## 1. Nursery Operations & Maintenance Works

For the month of August, we have a total seedling stock of **36,797** which comprises the seedling stock balance as of July **31** and the **685** assorted forest and fruit-bearing seedlings produced during the period. A total of 5,533 assorted seedlings and bamboo propagules were disposed: 2,000 during the conduct of Farmers' Congress at the Municipalities of Mallig and Echague; and 3,533 seedlings and bamboo propagules provided to requesting constituents. Further, a total of 657 bamboo propagules were considered overgrown hence were planted at the nursery. However, 7.00% mortality rate was incurred hence a remaining balance of **26,746** as of August **31**, 2018.

Inventory of Seedlings at the Provincial Nursery for the month of August 2018

Particulars	Previous Stock Balance (As of July 31, 2018)	Procured & Produced (August 2018)	Total	Disposed	Mortality	Over grown	Remaining Stock Balance (As of August 31, 2018)
Forest Tree Seedlings	20,645	650	21,295	2,110	1,539	-	17,646
Fruit Tree Seedlings	11,094	35	11,129	3,423	503	-	7,111
Bamboo Propagules	4,373	-	4,373	-	398	1,986	1,989





Farmers' Congress at Mallig, Isabela





Farmers' Congress at Echague, Isabela

From the **26,746** seedling stock as of August **31**, a total of **995** assorted forest and fruit-bearing tree seedlings were disposed to requesting constituents for the month of September. However, **6%** mortality rate was incurred specifically caused by Typhoon Ompong hence a remaining balance of **23,981** as of September **31**, 2018. The Office of the Provincial Agriculturist has also turned over a total of **3,303** Tamarind seedlings to this Office.

Inventory of Seedlings at the Provincial Nursery for the month of September 2018

Particulars	Previous Stock Balance (As of August 31, 2018)	Procured & Produced (September 2018)	Total	Disposed	Mortality	Over grown	Remaining Stock Balance (As of September 30, 2018
Forest Tree Seedlings	17,646	-	17,646	785	1,409	-	15,452
Fruit Tree Seedlings	7,111	-	7,111	210	361	_	6,540
Bamboo Propagules	1,989	-	1,989	-	-	-	1,989

#### 2. Forest Protection and Law Enforcement

#### a. Manning of Checkpoints

The ENR Office maintains eight (8) monitoring checkpoints located at strategic places and are manned by ENR personnel & ISEP-TF Operatives on a 24/7 basis to monitor the movement of forest products within the province. The following activities were also undertaken this reporting period:

- Conducted surveillance, foot and mobile patrol on the assigned area of jurisdictions;
- 2. Acted and responded on tipster (SMS) reports regarding violation of PD 705; and
- 3. Continuous operation and maintenance of Sitio Lagis Nursery and Reforestation Areas along IDRRIP by ISEP-TF Operatives assigned thereat.

For the month of August, a total of **104 pieces** of different species of CHW (Lumber and Flitches) with a total volume of **One Hundred Forty (140.00) board feet** and a total of **24 pieces** of Narra Flitches with a volume of **Three Thousand Five Hundred Sixteen (3,516.00) board feet** were apprehended in the conduct of forestry laws and enforcement activities thru the combine efforts of PGI-ENRO, ISEP-TF and partner agencies.

Further, for the month of September, a total of **55 pieces** of different species of CHW (Lumber and Flitches) with a total volume of **One Thousand Seventy Two (1,072.00)** board feet and a total of **32 pieces** of Narra Flitches with a volume of **Nine Hundred Twenty One and 92/100 (921.92) board feet** were apprehended. These apprehended lumbers & flitches are under the custody of PGI-ENRO.

#### b. Donation of Forest Products

For the month of August, a total of **60 pieces** of Common Hardwood (CHW) species with corresponding volume of **One Thousand Five Hundred Twenty Four and 66/100** 

(1,524.66) were utilized for the establishment of platforms and frames. On the other hand, for the month of September, 24 pieces of Common Hardwood (CHW) species with corresponding volume of Five Hundred One and 99/100 (501.99) board feet were donated to Naganacan-Villanueva National High School, Sta. Maria, Isabela.

#### 3. Climate Change Mitigation/Adaptation & Disaster Risk Reduction Management

In the continuous preparation and implementation of the different activities under Climate Change Mitigation/Adaptation & Disaster Risk Reduction Management program, this office conducted series of coordination to the different municipal counterparts.

#### a. Reforestation / Agro-Reforestation Establishment and Watershed Rehabilitation

In coordination with the Local Government Unit of Quezon, Isabela thru their Municipal ENR Officer, full implementation of the Agro-Reforestation Project was made upon confirmation that the fencing activity and other site preparation activities in the project area was already completed.

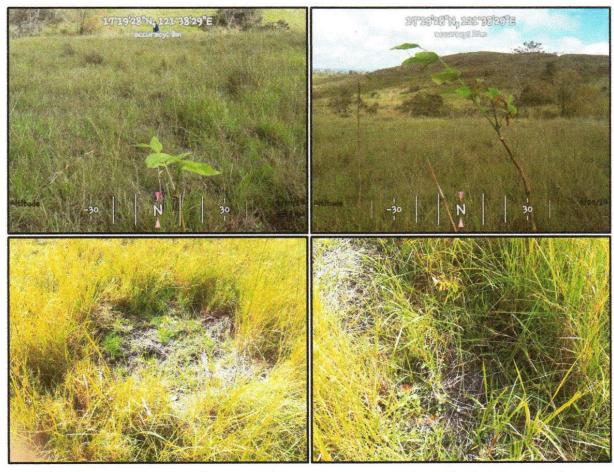
As scheduled, the tree planting activity was conducted on the 20<sup>th</sup> of August 2018. The activity started at 7:00 in the morning thru a briefing led by the Municipal ENR Officer. The participants then proceeded to their area of assignment and the undersigned together with MENRO Staff provided assistance. With an area of 2.5 hectares, we were able to plant 2,068 seedlings of narra, mahogany and mangga. The activity was actively participated by the LGU Quezon Staff led by the Honorable Mayor, representatives from all Barangays, SK Federation, Senior Citizen, DepEd, BFP and PNP. As committed, the maintenance and protection activities shall be done by the Local Government Unit of Quezon and monitoring on the survival of the plantation shall be conducted monthly by this Office.



After Typhoon Ompong, this Office conducted post-typhoon assessment at the established Agro-Reforestation Project plantation on September 20, 2018. With less than a week after said typhoon, the plantation is still in the process of recovery hence its survival rate cannot be estimated yet. However, the manga seedlings showed resiliency as indicated by the healthy foliage. The narra and mahogany seedlings on the other hand were very much affected by the strong winds that made the seedlings almost fell horizontally to the ground. Despite this, the seedlings are on their way to recovery as indicated by the presence of new leaves and shoots. As part of the counterpart of the LGU, the Municipal ENR Office committed that staking and brushing shall be done to assist the faster recovery of the seedlings. Follow-up assessment shall be conducted next month of October 2018 when full recovery is expected and survival rate shall be estimated.



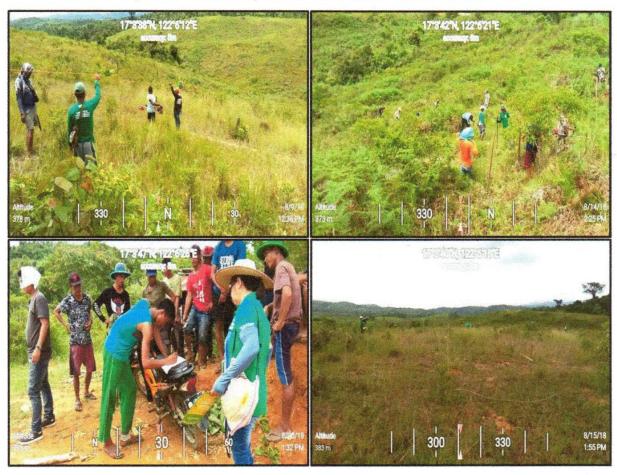
The healthy foliage of Manga seedlings less than a week after Typhoon Ompong showed its resiliency.



The Mahogany and Narra seedlings are on their way to recovery as indicated by the emergence of new shoots.

### b. Reforestation and Watershed Rehabilitation Project

This Office spearheaded the site preparation activities for the Fifty (50) hectares Reforestation and Watershed Rehabilitation Project at Sitio Disipun, Sindon Bayabo, City of Ilagan. The activities conducted by the concerned ENR personnel and ISEP-TF Operatives include brushing, hole-digging, staking and fertilizer application. Considering the area, manpower augmentation was made thru service contract of One Hundred Eleven (111) farmer labourers coming from the vicinity barangays of the City of Ilagan and San Mariano. For the full implementation of the project, tree planting is tentatively scheduled on the month of September to be led by the Provincial Government of Isabela.



#### c. Riparian Development Project

To ensure maintenance is being implemented by the partner LGU and to monitor growth and survival of the established riparian project at Sto. Tomas, Isabela, this Office conducted site inspection of the riparian plantations at Barangays Canyugan Norte, Ammugauan and San Rafael Abajo. The activity was conducted together with the Municipal Engineer and as a result, we were able to validate 98% survival rate of the plantation one (1) month after its establishment last July 19, 2018. The findings were presented to the Municipal Administrator and we expressed our recognition to the Barangay Officials who performed protection and maintenance of the plantation. As to the 2% mortality, replanting was initially scheduled to be conducted on the month of September.



The Riparian plantation at Sto. Tomas one-month after its establishment.

Prior to the second monitoring activity, Typhoon Ompong brought damage to the barely **two-months-old** riparian project on September 14-15. With the aim to assess the damages of the said typhoon to the planted bamboo and to identify activities to assist in the recovery, an inspection was conducted together with the staff from the LGU – Municipal ENR Office and Barangay officials. As a result, the following were observed:

- 1. Generally, the plantation has marked an approximate overall 95% survival rate;
- Despite that the plantation is still considered as newly-established, the purpose of riparian
  vegetation as a natural agent in decreasing soil erosion and river siltation was already
  evident with the presence of soil and debris build-up in every propagules as seen visibly in
  strips;
- Particularly at Barangays San Rafael Abajo and Canyugan Norte, the bamboo propagules
  resiliently survived the strong winds and the floodwater current as the propagules did not
  fell to the ground nor tumbled down by debris and soil;
- 4. Specifically observed at Barangay Ammugauan, the propagules which were tumbled down by debris are already in their recovery stage as manifested by emergence of new shoots; however, an estimated 50meter-length strip of bamboo planted in the sandy-soil were washed away by the floodwater.



The Riparian plantations at Barangays San Rafael Abajo and Canyugan Norte, Sto. Tomas showed high survival rate after Typhoon Ompong.



The Riparian plantation at Barangay Ammugauan where most of the propagules were tumbled-down by debris is now on its way to recovery.

With the observations made, this Office shall schedule the conduct of replanting in replacement of the 5% mortality. The barangay officials were also advised that as part of their commitment in the maintenance of the project, a clean-up activity should be made to free the propagules from the debris. Nevertheless, the high survival rate was also attributed to the efforts of the Barangays in assuring the security of the plantation from animals particularly cows and carabaos.

On the other hand, personnel of this Office coordinated with Municipal LGU of Echague thru their MENR Officer regarding the riparian establishment project to be implemented within their jurisdiction. The team of ENR Office and MENR Office personnel conducted survey and ground inspection of the project area and discussed how to implement the project efficiently and effectively. It was decided by the team to conduct IEC activity first with barangay officials concern prior to project start. The scheduled IEC will be on October 02, 2018.



## d. Mangrove Forest Rehabilitation Project

For this year 2018, the Municipality of Divilacan was identified as recipient of this project. In coordination with the LGU thru their Municipal ENR Officer, identification of their proposed area for rehabilitation was conducted which were located at Barangays Dipudo and Dimasalansan. The four (4) hectares mangrove rehabilitation project has an approved total cost of Php315,700.00. With the aim to also involve the Dumagats in the project area, it was agreed upon that the mangrove seedling requirements shall be bought from them. Further, the job contract (pakyaw) to conduct the activities on site preparation, maintenance and protection was also awarded to the Divilacan Agta Rattan Gatherers Association (DARAGAT).

The tree planting was then held on August 17, 2018. As contracted, the activities were done by the members of the Divilacan Agta Rattan Gatherers Association (DARAGAT) with the supervision of the Municipal ENR Office of Divilacan. A total of 11,000 seedlings and propagules of assorted mangrove species were planted.







On September 10-11, 2018, personnel of this Office conducted site inspection of the planted areas. A courtesy call was made to the Hon. Mayor Venturito C. Bulan and upon presentation of the purpose; he extended his gratitude for the project and instructed the Municipal ENR Officer For. Arturo V. Umengan to assist us in the conduct of site inspection.

From Barangay Dimapula, the personnel travelled at Barangays Dipudo and Dimasalansan by boat. Considering the timing of low tide and high tide, we were only able to enter parts of the project area where the water level is still low. On the other hand, areas which were already in high tide were observed from the boat. The planted areas with a total of 4-hectares were previously destructed due to typhoons and strong waves hence proposed for its rehabilitation. And with less than a month from the date of planting, this Office has affirmed an estimated **survival rate of 97%**. This can be attributed to the location of the project site which is situated in the middle zone of the mangrove area hence protected from waves. To cope with the 3% mortality, the members of DARAGAT who were with us took chance to replant some *bakawan sps* simultaneous with the inspection activity. Monitoring of the project shall be conducted by the LGU-MENRO and report shall be submitted to the ENR Office.





## 4. Ecosystems Management

#### a. Pollution Control Measures

Recognizing environmental consequences of developments to ecosystems management, the provincial government has sustained implementation of pollution control measures thru establishment of carbon sink plantations.

This Office continued its activities on the identification and assessment of possible areas for carbon sink plantation. For this month, proposed site located at Barangay Carmencita, Delfin Albano was identified and assessed together with LGU-MPDO and DENR-Cabagan representatives.



## b. Clean-up Drives

In adherence to the devolved functions of Provincial LGUs in the implementation of other environmental laws such as the Philippine Clean Air and Clean Water Act, clean-up drive activity along rivers and ocean was lined up for implementation. For the month of August, the activity was coordinated with the Local Government Units of Cabagan and Cabatuan, specifically at Barangays Catabayungan and Saranay respectively.



#### 5. Organic Fertilizer Production

For the month of August, the Vermi-composting Facility was able to produced Five Thousand Three Hundred Forty (5,340) kilograms of premium organic fertilizer and for the month of September, Eight Hundred Forty (840) kilograms was produced.

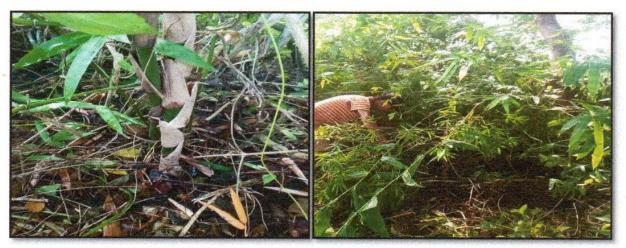
## 6. Rehabilitation of Mineral-Extracted/Mined-out Sites

To sustain and maintain an ecological balance between resource utilization and environmental protection, the Provincial Government thru the ENR Office has implemented Riverbank Stabilization Project thru the utilization of Mine Rehabilitation Fund, a fee collected purposely for rehabilitation projects of mined-out sites.

As part of the maintenance activities for previously implemented stream bank rehabilitation projects, this office also inspected the project areas at Casibarag Sur and Casibarag Norte, Cabagan; Barangay 2, Jones; Gucab, Echague; Culing East & Culing Centro, Cabatuan; Ragan Norte, Delfin Albano; and Sisim Abajo, Minanga and Arcon, Tumauini.



An approximate 60% survival rate was observed at Barangays Casibarag Sur and Casibarag Norte, Cabagan, Isabela.



Plantation at Barangay 2, Jones, Isabela.



Plantation at Barangays Minanga and Arcon, Tumauini, Isabela.

However, it was observed that the plantations established at the other sites were converted into permanent river flood control structures.

## 7. Monitoring of Mineral/Quarry Operations

## a. Processing of Permit Applications

For the months of August and September, a total of two (2) applications were received for Commercial Sand and Gravel (CSAG) Permit with corresponding administrative/processing fees collected by the Provincial Treasurer's Office amounting to Twenty Two Thousand Six Hundred Sixty Thirty (Php 22,660.00) pesos only.

## b. Monitoring of Extraction Activities

The ENRO Personnel and ISEP-TF Operative members conduct daily field monitoring in the different quarry areas province-wide. Monitoring reports together with the delivery receipts are submitted regularly in the office. In addition, a mobile team is also conducting its monitoring to validate submitted reports and ensure that the personnel are present in their designated area of responsibility.

For the month of August, 49,193.93 cu.m. quarry resources were extracted representing 4,140.75 cu.m. Boulders, 8,916.18 cu.m. G1/S1, 36,062.00 cu.m. Mixed Gravel and 75.00 cu.m. Ordinary Earth.

For the month of September, 26,936.85 cu.m. quarry resources were extracted representing 2,120.85 cu.m. Boulders, 4,838.00 cu.m. G1/S1 and 19,978.00 cu.m. Mixed Gravel.

# 8. <u>Processing and Issuance of Certificate of Accreditation for Haulers/Dealers/Traders and Retailers of Mineral/mineral products and/or b-products</u>

For the months of August and September, a total of Nine (9) haulers/dealers/traders and retailers in trading mineral products and by-products were accredited with corresponding fees collected by the PTO amounting to Twenty Two Thousand Six Hundred Eighty (Php22,680.00) pesos only.

These accredited haulers/dealers/traders and retailers were issued with a total of twelve (27) accreditation stickers conspicuously pasted in each of their trucks with corresponding amount of Two Thousand Seven Hundred (Php2,700.00) pesos only paid to PTO.

List of Accredited Haulers/Dealers/Traders and Retailers from August to September 2018:

Accreditation Permit No.	NAME	ADDRESS
0388	Felix C. Miguel, Jr.	Dibuluan, Jones
0389	MOP Buying Station	Calamagui 2 <sup>nd</sup> , City of Ilagan
0390	Jackson's Buying Station	Calamagui 2 <sup>nd</sup> , City of Ilagan
0391	Marites Ferrer	Sindon Bayabo, City of Ilagan
0392	Nelson T. Mejia, Jr.	Barangay 2, Jones
393	Juanito C. Frejas	Upi, Gamu
394	Ricardo R. Mencias	Camarao, Cordon
0395	Shanley Construction c/o Patrick Taguinod	Centro East, Santiago City
0396	RP Ramos Construction c/o Roberto P. Ramos	Barangay 1, San Mateo

To date, a total of **Three Hundred Ninety Six (396)** haulers/dealers/traders and retailers of sand and gravel and other quarry resources were already accredited by the provincial government.

## 9. Information Education and Communication (IEC) Activities

In line with the importance of giving a lot of attentions and concerns in the implementation of RA 9003 and Dengue awareness, we had coordinated with the Local Chief Executives (LCEs) thru the MENROs and Barangay Officials concerned for the upcoming conduct of Public Awareness Campaign and Behaviour Change Communication relative to Sec. 10, 21, & 22 of RA 9003 particularly at Barangay San Fabian, Echague and Barangay 1 & 2, Jones, Isabela.



September 12, 2018 – The ENR Office in coordination with Municipal Local Government Unit of San Mariano conducted Information, Education and Communication at Barangay Minanga of said municipality. The more than 200 participants are 4Ps members and residents of the barangay. The IEC focussed on different environment and forestry laws especially on the implementation of R.A. 9003 otherwise known as Ecological Solid Waste Management Act. At the end of the activity, the participants were encouraged to practice waste segregation and composting in their respective houses.





September 21, 2019 – Same activity were also conducted at Barangay Yeban Norte, Benito Soliven. The activity were attended by selected elected and appointed government officials coming from Municipal and Barangay LGUs and some from the host barangay led by Hon. Roberto T. Lungan, Municipal Mayor of Benito Soliven. In the end, Mayor Lungan and the IEC team encouraged the participants to help and do their respective roles and responsibilities as public officials in implementing R.A. 9003.

## 10. Other Activities

## a. Ilagan-Divilacan Road Rehabilitation & Improvement Project (IDRRIP)

As requested by CM Pancho Construction, the ENR Officer together with other members of the inspectorate team conducted inspection of the Ilagan-Divilacan Road Rehabilitation and Improvement Project. The team travelled up to kilometer 62 and inspected the accomplishments of the on-going road project.



# **ENVIRONMENT AND NATURAL RESOURCES OFFICE**

## b. Meetings and Convergence

Attended Inception Meeting/Official Kick-Off re: 2018 Korea SINGG Pilot Project in Cagayan Valley, Philippines at NEDA R-2, Tuguegarao City, Cagayan on August 14, 2018.





Consolidated by:

JOYCE N. CABARONGA

Attested:

GERONIMO P. CABACCAN, IR.

**ENR Officer**