gaano kadalas sa isang linggo?)  ribadong organisasyon tumutulong usaping kalusugan, edukasyon, o ang mga tulong/ programa ang			akikinita n nunidad?	nong magigi	ng pinakam	alaking pro	blema
ipinapatupad nila? Kung mayro Organisasyon	mga ma	amama		nakabubuti k arangay ang ng Plant?				
		"10". Bi "0" kun 1	lugan g hind	ang "10" l i ito makal 2 7	g kasalukuya kung higit na bubuti. 3 8	a makabubu 4 9	mula "0 hai iti ang proy 5 10	nggang /ekto a
5.0 PERCEPTIONS ON THE PRO								
5.1 Alam niyo po ba ang pinapla Dredging and Construction of Resources corporation?  □ Oo □ Hindi								
nanggaling ang impormasyon u  Kapitbahay Barangay Council/Office Mga Information, Educe activities ng proponent Media (Radyo, Dyaryo	cial ation and Communication (IEC) Telebisyon, etc.)			MAR	AMING SA	LAMAT PO	)!	
5.3 Ano po sa tingin ninyo a proyekto?	ang benepisyo na maidudulot ng							

Green Dev

Oportunidad sa trabaho

Dagdag na dami ng turista

Maiiwasan ang pagbaha

Iba pa, pakitukoy:

Pangkabuhayan at oportunidad sa negosyo

Mapapabuti ang mga daan at mga imprastruktura

# **ANNEX D**

IEC & Household Perception Survey
Photo Documentation











