



March 22, 2023

MEMORANDUM

FOR : The Regional Executive Director

THRU : The OIC, PENR Officer

FROM : The CENR Officer

SUBJECT : **SUBMISSION OF PROPOSAL FOR BAMBOO NURSERY AND PLANTATION IN THE OIL SPILL-AFFECTED BARANGAYS IN THE MUNICIPALITIES OF NAUJAN AND POLA, ORIENTAL MINDORO**

Respectfully submitting the proposal for Bamboo Nursery and Plantation in the oil spill-affected barangays in the Municipalities of Naujan and Pola, Oriental Mindoro.

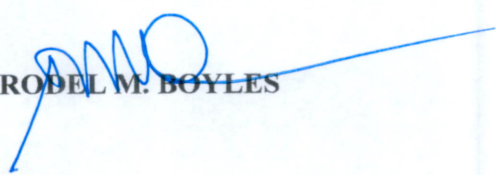
The total project cost is ₱ 8,461,200.00 which shall be implemented for three (3) years. A total of 660 persons (30 persons in each 22 affected barangays) shall benefit from the project. Likewise, about 67,320 bamboos shall be planted and maintained in the 330-ha bamboo plantation (15 ha/ barangays) with 7m x 7m spacing (204 bamboos/ ha). The bamboo to be produced and planted includes Bayog (*Bambusa merrilliana* (Elmer) Rojo & Roxas), Bolo (*Gigantochloa levis* (Blanco) Merr.), Kawayang Tinik (*Bambusa blumeana* J.A. & J.H. Schultes) and Taywanak/ Kawayan Kiling (*Bambusa vulgaris* Schrad.).

Bamboo has a potential market to the Municipality of Gloria, Oriental Mindoro, which has a processing plant for bamboo products. The project is part of the rehabilitation and recovery program for the aforementioned municipalities. This shall be beneficial and profitable to the oil spill-affected beneficiaries in the long term.

Further, the established bamboo plantations shall be developed into a Community Bamboo Eco-Parks which has ecotourism potential and seen as another sustainable source of income to the affected barangays. The details of the proposed activity/ project shall be discussed to the respective Municipal and Barangay LGUs.

Attached are the concept paper and the corresponding Work and Financial Plan (WFP).

For information, evaluation and consideration.


RODEL M. BOYLES



BAMBOO NURSERY AND PLANTATION ESTABLISHMENT
*(PROPOSED REHABILITATION AND RECOVERY PROGRAM FOR THE 22 OIL
SPILL-AFFECTED BARANGAYS IN THE MUNICIPALITIES OF NAUJAN AND
POLA, ORIENTAL MINDORO)*

The Bamboo Nursery and Plantation is a proposed Rehabilitation and Recovery Program of the Department of Environment and Natural Resources (DENR) for the 22 coastal barangays in the Municipalities of Naujan and Pola, Oriental Mindoro affected by the MT Princess Empress oil spill tragedy. This aims to provide financial assistance to the qualified individuals identified by the Municipal and Barangay Local Government Units (LGUs) while producing quality bamboo culms/ propagules for the rehabilitation and recovery of the 330 ha of lands. The total project cost is ₱ 8,461,200.00 which shall be implemented for three (3) years (Year 1 = ₱ 5,161,200.00; Year 2 = ₱ 1,650,000.00; Year 3 = ₱ 1,650,000.00).

The **1st Year Activities of Bamboo Nursery and Plantation** include the following:

1. Establishment of Bamboo nursery (1st-2nd Quarter)
 - a. Nursery establishment and Operations;
 - 1) Select nursery site
 - 2) Prepare the nursery site
 - 3) Construct nursery infrastructure and facilities such as seedbeds, pot beds, germination shed, potting shed, water storage, composting area, fencing, road ' network, and bunkhouse
 - b. Seedling production
 - c. Care and maintenance of seedlings
 - Watering
 - Weeding
 - Shading
 - Root pruning
 - Fertilizer application
 - Protection from pests and diseases
 - d. Hardening-off seedlings
 - e. Grading and classifying the seedlings
2. Site Preparation and Planting Including Construction of Firebreaks (3rd Quarter); and
3. 1st Cycle Maintenance and Protection (4th Quarter)
 - a. Ring weeding
 - b. Patrol works (Monitoring of Perimeter and other Wildlife Damage)
 - c. Application of fertilizer
 - d. Replanting of bamboo culms/ propagules.

Meanwhile, the **2nd and 3rd Year Maintenance and Protection Activities of Bamboo Nursery and Plantation** include the following:

1. Ring weeding/ strip brushing;
2. Procurement and application of organic fertilizer;
3. Replanting activity;
4. Establishment/ maintenance of fire breaks;
5. Foot patrolling (Monitoring of Perimeter and other Wildlife Damage); and
6. Watering.



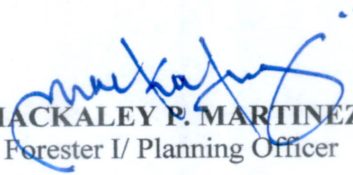
A total of 660 persons (30 persons in each 22 affected barangays) shall benefit from the project. About 67,320 bamboos shall be planted and maintained in the 330 ha bamboo plantation (15 ha/ barangays) with 7m x 7m spacing (204 bamboos/ ha). The bamboo to be produced and planted includes Bayog (*Bambusa merrilliana* (Elmer) Rojo & Roxas), Bolo (*Gigantochloa levis* (Blanco) Merr.), Kawayang Tinik (*Bambusa blumeana* J.A. & J.H. Schultes) and Taywanak/ Kawayan Kiling (*Bambusa vulgaris* Schrad.).

Bamboo is a group of perennial evergreen belonging to the grass family – Poaceae. Bamboos are some of the fastest-growing plants in the world. It has a potential market to the Municipality of Gloria, Oriental Mindoro, which has a processing plant for bamboo products. Dubbed as the “wise man’s timber”, bamboos are notable for its economic significance mainly used as a renewable and versatile material. Its products can be classified into poles, stumps, sawali, spits, sticks, boards, handicraft, furniture and ready-to-cook/ eat shoots. Given the wide range of opportunities, the Bamboo Nursery and Plantation in the Municipalities of Naujan and Pola, Oriental Mindoro is both beneficial and profitable to the oil spill-affected beneficiaries in the long term.

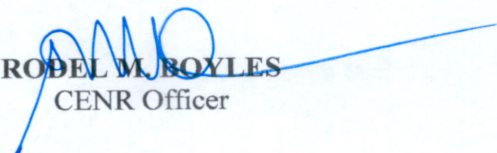
Further, the established bamboo plantations shall be developed into a Community Bamboo Eco-Parks which has ecotourism potential and seen as another sustainable source of income to the affected barangays. The details of the proposed activity/ project shall be discussed to the respective Municipal and Barangay LGUs.

Attached is the corresponding Work and Financial Plan of Bamboo Nursery and Plantation.

Prepared by:


MACKALEY P. MARTINEZ
Forester I/ Planning Officer

Reviewed and Approved by:


RODEL M. BOYLES
CENR Officer

Proposed by: DENR-CENRO Socorro, Oriental Mindoro

Proposed by: DENR-CENRO SOCORO, Oriental Mindoro														
PROGRAM / ACTIVITY / PROJECT	Unit (P)	PERFORMANCE INDICATORS	PROVINCE/ MUNICIPALITY	2023 Physical Performance Targets				2023 Financial Performance Targets						
				Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	
				Estimate (3)	Estimate (4)	Estimate (5)	Estimate (6)	7= (3+4+5+6)	Estimate (8)	Estimate (9)	Estimate (10)	Estimate (11)	12= (8+9+10+11)	
CASH-FOR-WORK ACTIVITY		660 beneficiaries (30 persons in each 22 affected coastal barangays) 15 ha/ barangay							774,180	2,682,020	3,245,000		1,760,000	8,461,200
Year 1									774,180	1,582,020	2,145,000		860,000	5,161,200
Year 2										550,000	550,000		550,000	1,650,000
Year 3										550,000	550,000		550,000	1,650,000
Year 1									774,180	1,582,020	2,145,000		860,000	5,161,200
Establishment of agroforestry nursery (1st and 2nd Quarter)	35/ propagules	Planting materials/ propagules		16,830	50,490			67,320	774,180	1,582,020				2,356,200
1. Nursery establishment and Operations		produced with 10% mortality allowance (no.)	Nauuan, Oriental Mindoro	8,415	25,245			33,660	387,090	791,010				1,178,100
a. Select nursery site														
b. Prepare the nursery site		- Barangay Nag-Iba I		765	2,295			3,060	35,190	71,910				107,100
c. construct nursery infrastructure and facilities such as seedbeds, polybeds, germination shed, potting shed, water storage, composting area, fencing, road'		- Barangay San Antonio		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Estrella		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Sta. Cruz		765	2,295			3,060	35,190	71,910				107,100
2. Seedling production		- Barangay Kalinisan		765	2,295			3,060	35,190	71,910				107,100
		- Barangay San Jose		765	2,295			3,060	35,190	71,910				107,100
3. Care and maintenance of seedlings		- Barangay Melgar A		765	2,295			3,060	35,190	71,910				107,100
- Weeding		- Barangay Melgar B		765	2,295			3,060	35,190	71,910				107,100
- Shading		- Barangay Montemayor		765	2,295			3,060	35,190	71,910				107,100
- Root pruning		- Barangay Hererra		765	2,295			3,060	35,190	71,910				107,100
- Fertilizer application		- Barangay Masaguing		765	2,295			3,060	35,190	71,910				107,100
4. Protection from pests and diseases			Pola, Oriental Mindoro	8,415	25,245			33,660	387,090	791,010				1,178,100
5. Grading and classifying the seedlings														
		- Barangay Misong		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Tagumpey		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Puting Cacao		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Tigulhan		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Bayanan		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Zone I		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Zone II		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Batuhan		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Calima		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Buhay na Tubig		765	2,295			3,060	35,190	71,910				107,100
		- Barangay Bakawan		765	2,295			3,060	35,190	71,910				107,100
Site Preparation and Planting Including Construction of Firebreaks (3rd Quarter)	6,500/ ha	Site prepared and planted (no)							-	-	2,145,000		-	2,145,000
1. Site Prepared (ha)	4,500/ ha	Site prepared and planted (no)				330		330			1,485,000			1,485,000
			Nauuan, Oriental Mindoro			165		165			742,500			742,500
		- Barangay Nag-Iba I				15		15			67,500			67,500
		- Barangay San Antonio				15		15			67,500			67,500
		- Barangay Estrella				15		15			67,500			67,500
		- Barangay Sta. Cruz				15		15			67,500			67,500
		- Barangay Kalinisan				15		15			67,500			67,500
		- Barangay San Jose				15		15			67,500			67,500
		- Barangay Melgar A				15		15			67,500			67,500
		- Barangay Melgar B				15		15			67,500			67,500
		- Barangay Montemayor				15		15			67,500			67,500
		- Barangay Hererra				15		15			67,500			67,500
		- Barangay Masaguing				15		15			67,500			67,500

PROGRAM / ACTIVITY / PROJECT	Unit (P)	PERFORMANCE INDICATORS	PROVINCE/ MUNICIPALITY	2023 Physical Performance Targets					2023 Financial Performance Targets				
				Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL
				Estimate (3)	Estimate (4)	Estimate (5)	Estimate (6)	7= (3+4+5+6)	Estimate (8)	Estimate (9)	Estimate (10)	Estimate (11)	12= (8+9+10+11)
			Pola, Oriental Mindoro	165		165		165			330,000		330,000
		- Barangay Misiong				15		15			30,000		30,000
		- Barangay Tagumpay				15		15			30,000		30,000
		- Barangay Puling Cacao				15		15			30,000		30,000
		- Barangay Tiguihan				15		15			30,000		30,000
		- Barangay Bayanan				15		15			30,000		30,000
		- Barangay Zone I				15		15			30,000		30,000
		- Barangay Zone II				15		15			30,000		30,000
		- Barangay Batuhan				15		15			30,000		30,000
		- Barangay Calima				15		15			30,000		30,000
		- Barangay Buhay na Tubig				15		15			30,000		30,000
		- Barangay Bakawan				15		15			30,000		30,000
1st Cycle Maintenance and Protection (4th Quarter)	2,000/ ha	Area effectively maintained and protected with at least 85% survival rate										660,000	660,000
Maintenance and Protection of Plantation		Site prepared and planted (no)											
1. Ring weeding	(204 bamboo												
2. Patrol works (Monitoring of Perimeter and other Wildlife	propagules/ ha)												
3. Application of fertilizer													
4. Replanting of bamboo culms/ propagules			Naulan, Oriental Mindoro				165	165				330,000	330,000
		- Barangay Nag-Iba I				15		15				30,000	30,000
		- Barangay San Antonio				15		15				30,000	30,000
		- Barangay Estrella				15		15				30,000	30,000
		- Barangay Sia Cruz				15		15				30,000	30,000
		- Barangay Kalinisan				15		15				30,000	30,000
		- Barangay San Jose				15		15				30,000	30,000
		- Barangay Melgar A				15		15				30,000	30,000
		- Barangay Melgar B				15		15				30,000	30,000
		- Barangay Montemayor				15		15				30,000	30,000
		- Barangay Hererra				15		15				30,000	30,000
		- Barangay Masaguling				15		15				30,000	30,000
			Pola, Oriental Mindoro				165	165				330,000	330,000
		- Barangay Misiong				15		15				30,000	30,000
		- Barangay Tagumpay				15		15				30,000	30,000
		- Barangay Puling Cacao				15		15				30,000	30,000
		- Barangay Tiguihan				15		15				30,000	30,000
		- Barangay Bayanan				15		15				30,000	30,000
		- Barangay Zone I				15		15				30,000	30,000
		- Barangay Zone II				15		15				30,000	30,000
		- Barangay Batuhan				15		15				30,000	30,000
		- Barangay Calima				15		15				30,000	30,000
		- Barangay Buhay na Tubig				15		15				30,000	30,000
		- Barangay Bakawan				15		15				30,000	30,000
Year 2	5,000/ ha	Area effectively maintained and protected with at least 85% survival rate		330	330	330	330	330			550,000	550,000	1,650,000
Maintenance and Protection of Plantation													
1. Ring weeding/ strip brushing	(204 bamboo												
2. Procurement and application of organic fertilizer	propagules/ ha)		Naulan, Oriental Mindoro	165	165	165	165	165			275,000	275,000	825,000
3. Replanting activity		- Barangay Nag-Iba I		15	15	15	15	15			25,000	25,000	75,000
4. Establishment/ maintenance of fire breaks		- Barangay San Antonio		15	15	15	15	15			25,000	25,000	75,000
5. Foor patrolling (Monitoring of Perimeter and other Wildlife Damage)		- Barangay Estrella		15	15	15	15	15			25,000	25,000	75,000
6. Watering		- Barangay Sia Cruz		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Kalinisan		15	15	15	15	15			25,000	25,000	75,000
		- Barangay San Jose		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Melgar A		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Melgar B		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Montemayor		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Hererra		15	15	15	15	15			25,000	25,000	75,000
		- Barangay Masaguling		15	15	15	15	15			25,000	25,000	75,000

