



BUKANA

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SEAWEED MICROPROPAGATION:

A Key to Seaweed Industry's MacroSuccess

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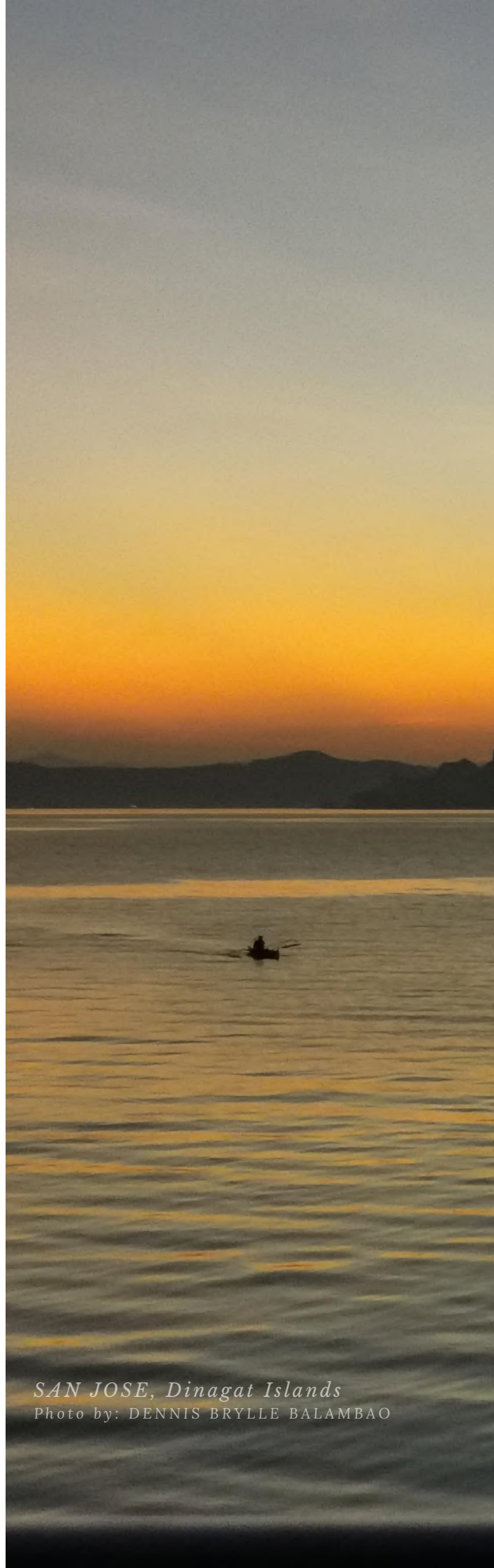
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SAN JOSE, Dinagat Islands

Photo by: DENNIS BRYLLE BALAMBAO

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Claver Fisherfolk Beneficiaries Receive 15 Motorized FRP Boats

What a great way to start the year! About 15 fisherfolk beneficiaries from the municipality of Claver in Surigao del Norte formally received last January 10, 2020, a total of 15 fiberglass-reinforced plastic (FRP) boats from the Bureau of Fisheries and Aquatic Resources-Caraga. The distribution was headed by Regional Director Visa Tan-Dimerin, and assisted by the Honorable Mayor Georgia Gokiangkee of Claver.

The turnover ceremony was also attended by the Members of the Sangguniang Bayan, Barangay Urbiztondo local officials, and BFAR-Caraga F/B Pagbabago focal person Restituto Bautista.

Aside from the 22-footer FRP boats, the recipients further received 7.5 horsepower diesel marine engines each.

In her message, Mayor Gokiangkee said, "We need these programs for our fisherfolk's livelihood."

"To the beneficiaries, unta magmalampuson kamo sa inyo panginabuhi. Awhaga ang inyong kaubang mangingisda nga gamiton ang baroto [gikan sa BFAR] sa legal nga pamaagi lamang," the Mayor added.



TURN-OVER. Claver Mayor Georgia Gokiangkee (in yellow) and BFAR-Caraga Regional Director Visa Tan-Dimerin lead in the distribution of 15 FRP boats and diesel marine engines.

RD Dimerin, on the other hand, challenged the beneficiaries not to sell their boats and accessories because the 'Banka Ko, Gawa Ko' program is for livelihood – not only for increased food production or 'ani', but for increased income or 'kita' as well, as what Department of Agriculture Secretary William Dar is giving emphasis in the 'new thinking' strategy in agriculture.



TRAINING. BFAR-Caraga and LGU Claver conduct hands-on training on the construction of FRP boats for the fisherfolk beneficiaries in Claver.

The Regional Director also assured the participants that BFAR-Caraga will continue to support the municipality of Claver through various training, and provide the beneficiaries fishing nets for better catch and income.

Mr. Bautista, the F/B Pagbabago focal person, conducted a 6-day hands-on training on the construction of FRP boats in Claver from November 26 to December 1 2019.



PARTICIPANTS during the conduct of hands-on training on the construction of FRP boats for the fisherfolk beneficiaries in Claver.

BFAR provided the materials and trainers, while the Local Government Unit of Claver provided the working area, water and electricity. The fisherfolk beneficiaries built the boats and are expected to maintain them.



The 'Banka Ko, Gawa Ko' program is for livelihood – for increased food production or 'ani' and increased income or 'kita'.

RD Visa Tan-Dimerin, CESO V

Sperm Whale Found Dead Ashore in Hinatuan, Surigao del Sur

A beached marine mammal was reportedly found dead ashore in Sitio Gakubay, Baculin, Hinatuan, Surigao del Sur last Saturday, May 9, 2020.

Based on the initial results of the on-site investigation conducted by the Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR) Caraga Fisheries Laboratory personnel in coordination with the Local Government Unit (LGU) of Hinatuan, Surigao del Sur and the Philippine Marine Mammal Stranding Network, the carcass was identified as a Sperm Whale (*Physeter macrocephalus*) that is 17.06 meters long with an estimated weight of more than 40 tonnes.

The carcass was in an advanced decomposition stage (Code 4 as per Specimen and Data Collection Field Guide for Marine Mammal Strandings by Geraci JR, Lounsbury VJ (2005)) as evidenced by its missing skin, soft blubber, bloating, and strong foul odor, thereby limiting the laboratory personnel to conduct a necropsy.

Meanwhile, tissue and teeth samples were collected by the laboratory personnel and will be sent to the University of the Philippines - Institute of Environmental Science and Meteorology for biological and molecular tests and age estimation.



After thorough deliberation among LGU officials and as per recommendation by the DA-BFAR XIII personnel, for purposes of sanitation, the carcass should be buried to at least 6 feet below the ground in a secluded area that is distant from nearby communities. The LGU Hinatuan also expressed its intent to collect the bones of the carcass for specimen accessioning.

Under Section 4 of the Republic Act No. 9147 known as the “Wildlife Resources Conservation and Protection Act”, the DA BFAR shall have jurisdiction over all marine mammals, except dugong; thus, DA-BFAR Caraga urges the public to report any marine mammal stranding

or beaching incidence to the nearest Municipal Agriculture Office or to the BFAR Provincial Fisheries Office for immediate and appropriate action.





Boats, Fishing Gears Released to AgSur Fishers Under SAAD Program

The Bureau of Fisheries and Aquatic Resources (BFAR) – Caraga has distributed 30 units of brand new fiberglass-reinforced plastic (FRP) paddle boats complete with gill nets and hook-and-line, which were funded by the Special Area for Agricultural Development (SAAD) Program, to 30 fisherfolk in the municipality of La Paz, Agusan del Sur last February 12, 2020.

The non-motorized FRP boats with a length of 17 feet are part of the fishing boat & gear livelihood package under the capture fishery project of the program.

The recipients were fisherfolk from Sabang Adgawan Farmers and Fisherfolk Association in the Municipality of La Paz.

The turnover activity was led by BFAR-Caraga Assistant Regional Director Edgardo P. Balambao. Also present were BFAR-Provincial Fisheries Officer Bernard Baclayo, Vice Chairman for Committee on Agriculture Hon. Diosdado Caliso, Municipal Administrator Tirso Gomez Sr. and Municipal Agriculturist Teofilo Ferolin Sr.

Assistant Director Balambao assured the fisherfolk of the continued support of BFAR-

Caraga to their endeavors for increased productivity and income.

La Paz is one out of seven select municipalities of BFAR SAAD based on their poverty incidence rankings in the province. Other municipalities covered by SAAD were Esperanza, Veruela, Loreto, Talacogon, Bunawan and San Luis.

Last February 3, 2020, BFAR has also distributed 30 FRP paddle boats and environment-friendly fishing gears to 30 fishers from barangays San Marcos and Nueva Era in Bunawan, and conducted monitoring activity in San Luis, where around 4,500 tilapia fingerlings were stocked in their fishpond owned by Doña Flavia Farmers Association.

SAAD aids poor farmers and fisherfolk, who are from provinces with the highest poverty incidence rates in the country since 2017.

The program was implemented in Region 13 in 2019, covering the provinces of Agusan del Sur and Surigao del Sur. A total of P30 million budget was allocated for the BFAR SAAD in the region.

FISH ON WHEELS: BRINGING FISH CLOSER TO COMMUNITIES

BY: IVY C. ANTONIANO, PMEUC

Key players in the food fish value chain in Caraga Region benefit from the Department of Agriculture's (DA) "Kadiwa ni Ani at Kita" direct marketing program, wherein fisherfolk-producers could directly sell their produce to consumers who gain better access to fresh and affordable fish.

In the implementation of the Kadiwa program, the BFAR, through the Fisheries Postharvest and Marketing Section and the Provincial Fishery Offices, facilitated the conduct of 43 Seafood Kadiwa on Wheels (fish and fishery product mobile market) and Kadiwa ng Masa (Kadiwa Retail) activities throughout the region.

A total of 11 fisherfolk groups and 57 individuals were assisted, selling 5.8 metric tons of fresh and processed fishery products and generating total sales of PhP1,079,703.50.

Initially implemented as a response to the outbreak of the corona virus disease (COVID-19), the program not only ensures that cheap and nutritious fish is available amidst the community quarantine but also generates income for the fisherfolk during the crisis.

At present, the Seafood Kadiwa on Wheels has rolled out in 44 barangays through the engagement of 11 municipalities in the region, inamely Butuan City and Magallanes in Agusan del Norte; Bayugan City, Esperanza, Veruela and Prosperidad in Agusan del Sur; and Claver, Mainit, and Tubod in Surigao del Norte; and Lianga in Surigao del Sur.

The Seafood KADIWA on Wheels is one of the components of the DA's KADIWA ni Ani at Kita, a program which envisions to increase small farmers and fisherfolk's income through direct product selling and increased institutional market linkages.

The project also aims to help sustain the price advantage derived by small farmers and fisherfolk from selling directly to consumers, as well as providing the consuming public access to safe, fresh and quality agri-fishery products at affordable prices.







ANI AT KITA sa SAAD: SPECIAL AREAS FOR AGRICULTURAL DEVELOPMENT

BY: JESTONI QUIJADO, PMEUI

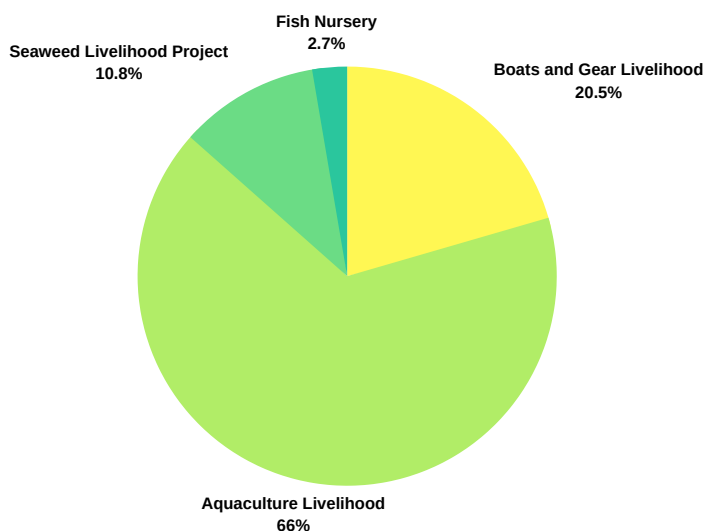
The Bureau of Fisheries and Aquatic Resources- Caraga, thru the Special Areas for Agricultural Development (SAAD) Program for fisheries provided essential support services and interventions to marginal fisherfolk in the region.

The two poorest provinces- Agusan del Sur and Surigao del Sur have already implemented their year-one livelihood packages covering 16 municipalities. This consists of 259 individuals and 40 group beneficiaries received various projects that are expected to contribute 3-5% increase of their income annually.

As of June 27, 2020, SAAD contributed a total of 26.80 metric tons of fish produced (excluding seaweeds) from both grow-out aquaculture and capture fisheries livelihood interventions. A total sales of Php. 2,410,333.00 were documented. In addition, fish nursery projects disposed 149,100 pcs. of tilapia fingerlings with a corresponding sales of Php. 74,650.00.

Meanwhile, for seaweed culture projects, total harvest as of June were recorded at 15.0 metric tons with a sales equivalent of Php. 300,160.00 at minimum price of Php. 20.00 per kilogram.

Overall sales for SAAD livelihood projects were totaled at Php. 2,785,143.00. These figures were expected to grow in succeeding days since more harvesting and fishing activities are still on schedule.



Projects	Ani	Kita (Php)
Boat and Gear Livelihood	6.87 MT	571,096.00
Aquaculture Livelihood (Grow-out)	19.93 MT	1,839,237.00
Seaweeds Livelihood Project	15.0 MT	300,160.00
Fish Nursery	149,100 pcs	74,650.00
TOTAL SALES		2,785,143.00



ON FINGERLINGS DISPERSAL & PROJECT BASIL: Balik Sigla sa Ilog at Lawa

The Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR) in Caraga Region has continued to support the fisherfolk through unhampered delivery of production support services in the midst of the COVID-19 pandemic

From April 28 to May 22, the Regional Office, thru its Technology Outreach Station, has dispersed 307,251 pcs of GET Excel tilapia fingerlings and 6, 100 pcs of saline tilapia to various fisherfolk in the region.

The Kitcharao Technology Outreach Station of DA-BFAR XIII has also successfully dispersed 153,340 pcs of carp fingerlings, seeded along Lake Mainit as one of the identified major lakes targeted for the fingerlings seeding under the Project BASIL or Balik Sigla sa Ilog at Lawa of DA-BFAR.

Now in its fifth year, Project BASIL aims to rehabilitate and restore the physical conditions of major lakes and river basins and to enhance inland fisheries production.



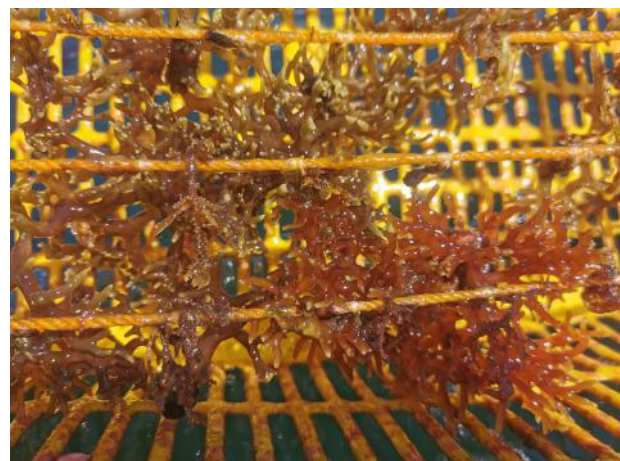


SEAWEED MICROPROPAGATION: A KEY TO SEAWEED INDUSTRY'S MACROSUCCESS

BY: DENNIS BRYLLE BALAMBABO, SEAWEED FOCAL PERSON

Seaweed farming for the past decades has been known globally, especially in Southeast Asia to bring substantial impact not only in terms of providing alternative livelihood but as well as contributing massively in the economic growth of countries, including Philippines. The high demand of carrageenan & agar which are extracted from red seaweeds leads to enormous growth of seaweed industry for the past decades. Some of the common seaweeds that are cultivated are Kappaphycus, Eucheuma & Gracilaria. These aforementioned contained phycocolloids (carrageenan & agar) which are essentials in producing food products, cosmetic products & pharmaceuticals. The high profit obtained from this commodity has attracted stakeholders, including our fisherfolks to engage in seaweed farming.

Unfortunately, this industry is facing a threat since there is decline in terms of production of seaweeds in the country for the last two (2) decades that are attributed to several factors. Some of these are the quality of seaweed propagules used for cropping; prevalence of diseases such as ice-ice & epiphytism; slow growth rate; climatic conditions & low price of dried seaweeds. These factors have compromised seaweed production and greatly affected stakeholders, especially seaweed farmers. With this current scenario, it is vital to develop practices or tools in order to ensure the sustainability of seaweed farming in the country.



In order to address & resolve the issues and factors affecting the production of seaweeds in the country, seaweed micropropagation has been promoted and initiated to ensure the production of good quality seaweed plantlets. Micropropagation is a form of tissue culture wherein good traits & characteristics from a parent plant can be replicated. With this culture method, mass production of good quality seaweed plantlets can be done. Aside from this, tissue-cultured produced seaweed plantlets are scientifically proven to be more tolerant to diseases, faster growth rate; more adaptable in fluctuations of environmental parameters; higher carrageenan yield & higher carrageenan quality compared to those propagules that obtained from conventional seaweed farming according to several studies. With these advantages, it is evident enough to opt in seaweed micropropagation for production of seaweed plantlets as the sustainable tool in resolving issues in seaweed farming in the country.

The Bureau of Fisheries & Aquatic Resources-Caraga Region through Seaweed Culture Laboratory has already adopted seaweed micropropagation as a culture method in their operation. The culture scheme under this method involves three (3) stages as follows; 1. Selection of seaweed material, 2. Shoot production, 3. Pre-transplantation (outplanting) and 4. Transfer to natural environment (outgrow). Stage 1 includes the collection of good quality and robust parent plants from Regional Seaweed Nursery located in Lianga, Surigao del Sur & Provincial Seaweed Nursery of Province of Dinagat Islands located in Cagdianao, PDI. The collected parent plants are then acclimatized at least two (2) weeks before selecting certain parts of seaweeds that will served as "explants", termed used for cell, tissue or branch of seaweeds used in vitro cultures. In stage 2, this is the stage wherein explants are expected to replicate the heritable characteristics from their parent plants by producing "shoot" which ideally means, arising of a new plant. The duration period of this in vitro culture is within three (3) months which include activities such as stocking of explants, changing of culture medium, weighing, washing & disinfecting. In stage 3, seaweed plantlets that are produced can be now transferred or pre-transplanted in Seaweed Sea-based nursery for them to develop more growth. Seaweeds plantlets that are produced from in vitro culture are not recommended to be outgrown immediately. During this stage, it will undergo three (3) months culture period before they are dispersed or distributed to beneficiaries. Stage 4 is the final stage where tissue-cultured produced seaweed plantlets are readily available to be utilized for the outgrow stage.

Since there is already an existing seaweed culture laboratory in the region, opting for seaweed micropropagation is compelling strategy to sustain mass production of good quality seaweed plantlets. Enumerated below are the advantages of micropropagation as a means in vitro culture of seaweeds:

- Can produce numerous propagules from a single plant
- Multiplication in controlled laboratory conditions
- Continuous propagation year around
- Potential for disease-free plantlets
- Precise crop production scheduling
- Long-term germplasm storage

Development of convenient and easy to adapt in vitro culture of seaweeds is such an innovation wherein the cost and duration of production of good quality seaweed propagules can be reduced significantly. The use of micropropagation can lead in generating strains & eco-variants of seaweeds that can be more suitable & robust, giving an edge to stakeholders involved in seaweed farming. Hopefully, the success in producing more viable seaweed plantlets could also lead in enhancing farm practices & management. Overall, consistency & efficiency in producing these tissue-cultured seaweed plantlets could contribute in generating revenue for the entire seaweed industry, as well as the economy in the country.

Dinagat Intensifies Fishery Law Enforcement with Patrol Boats from BFAR

The Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR), Region 13, led by Regional Director Visa Tan-Dimerin and represented by Asst. Regional Director Edgardo P. Balambao, turned-over two units of 30-footer fiberglass reinforced plastic (FRP) patrol boats to the Provincial Government of Dinagat Islands through Congressman Alan I. B. Ecleo, the Vice Chairman on Aquaculture and Fisheries, last March 2, 2020.

Each patrol boat was equipped with 16-horsepower twin gasoline marine engines and underwater fittings.

Also present were BFAR-Provincial Fisheries Officer Mansueto Cadelina and staff, OIC-Regional Maritime Unit-13 PLtCol Hadji Ballangan and his team, and the beneficiaries from Barangays R. E. Ecleo Sr. and Mabini of the Municipality of Cagdianao, Dinagat Islands, represented by Punong Barangays Zacarias Gumamera and Alexander Eraya, respectively.

Cong. Ecleo thanked DA-BFAR for heeding their request, and for the agency's constant support to the local government. He also promised the beneficiaries to provide the outrigger of the patrol boats.

Asst. Dir. Balambao in his message assured the Congressman and the beneficiaries that DA-BFAR will continue to support the projects of Dinagat and its enforcement of fishery laws.

"Take good care of the patrol boats... these are of great help in the implementation of fishery laws," Balambao said.



We are thankful for the support of the Congressman and of BFAR. We now have a boat to catch and stop illegal fishing activities," Punong Barangay Gumamera responded.

PLtCol Ballangan added that the Maritime Group in Caraga is always ready to assist BFAR in curbing illegal fishing activities in Dinagat and the entire region.

The turnover of the FRP patrol boats is under the FB Pagbabago Program, which is designed to provide modern and disaster-resilient fishing boats and resource-appropriate fishing gears.

The said program spearheaded by BFAR National Director Eduardo Gongona also supports Department of Agriculture Secretary William Dar's *Masaganang Ani at Mataas na Kita* approach, which aims to uplift the economic status of both Filipino farmers and fisherfolk.

DA-BFAR Holds Training on the Preparation of Unified Fisheries Ordinances; Establishment of Marine Protected Areas in Dinagat Islands

In accordance with the directive of the Department of Agriculture (DA) Secretary William D. Dar to empower local communities and instruction of the DA-Bureau of Fisheries and Aquatic Resources (DA-BFAR) National Director Eduardo B. Gongona to strengthen partnership and coordination with local governments to address the occurrence of illegal, unreported, unregulated fishing (IUUF), the DA-BFAR Caraga Region, through its Regional Director Visa Tan- Dimerin and its Regional Fisheries Management Regulatory and Enforcement Division (FMRED), in coordination with the Provincial Government Office of Dinagat Islands, convened the local chief executives, vice mayors, sanguniang bayan chair on agriculture, municipal agriculturists, agricultural technologists for fisheries, municipal environment and natural resource officers together with representatives from the Provincial Agriculture Office and BFAR Provincial Fisheries Office to guide the local government units (LGUs) in crafting their unified fisheries ordinances, last March 4 to 6, at the Provincial Governor's Conference Hall in San Jose, Province of Dinagat Islands.

FMRED Officer-in-Charge Omnia Olama, of DA-BFAR-13, gave an overview of the activity:

“Caraga region is noted to have vast marine resources. In Dinagat Islands, you are known to be producers of lobsters, milkfish, seaweeds and other marine endowments. If you will not protect your coastal resources, this will result to depletion, that is why we are conducting this activity for you to come up with unified fisheries ordinances to holistically prevent IUUF activities in your province,” said the DA-BFAR FMRED Officer-in-Charge.



Provincial Agriculturist Oswaldo T. Borja, in his message, reminded the LGUs of their responsibility as cited in the Section 16 of the Philippine Fisheries Code as amended by RA 10654, which states that the municipal government shall have the jurisdiction over municipal waters. LGUs shall be responsible for the protection, for the conservation, for the management and utilization of all fishery and aquatic resources within municipal waters.

“Experience also has been observed that different municipalities have different municipal ordinances. We lack uniformity of our municipal fisheries ordinances (FOs), thus this activity is being conducted for us to hopefully come up with a unified FOs,”

“Let us be united, let us continue working together, let us continue our battlecry - which is to deter and totally eliminate the illegal fishing activities in our province,” Borja added.

Conservation to investment

Provincial Governor Atty. Arlene J. Bag-ao also graced the activity and challenged the local government units:

“Our efforts should not end in the enforcement alone. We need to look forward to the future of our aquatic resources in that our direction should be to develop the fisheries industry in the province, as our source of economic activities that will augment income and alleviate the quality of lives of our fisherfolk and communities,” Governor Bag-ao said.

“We want to review your respective municipal fisheries ordinances in terms of its relation to your adjacent municipality; and we need to look into the similarities of the illegal fishing activities, so that we could have a common definition. We want



to achieve that level,” the provincial governor added.

Governor Bag-ao clarified that the unified FOs does not mean a single fisheries ordinance for the entire province. It means that they have seven ordinances with similar provisions, in terms of enforcement and regulation, and our definition of illegal fishing. It should also reflect the unique features of your respective municipalities as these will be our bases for the development of our Provincial Coastal Resource Management Plans and Programs,”

“After this, the next challenge is how we are going to design our capital investments. We just want to lay down the foundation of what type of capital and business we are going to, depending on the nature of your fishery ordinances and to that of your partnership with the fisherfolk. You protect, you earn - that will be our theoretical framework in the province,” the Governor concluded.



Provincial Director Domingo E. Bulabog of the Department of Interior and Local Government (DILG) presented the Memorandum Circular MC 2018-147 or the Guidelines on the Implementation of the Fishery Compliance Audit (FishCA) to monitor the compliance of LGUs on the MC 2018-59 or the Policies and Guidelines on the Regulation and Monitoring of Fishery Activities in Municipal Waters.

Under the DILG MC 2018-59, all concerned Municipal Mayors, and Punong Barangays are required to observe the policies and guidelines on the monitoring, and regulation of fisheries activities in municipal waters.

These fishery activities include the establishment of municipal fisheries and aquatic resource management council, enactment of municipal fisheries ordinances, registration and issuance of license and permits, and monitoring of water quality and marine resources.

“The MC 2018-59 reiterates the existing national policy to ensure that LGUs must play an active role in coastal resource management (CRM), to hold them accountable to their action and inaction towards the monitoring and regulation of fisheries activities and serve as a reminder and ensure that the law is strictly enforced, followed and implemented,” the DILG provincial director said.



DA-BFAR Holds Training on the Preparation of Unified Fisheries Ordinances; Establishment of Marine Protected Areas in Dinagat Islands

Highlights from Resource Speakers

Serving as Resource Speaker, Atty. Asis G. Perez, the then BFAR national director and currently the Senior Adviser of Tanggol Kalikasan, set the tone for the said training and facilitated the identification of the activities in their respective municipal waters that they want to allow but has to be regulated as initial step in the formulation of their respective unified fisheries ordinances.

“You do have an important resource as an Islandscape. What do you want to do with that resource? Do you want it to be there forever? Or do you want to get it all today?,” Atty. Perez asked before the participants.

Perez also emphasized that municipal fisheries ordinances, to be unified, should be consistent and complimentary with each other.

“It is very important that you have this level of coordination so that the ordinances that you have are consistent with each other,” Atty. Perez underlined.





Joyce Baclayo, DA-BFAR NSAP Project Leader, also reported the status of the fisheries resource in Dinagat Islands with notes from Fisheries Management Area (FMA) 8, in order for the local government units to have an overview of their resource.

Chief Aquaculturist Sandra Victoria R. Arcamo, from DA-BFAR Central Office, highlighted the Ecosystem Approach to Fisheries Management wherein conservation is finding a balance of between ecological well-being and human well-being through good governance for future generations.

The DA-BFAR chief aquaculturist also stressed that at least 15 percent of the total municipal waters should be set aside for MPAs.

Engr. Mario A. Princer, from the Maritime Affairs Division of the Department of Natural Resource and Environment – National Mapping and Resource Information Authority (DENR-NAMRIA), presented the legal framework for the delineation and delimitation of municipal waters, the importance of delineation and its methods

“As of February 29, 2020, we have delineated some 928 coastal cities and municipalities in the Philippines but only 311 are certified,” the NAMRIA representative said.

“Part of your FOs should be the delineation of municipal waters as mandated by law,” Engr. Princer said.

Rene Zaldy Porlaje, from DA-BFAR’s Fisheries Resource Management Division, discussed the crucial role of management plan in the establishment of MPAs.

“MPA Management Plan provides you direction, reduces risk of uncertainties, reduces overlapping and wasteful action, promotes innovative ideas, facilitates decision-making, and establishes standards for controlling,” Porlaje said.

Assistant Regional Director Edgardo P. Balambao said that the outcome of the activity would be instrumental in the implementation of all fishery laws and regulation.

It can be recalled that last year, the Regional Bureau held the Fisheries Law Enforcement Training for Local Chief Executives and Other Official in the same province.

DA-BFAR XIII Continues to Curb IUUF Amidst COVID-19 Pandemic

Amidst the coronavirus disease 2019 (COVID-19) pandemic, the Department of Agriculture-Bureau of Fisheries and Aquatic Resources Caraga Region (DA-BFAR XIII) through its Fisheries Resource Protection Group (FRPG) continue to curb illegal, unreported and unregulated fishing activities in the waters of Caraga.

The DA-BFAR 13 FRPG team conducted seaborne patrol operation in the waters off Hinatuan Passage, Surigao del Norte.

Upon patrolling, the team spotted on Friday, March 27, an unmarked color green, small scale fishing vessel believed to be engaged in the use of Modified Danish Seine or locally known as “liba-liba” along the municipal waters of Punta Sili, Surigao City with grid coordinates of 09°46’56.8’’N, 125°44’54.6’’E.

While approaching the fishing vessel, the fishery law enforcers informed the boat captain to stop the vessel but instead of doing so, they speed up and changed their course of direction heading towards Placer, Surigao del Norte.

This resulted to hot pursuit, which lasted about 1.5 hours and eventually led to its apprehension. Notice of violation was issued to the boat captain, for violating Sections 86, 113, and 115 of Republic Act 10654.



DA-BFAR Turns-Over 1.8M worth SAAD Projects in San Agustin, Surigao Sur

"I hope that you (fisherfolk) will strive to translate these interventions to increase food production "ani" and income "kita", the twin goals of the Department of Agriculture for the agriculture and the fisheries sector."

These are the challenging words of Assistant Regional Director Edgardo P. Balambao as he represented RD Visa Tan-Dimerin during the turn-over ceremony of the 1.8 million worth of fisheries livelihood projects under the Special Areas for Agricultural Development (SAAD) Program of the Department of Agriculture (DA) - Bureau of Fisheries and Aquatic Resources (BFAR)-Caraga.

At least 3 associations and 12 fisherfolk beneficiaries in San Agustin, Surigao del Sur received on Friday, February 28, aquaculture and capture livelihood projects.

Hornasan Fisherfolk Organization and Nagkahiusang Mananagat sa Gata both received 1 unit of Milkfish Culture in Pen Project with aquaculture inputs while Nagkahiusang Mananagat sa Britania received 1 module of Seaweed Farming Project.

Meanwhile, 12 fisherfolk beneficiaries received complete set of brand new motorized, fiberglass reinforced plastic (FRP) fishing boats and gears with gill net and hook and line fishing paraphernalias.

The 27-footer FRP boats were fabricated and designed by the fisherfolk themselves through the 'Bangka Ko, Gawa Ko' scheme of DA-BFAR.

These interventions were part of the first component of the SAAD program implementation in support to aquaculture livelihood production.

On its second year of implementation, the SAAD program targets to provide post-harvest equipments to support fisherfolk associations that venture value-adding of fisheries products.

San Agustin is a fourth class municipality and is one of the highest poverty incidences among the fisherfolk sector in the province of Surigao del Sur.



DOING BUSINESS WITH INSTITUTIONAL MARKET: A STORY OF SMALL SEAWEED FARMERS IN HINATUAN

BY: VANESSA Z. VINGUA AND MARISOL D. TUSO

The Hinatuan Seaweed Producers Association (HSWPA), a group of small fishers in barangay Loyola, Hinatuan, Surigao del Sur, is now engaged in production and marketing of Raw Dried Seaweeds (RDS). Not only selling their produce to the local buyers in the municipality, HSWPA is now marketing RDS directly to the Plant in Marilao, Bulacan.

After three attempts of test market to Compañia Española de Algas Marinas (CEAMSA) Asia, HSWPA confidently dealt for a marketing contract the whole year round. HSWPA Bookkeeper Bonifacio Bughao emphasized that if there is a marketing contract, they can convince more seaweed growers in the nearby municipalities, thereby meeting the volume requirement that CEAMSA Asia needs.

Bughao personally met the Plant Manager, Mr. Jose Arturo Evalle together with the stakeholders of the Seaweeds Industry Strategic Development Plan of the region. She was joined by the Regional Project Manager, the Institution and Gender Officer, and the Livelihood Officer of the Fisheries, Coastal Resources and Livelihood (FishCORAL) Project, the Municipal Agriculturist of Hinatuan, and CODESPA Project Coordinator for the Seaweeds Enhancement Project.

Recognizing the importance of the marketing contract for HSWPA and for the seaweed growers in the municipality and the neighboring areas, Evalle requested the FishCORAL project to draft marketing contract for their review. The contract is now being reviewed by the Plant.

The visit to CEAMSA Asia in Marilao, Bulacan is one of the strategies identified by the stakeholders in its Operational Planning last November 2019 in San Agustin, Surigao del Sur, which was participated by the representatives from the Department of Agriculture- Bureau of Fisheries and Aquatic Resources (DA-BFAR) XIII- Planning and Production Division, Department of Trade and Industry (DTI)-Caraga, the Local Government Unit of Hinatuan, the CODESPA Foundation, and the Project.

Recently, HSWPA have delivered its 5th shipment to CEAMSA.

HSWPA is a newly organized association inspired by CODESPA Foundation through the Seaweeds Enhancement Project. The organization is registered with the Department of Labor and Employment (DOLE) with Registration Number CARAGA-SDS-2019-06WA62.

The association is consolidating RDS from registered seaweeds farmers whose farm is closely monitored since from the first day of planting until harvest. This is to make sure that the harvested seaweeds complied with the requirements set by CEAMSA.

Plant laboratory result showed that HSWPA has improved the quality of their RDS deliveries. Plant Manager Evalle said, they are impressed with the quality of seaweeds that the association has delivered compared to other sources.

The direct marketing of RDS to the Plant has addressed the long time problem of seaweed farmers on low buying price of RDS.

Two years ago, buying price of RDS in the locality was only at Php30- Php35.00/kg. Despite of this, seaweed farmers continue to plant because they have no other source of livelihood. Others delayed their harvest, while some totally stopped planting for a whole cropping season and wait for the good price.

Now, buying price of RDS in the municipality have increased since seaweeds producers have found a direct market for RDS. This came after CODESPA came to the municipality for the Seaweeds Enhancement Project which assisted seaweeds producers in linking to the direct market.

CODESPA and FishCORAL Project worked together with the stakeholders of the Seaweeds Industry Strategic Development through the convergence of services which the Project has facilitated in 2017.

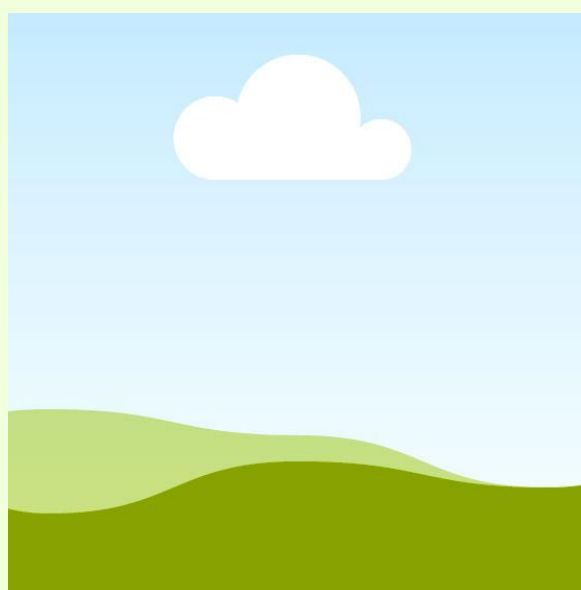
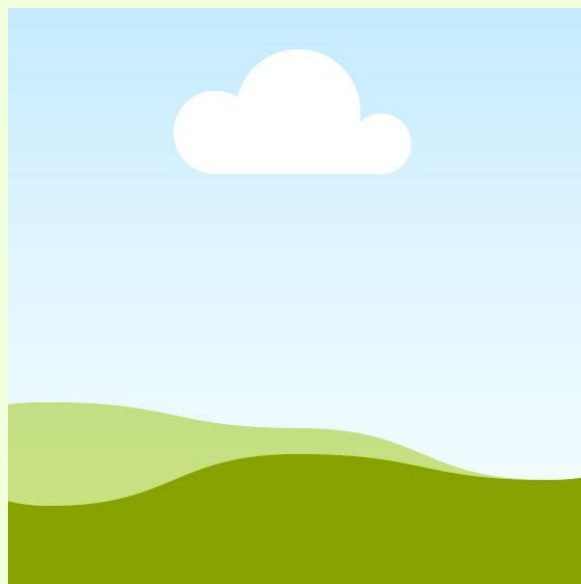
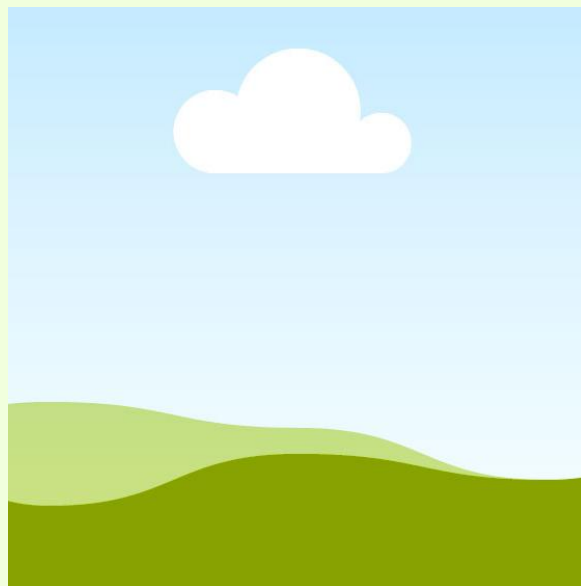
To assist HSWPA in meeting the volume required by the Plant, the FishCORAL project will organize seaweed growers in the nearby municipalities of San Agustin, Lianga, Barobo, and Lingig, Surigao del Sur. The Project has procured bailer machine for HSWPA to maximize the capacity of container van during shipment, thus reducing cost.

Climate-resilient communal seaweeds solar dryer have been also constructed by the Project to make sure that seaweeds are free from foreign objects such as straw ties, sand, and other debris.

The LGU of Hinatuan has also shared out One Million (Php 1Million) pesos for the warehouse. Infrastructure development of barangay Loyola, where HSWPA is located, is expected to follow. As of this writing, road concreting has already started from the national highway.

On the other hand, DTI will also provide forklift, weighing scale and office equipment for HSWPA to hold its office at the warehouse.

CEAMSA Asia Inc. is a manufacturer of semi-refined carrageenan and supplies a comprehensive range of high-quality carrageenan to the global food industry.



PO sustainably manage a Fish Sanctuary for 18 years

BY: RENELYN M. BALAGOT, COASTAL RESOURCE MANAGEMENT OFFICER

The Lawigan Fish Sanctuary (FS) was established during the Community-Based Resources Management Project (CBRMP) in 2002. It is a 10- hectare marine sanctuary situated N 09.203220 E 125.511110 in Barangay Lawigan adjacent to the geographical boundary of the municipality of Jabonga.

The lawigan FS establishment is based on the Tubay Environmental Code Municipal - Ordinance 2011-34. It was managed and sustained by the Lawigan Farmers and Fisherfolks Association (LAFFA) Inc. since its establishment.

As management activities take-off, the ridge to reef management approach was applied wherein the People's Organization (PO) managing the sanctuary was also active in participating upland undertaking such as tree planting. They envisioned to forest restoration while protecting the adjacent coastal habitat.

In this period, the PO was supported by different institutions such as the Bureau of Fisheries and

Aquatic Resources (BFAR), Department of Environment and Natural Resources (DENR), the Local Government Unit (LGU) of Tubay and the MRL Nickel Philippines Incorporated which operates in the area.

Furthermore, the PO also received an estimated 1 Million Pesos worth of assistance to delineate the sanctuary area and for the construction of a watch tower adjacent to the FS site. They also received various livelihood support from the LGU way back in the early years of the fish sanctuary establishment.

Fish Sanctuary Management

Since the establishment of the fish sanctuary in 2002, the communities adjacent to the area understood its importance biologically, how it contributes to sustainable fish yields and boost income. The impact of this awareness resulted to volunteerism in the management of the fish sanctuary.

The PO managing the sanctuary are passionately active as volunteers in patrolling and safe guarding the site in a regular basis.

However, the PO Chair finds way to compensate the efforts of the members by soliciting to politician every end of the year. The organization has 118 members, 65 of them are actively in the FS management

A group of 5 or 8 has to guard the FS with team leader designate daily at 6:00PM to 9:00PM for night shift and at 8:00AM to 5:00PM for day shift.

The sanctuary guards are fishers and part-time farmers to augment their income. They are committed to watch and maintain the integrity of the fish sanctuary sustainably.

Also supporting their cause is a women's organization of Lawigan Women Association. They assisted the PO in its various undertakings in the protection and conservation of the fish sanctuary.

Recently, the PO has also gained support from a newly created organization. The Lawigan- Sua Fisherfolks and Farmers Association (LASFFA) is now active in safe guarding the protected area.

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YOUNG FISHERS CALL FOR MANGROVE PROTECTION: CREATES BANTAY KALIKASAN, BANTAY GUBAT TASKFORCE

The La Union Mangrove Fisherfolk Association, Incorporated (LUMFAI) is a strong advocate in the restoration, protection, and conservation of mangrove ecosystem in Cabadbaran City. An organization of fishers, mostly composed of young members, LUMFAI has been engaged in mangrove reforestation projects since 2014 in barangay La Union, Cabadbaran City in Agusan del Norte.

LUMFAI is guided with their organizational objective which is to restore, protect, and conserve the mangrove ecosystem from danger of extinction due to coastal development and other factors, such as climate change, timber poaching, and conversion of land use into agricultural use. The group also aims to increase coastal protection, food resources, and livelihood diversification.

“Instead of doing anything that youth usually do, we make ourselves different. We wanted to be part of this cause to mitigate the effects of climate change and increase the cover of mangrove forests which is considered as the nursery grounds to many of the species of fishes, he added.” Gilbert recalled that at first, they found mangrove forestation as their way of going out together as youth. “Instead of being addicted to vices, we realized that we can be meaningful to the community by doing our part in protecting the environment,” he added. Aside from mangrove forestation, they also do regular clean-up activities along the mangrove areas.

Barangay La Union is one of the so-called “green belt” area of Cabadbaran City, which the Caraga State University (CSU) describes. This means for areas where mangrove should be planted to protect the city from the storm surges and devastation from typhoons.

Innovations / Good Practices

Regular Meeting and Assessment as a Strategy of Strengthening.

The organization conducts regular meeting and assessment. Aside from regular meetings, they conduct activity assessment every time they do mangrove forestation, rehabilitation, and clean-up.

Strong environmental advocacy. With a strong foundation instilled in every member without no other personal interests, they are solid of their advocacy for the environment, particularly in the protection and preservation of mangrove forest.

Strong relationship with the Provincial Government.

In more than five years, LUMFAI was able to maintain its good relationship with the Provincial Government through the Provincial Environment and Natural Resources (PENRO) in mangrove reforestation activities. With high survival of mangrove propagules planted, they are always being tapped for mangrove planting.

Status: LUMFAI has already extended its services outside their barangay. They were engaged in mangrove reforestation in barangays Cabinet and Quarry in Cabadbaran and even in the neighboring municipality of Remedios T. Romualdez. Today, they were able to plant more than 300,000 mangrove propagules.

Facilitating Factors / Challenges

The advocacy of the organization which is in the heart of its members has made LUMFAI apart from other organizations. Everyone is true to their spirit in protecting the environment. With most of the members that are young who find fun in their activities, it makes their organization stronger as they are now.

Like any organizations, LUMFAI was also tested by time. They lost their hard earning of money from mangrove reforestation projects in a lending venture. At first, they earned with tough policy of releasing loan. However, when the policy became loose, they started to fail. The organization learned to be strong on its policies, which is a strong fundamental of an organization.

Impact: With more than 300,000 propagules planted by the organization, LUMFAI have lobbied for policy development at the barangay level in raising concerns for mangrove protection. LUMFAI has lobbied for a barangay resolution to protect the mangrove forests. The Barangay Local Government Unit (BLGU) then brought this concern to the Sangguniang Panlungsod for a legislation, not only for barangay La Union, but for all other barangays with mangrove forests to protect Cabadbaran from the threats of storm surges. Now, the city government has created a Bantay Kalikasan and Bantay Gubat Taskforce to take the lead in the mangrove and forest protection. The Taskforce is now regularly monitoring the mangrove and forested areas from the threat of exploitation, where some members of LUMFAI are among the composite members.

On the other hand, LUMFAI have also adapted Gender Mainstreaming through the FishCORAL Project. The organization which was used to be an all-male organization, was able to invite women to join with the organization. Now, there are seven women that are added to the organization, two of them are the Business Manager and the Bookkeeper of the Mangrove Crab Fattening Project.

Fighting COVID-19 with food security: Fishers in Bayabas town start Mangrove Crab Culture, Crab Fattening Projects

BY: MARISOL D. TUSO, MM-ISM, INSTITUTION AND GENDER OFFICER

(*With reports from Vanessa Cemanes, Community Facilitator)

Responding to the call of the national government of ensuring food security in this time of crisis brought by the Corona Virus Disease (COVID)-19, fishers in Bayabas, Surigao del Sur have started their Mangrove Crab Culture and Crab Fattening Projects very recently.

The project aims to provide income to fishing households who are desperately affected by the pandemic. With limited economic activities today because of this health crisis, this livelihood project costing a total amount of Php1, 306, 506.17 hopes to help beneficiaries in responding to the basic needs of their family in the next four months.

Fisherfolk beneficiaries are now excited to start their livelihood project as they have successfully attended the Technical Training on Mangrove Crab Culture and Crab Fattening Project last July 2, 2020.

The training, which was conducted while observing health protocols to prevent the spread of the virus, was facilitated by the resource persons from the Provincial Fisheries Office (PFO) of Surigao del Sur and the Provincial Fisheries and Aquatic Resources Office (PFARO), the only provincial local government with a separate fisheries office.



WOMEN IN FISHERIES. Women actively participated in the net mending for the mangrove crab culture project

It was attended by 33 participants from three recipient People's Organizations namely: Magobawok Farmers and Fisherfolk Association, Balete Womens Association, and Buwan-buwan Fisherfolk Association.

At least 36% of the participants are women. Members of the Balete Women's Association also brought their husbands during the training as they work together in managing the project.

The training was graced by Bayabas Municipal Mayor Maria Clarita Limbaro who gladly encouraged beneficiaries to manage their project sustainably. The lady mayor who also chairs the Coastal Communities Alliance Unified for Sustainable Ecosystem (CCAUSE) for the 10 Local Government Units (LGUs) of the Lianga-Hinatuan-Bislig Bays, urge fishers to continue their livelihood activities.

In her post in the social media of the training conducted, Limbaro stressed that life should continue amid the pandemic. She called on the local folks to show their strength as one town with her hashtags of #TuloyAngBuhaySaGitnaNgPandemya #TIBAYabas #LakasBayabas.

Bayabas is a 5th class municipality located 29 kilometers from the capital town of Tandag in the province of Surigao del Sur. Households rely mostly on farming and fishing in their livelihood activities. Fishers are commonly dependent to capture fishing, gleaning, aquaculture, and fish vending.

The Mangrove Crab Culture and Crab Fattening Project is a livelihood project of the Fisheries, Coastal Resources and Livelihood (FishCORAL) Project funded through a financing agreement with the Philippine government and the International Fund for Agricultural Development (IFAD, through the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) as the implementing agency.

Stranded megamouth shark released back into the wild

A megamouth shark (*Megachasma pelagios*) was accidentally entangled in a fishing net of a fisherfolk, on June 6, off Butuan Bay in Brgy. Tinago, Buenavista, Agusan del Norte.

The group of fishers then called for help from the local government unit to assist them in handling the shark after having found out that it was still alive.

According to one of the responders Klyd Eman Chavez, AT-Fisheries of LGU Buenavista, the megamouth shark, that was 20 feet long with an estimated weight of around 500 to 600 kilograms, was successfully released back to the ocean.

In the Philippines, it is estimated that 200 species of the sharks swim in its waters, however only 25 species are protected. Sharks and their relatives (rays and chimaera) are particularly vulnerable to threats from targeted

fishing, overfishing, bycatch, pollution, habitat degradation, unregulated tourism, and climate change. These threats place almost a quarter of the world's total chondrichthyan - a diverse group of cartilaginous fishes that includes the sharks, skates, rays, and chimaeras - species at risk of extinction.*

On a lighter note, the Shark Conservation Act of the Philippines has been refiled in both the Senate and the House of Representatives with multiple sponsors last year. The bill proposes better conservation of threatened species, management of fisheries, stronger traceability for shark products and derivatives, guidelines for shark tourism interactions, and research into populations, among others.

To help conserve other sharks and rays, sign this petition:
<http://bit.ly/SharkRayChimaeraAct>

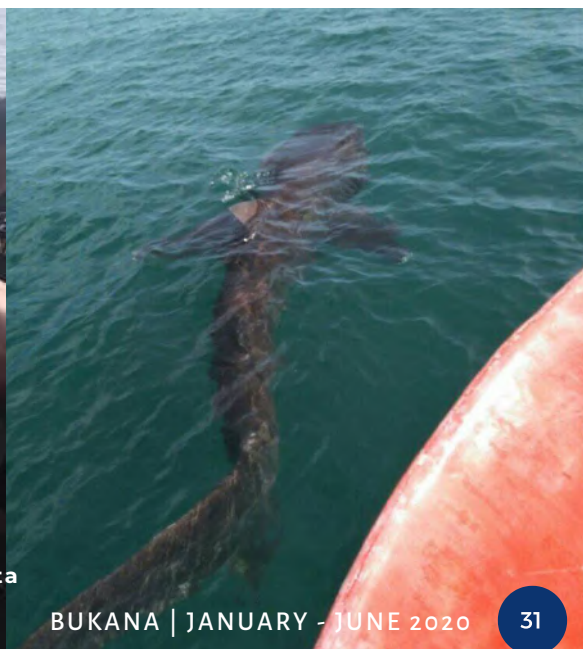


Photo Courtesy: Klyd Eman Chavez, AT-Fisheries of LGU Buenavista
Source: *2020 Conservation Roadmap for Sharks and Rays in the Philippines/Save Sharks Network Philippines

Photo by: JOHN ROLLIE COMPRA



GONE FISHING

Basilisa, Province of Dinagat Islands