

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

Eighteenth Congress
First Regular Session

HOUSE BILL NO. 6831



Introduced by Honorable Deogracias Victor 'DV' B. Savellano

EXPLANATORY NOTE

The current global pandemic brought about by the 2019 Corona Virus Disease (COVID-19), has placed the Philippines in a state of calamity causing fishers and aquaculturists to prepare for the possible negative impact on the production of fish and fishery products. To ensure that the stakeholders will have a stable income in the next few months after the country has lifted the Enhanced Community Quarantine (ECQ), the Bureau of Fisheries and Aquatic Resources will line up various activities so as to meet the projected production target for food security.

This proposed bill has two (2) components: Production and post-harvest interventions.

The focus of production interventions includes the farming of milkfish and tilapia. It also comprises the culture of high value species in selected Regions in Luzon, Visayas, Mindanao and Metro Manila. The post harvest interventions are the provisions of processing equipment such as vacuum packer, processing utensils and mobile cold storage and establishment of processing facilities.

The ultimate goal here is to aid in the efforts of mitigating the impact of COVID-19 by ensuring basic food requirements from the sea and other aquatic resources for the fisher families and the rest of the nation as well.

The approval of this measure is then earnestly sought


HON. DEOGRACIAS VICTOR 'DV' B. SAVELLANO

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AN ACT

TO BOLSTER THE PRODUCTION AND POST HARVEST SUPPORT OF THE FISHERIES AND AQUACULTURE INDUSTRY AND APPROPRIATING FUNDS THEREFOR

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. Short Title-This Act shall be known as the "Bolstering The Fisheries Industry Act"

SECTION 2. Objectives – The purpose of this Act is to; 1) Improve the production of major aquaculture commodities despite the Covid-19 crisis; 2) Provide assistance and support to the production and post-harvest; 3) Conduct technology transfer on mature aquaculture and post-harvest; 4) Prepare and distribute IEC materials as part of strategic communication.

SECTION 3. The Plan:

A. Key Performance Indicators and Targets:

Performance Indicator	Targets
1. Number of Fishery Associations and Cooperatives benefitted	300
2. Number of fingerlings/seedstocks distributed	
Tilapia	200M pcs.
Bangus	204 M pcs
3. Number of Fingerlings/Seedstocks Produced	0.6M
4. Number of Cages for Livelihood Distributed	0.300M
1. Number of hatchery established	5
2. Number of shrimp facility/school established (Regions 4A, 6, 8 and 10)	4
7. Number of other post-harvest equipment distributed	

Vacuum packer	300
Processing utensils	1,500
8. Number of Refrigerated van procured and operated	17
9. Number of processing plants established	1
10. Number of IEC materials developed and distributed	25,000
11. Number of technology transferred/ disseminated and adapted	25

B. Budgetary Requirements:

PAP	MOOE Php '000	CO	TOTAL (Php '000)
Fisheries production and Distribution:	<u>173,700</u>	<u>116,800</u>	<u>290,500</u>
Sea Urchin	1,000	15,000	16,000
Green Mussel	1,500	15,000	16,500
Siganid	2,100	15,000	17,100
Milkfish	81,600		81,600
Tilapia	70,000		70,000
Eel	2,500	3,500	6,000
Broodstock maintained		3,300	3,300
Hatchery Established	5,000	25,000	30,000
Technology transfer	5,000		5,000
Shrimp facility established	5,000	40,000	45,000
Provision of Fishery on farm equipment and post harvest facilities	22,000	130,000	152,000
IEC Materials developed and distributed	2,500		2,500
GRAND TOTAL		Php	445,000,000

The Fisheries Policy and Economics Division of the Bureau shall ensure the submission of regular accomplishments and shall randomly monitor the actually field operation to meet the expected output and outcome.

Section 4. Urban Aquaponics Project- This will be at a cost of: Php 250,000,000.00

A. Project Description:

The urban aquaponics is an emerging innovative technology for urban aquaculture in a combination of aquaculture (raising fish) and hydroponics (soil less growing of plants) that

grows plants and fish together in one integrated system. It is an environment-friendly aquaculture technology which does not rely on the use of chemicals and fertilizers. Fishes and vegetables grown in aquaponics are safe from residues and known to be organically produced. An example is African catfish and lettuce or Tilapia and lettuce production system either for household consumption and business purposes.

For household consumption, the harvest of fish and vegetables can start after one (1) month. Replenishment of fish stocks can be done every 60 days while replenishment of vegetables can be done every 30 days.

For business purposes, vegetables are planted in Day 1 and harvested in Day 31, while fish are harvested in 4 months.

In addition, various technology demonstration and promotion / commercialization of matured aquaculture technologies shall be undertaken. This also includes technical assistance of fisheries technologist with knowhow on the aquaponics system.

B. Objectives:

General:

- To serve as an effective learning tool as a social enterprise which could offer and improve quality of life for the reason that the food is grown locally at home or in the backyard.
- To ensure food availability and maintain supply of fish and vegetable produced while giving access to clean, healthy and affordable food from the aquaponic system and other aquaculture technology

Specific:

- To integrate livelihood opportunities, increase production as a whole and income of the family households, especially in urban areas.
- To reduce dependence of families of food from the market.
- To provide alternative aquaculture technology which shall be source of food (i.e. fish and vegetable plants) of household families especially during this COVID-19 crisis in targeted urban production areas
- To capacitate fisherfolk and associations/group beneficiaries on various training programs on aquaculture
- To augment income and earnings from the local fish-vegetable production as opportunity for high return on investment

C. Beneficiaries:

Activity/Intervention	Beneficiaries
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Aquaponics	1052 individuals 226 groups
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D. Project Components:

Distribution of Aquaponics Set – The project shall provide to its beneficiaries packaged technology to include aquaponics structures as well as operational inputs such as fingerlings, vegetable seedlings and other agri-fisheries inputs to produce the fish and vegetables.

Replenishment of Seedstock and FishStocks – This project will be complemented with the Enhanced Aquaculture and Sustainable Capture Fisheries in Municipal Waters Project for potential source of seeds and fingerlings for replenishing aquaponics system

Technical Assistance – Operation and maintenance of the system will be provided upon establishment of the system.

E. Physical Targets (by PAP):

Activity/Intervention	Target	Target Beneficiaries
Aquaponics <i>Number of Package of Technology (POT) distributed (number)</i>	3,503	1,052 individuals 226 groups
-Vegetables produced (pc) -Fish produced (kg) Assumptions: -75 fish @ 250g/fish -Survival Rate of 0.80%	182,156 52,545	

F. Financial Targets (by PAP):

Activity/Intervention	Financial (in Php '000)
Aquaponics	250,000
Total	250,000

G. Implementation Framework/Scheme:

Institutional arrangement through a memorandum of agreement (MOA) will be executed among the concerned parties of the said project. The training project component shall accelerate the transfer of technology and start up production facility and inputs.

Selection of Beneficiaries:

- 1) Must be a bona fide resident of the barangay
- 2) Highly urbanized city with available space, existing organized groups composed of men or women, youth, family households and senior citizens who are interested in aquaculture program
- 3) African swine fever (ASF) and Covid 19 affected areas recommended by the Local Government Units; and
- 4) Shall pass the evaluation criteria on site assessment for urban aquaponics

H. Project location (s)

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CO	244		40	9,210
NCR (to be lodged under Central Office)	260	123		27,000
CAR	88	25	29	6,825
Region I	540		27	15,120
Region II	20		20	13,600
Region III	100		33	35,000
Region IVA	1,500	300		45,000
MIMAROPA	9		9	6,845
Region V	14		7	11,900
Region VI	10		10	7,500
Region VII	68		17	28,900
Region VIII	12			1,200
Region IX	15		15	12,750
Region X	15		15	12,750
Region XI	4		4	3,400
Region XII	460	460		10,120
Region XIII	144	144		2,880
GRAND TOTAL	3,503	1,052	226	250,000

Section 5. Enhanced Aquaculture and Sustainable Capture Fisheries in Inland Waters – will be at a cost of Php 750,000,000.00

A. Objectives:

General:

To achieve an improved aquaculture through promotion of intensive aquaculture, modernization of aquaculture by farm mechanization and enhanced broodstock development and sustained capture fisheries production through distribution of environment-friendly fishing gears and enhancement of inland waters such as lakes, rivers and other water systems like dams during the COVID 19 crisis

Specific:

To provide input assistance such as fingerlings for production and distribution/dispersal and cages for livelihood as opportunity to augment income and look for food fish sources

To develop and maintain broodstock for production of seedstock and fry/fingerlings

To rehabilitate existing Technology Outreach Stations and Hatcheries and other production facilities as facility for fish/fry or fingerling production

B. Beneficiaries:

Activity/Intervention	Beneficiaries
Operation of Regional Office (NCR)	
Fishing Gears and other paraphernalia Distribution	2,605 individuals
Broodstock Development and Maintenance	1 group 10 individuals
Fingerlings/Seedstocks Production and Distribution (in M)	
-distributed	6,997 individuals & 568 groups
Aquapark maintained /established	94 groups 125 individuals
Cages for Livelihood	61 groups
Operation & Management of Production Areas	750 individuals
Operation and Management of Production Facilities	

Activity/Intervention	Beneficiaries
TOS National Centers Hatcheries	2 groups & 4 individuals
BASIL	
Promotion /Commercialization of Matured Aquaculture Technologies including establishment of technology demonstrations	52 groups 370 individuals

C. Project Components:

The scope of the project includes activities related to as follows:

- Production, procurement of fry for distribution to sustenance fisherfolk where fingerlings raised out of the fry shall be sold to mariculture and large fishpond operators
- Promote intensive aquaculture through rehabilitation of aging aquaculture areas
- Modernization of aquaculture through farm mechanization
- Expanded broodstock development towards independence / self-reliance of aquaculture and in support to but not limited to existing private, satellite, and legislated hatcheries in the context of sustainable development
- Establishment of typhoon resilient mooring systems in aquapark areas
- Intensify stocking of inland waters such as dams, rivers, lakes and swips to enhance productivity
- Various technology demonstration and promotion / commercialization of matured aquaculture technologies shall be undertaken.

D. Physical Targets (by PAP):

Activity/Intervention	No. of Units
Operation of Regional Office (NCR)	1
Fishing Gears and other paraphernalia Distribution	2,605
Broodstock Development and Maintenance (pc)	9,787
Fingerlings/Seedstocks Production and Distribution (in M)	

Activity/Intervention	No. of Units
-distributed	140.35
-produced	61.78
-procured	93.87
Aquapark maintained /established	38
Cages for Livelihood	88
Operation & Management of Production Areas	3
Operation and Management of Production Facilities	
TOS	13
National Centers	3
Hatcheries	28
BASIL	64
Promotion /Commercialization of Matured Aquaculture Technologies including establishment of technology demonstrations	395

Production Target

Activity	Target	Food Equivalent (in kg@ 5pc/kg) Per cropping season
Fingerlings distribution (in Millions)		
-Tilapia (Survival rate: 80%)	90.82	90,656,000 pc = 14,531,200 kg
-Milkfish (Survival rate: 70%)	29.93	20,951,000 pc =4,190,200 kg
-Carp (Survival rate: 70%)	0.30	21,000 pc = 4,200 kg
-Hito& Others (Survival rate: 70%)	19.30	13,510,000 pc = 2,702,000 kg
Fishing Gear Paraphernalia distributed (number)	2,605	687,720 kg

<i>(3-5 kg. of fish catch per day assuming they will only go to sea for 5 times a week for 4 months)</i>		
Fish produced (Fish Cage)		
-10x10x5 type <i>(Stocking density of 15,000pcs., survival rate of 80%, with the marketable size of 3-4 pieces per kg.)</i>	12,000	352,000 kg
- Norwegian type <i>(Stocking density of 50,000 pcs., survival rate of 80% and with the marketable sized of 3-4 pieces per kg.)</i>	40,000	40,000 kg
Fish produced (Fish Pond) <i>(per ha. Stocking density of 10,000 pcs. Survival rate of 80% with marketable sized of 3-4 pieces per kg.)</i>	8,000	426,667 kg
Fish produced (Aquaparks) <i>(Survival rate of 80% with marketable size of 4-5 pieces per kg.)</i>		1,843,000 kg

E. Financial Targets (by PAP):

Activity/Intervention	Financial (in Php '000)
Operation of Regional Office (NCR)	2,104
Fishing Gears and other paraphernalia Distribution	25,620
Broodstock Development and Maintenance (pc)	7,415
Fingerlings/Seedstocks Production and Distribution (in M)	
-distributed	708
-produced	29,754
-procured	119,538

Aquapark maintained /established	86,080
Cages for Livelihood	42,804
Operation & Management of Production Areas	199,998
Operation and Management of Production Facilities	
TOS	16,854
National Centers	7,000
Hatcheries	64,535
BASIL	99,876
Promotion /Commercialization of Matured Aquaculture Technologies including establishment of technology demonstrations	47,714
Total	750,000

F. Implementation Framework/Scheme:

- BFAR facilities shall intensify production and procurement of fish seed/fry for distribution to fishpond operators/registered fisherfolk and members of the existing fisherfolk organizations/cooperative operating 2,000 sq. meters to 20000 sq. m. fishpond at a rate of 50000 to 100000 fry per qualified fishpond operator. A total of 4500 fishpond operators shall benefit from the program which will eventually sell their excess fingerlings to large fishpond operators and marine cage operators.
- Aging supply canal of brackishwater aquaculture areas in Regions I, III and IV A servicing 3000 ha are targeted for rehabilitation (cleaning, deepening of supply canals 25% or 750 has. of this fishpond areas shall be targeted for the provision of aerators which will improve productivity of at least 25%. The project shall be implemented to eight fishpond operators associations, cooperatives and whose members are registered fisherfolk
- BFAR facilities shall be upgraded to development and maintain broodstock (milkfish, tilapia, carp, catfish and siganid) to ensure the production of eggs to cater in the increasing number of hatcheries that would eventually hatch and nurse fingerlings for stocking to grow out areas
- BFAR in partnership with LGUs shall establish a mooring system for marine cages to offer investment areas in mariculture. The system shall be offered for rent to interested investors
- Facilities of BFAR shall intensify its stocking of inland waters to improve its biodiversity and productivity

- BFAR in partnership with the LGUs, local fisherfolk organizations and even local NGOs, to bid themselves together to focus on coastal resource recovery, productivity enhancement by developing 50 municipal fishery reserves, The program will involve coastal water resource enhancement with the deployment of manmade concrete reefs and establishing an effective conservation and protection group. The fishery reserves shall be backed up legally with the local fishery ordinance.

G. Project location (s)

Fishing Gears & Paraphernalia

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
NCR (to be lodged under Central Office)	1,500	1,500		12,750
CAR	405	405		4,870
Region II	300	300		6,000
Region III	300	300		1,500
Region XII	100	100		500
GRAND TOTAL	2,605	2,605	-	25,620

Broodstock Development and Maintenance

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
Region I	11	10	1	1,815
Region X	5,200			1,800
Region XI	293			1,600
Region XIII	4,283			2,200
GRAND TOTAL	9,787	10	1	7,415

Fingerlings/Seedstocks Production and Distribution (Distributed, in million)

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CO	0.02	40		
NCR (to be lodged under Central Office)	3.10	651		
CAR	4.92	99		
Region I	6.38	262	96	
Region II	12.85	700	35	
Region III	8.30	1,200		
Region IVA	10.86	548	2	

MIMAROPA	27.10	483	20	
Region V	6.50	290		
Region VI	6.26	472		
Region VII	10.65	633		
Region VIII	7.87	880	59	
Region IX	4.10	62	20	
Region X	6		27	
Region XI	4.66	98		
Region XII	1.79	240		
Region XIII	19	339	309	
GRAND TOTAL	140.35	6,997	568	-

Fingerlings/Seedstocks Production and Distribution (Produced)

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CO	0.03			450
MIMAROPA	24.00			1,368
Region VI	3.00			3,500
Region VII	11.75			9,319.65
Region X	8.00			7,261
Region XIII	15.00			7,855
GRAND TOTAL	61.78	-	-	29,754

Fingerlings/Seedstocks Production and Distribution (Procured)

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
NCR (to be lodged under Central Office)	3.10			11,700
CAR	4.92			4,955
Region I	6.38			8,328
Region II	12.85			8,327.65
Region III	8.30			8,328
Region IVA	10.86			8,328
MIMAROPA	10.30			8,327.65
Region V	6.5			8,328
Region VI	4			8,328
Region VIII	8.96			8,327.65
Region IX	4.1			8,327.65
Region X	1			2,950
Region XI	4.66			8,327.65

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
Region XII	1.79			8,327.65
Region XIII	6			8,328
GRAND TOTAL	93.87	-	-	119,539

Aquapark Maintained/Established

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CAR	4	48	3	9,035
Region I	5		5	15,000
Region II	2		25	9,000
Region III	1	10		10,000
Region IVA	1		1	2,000
Region IVB	1		6	6,000
Region V	7		7	8,400
Region VI	1		1	4,000
Region VII	3		3	3,600
Region VIII	8	77		6,160
Region IX	2		25	8,935
Region X	1		4	1,600
Region XI	1		3	650
Region XII	1		1	1,700
GRAND TOTAL	38	135	84	86,080

Cages for Livelihood

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
NCR (to be lodged under Central Office)	10		10	9500
Region I	24		6	3,823
Region III	7		3	735
Region IVA	2		2	1,782
Region IVB	2		2	1,871
Region V	10		10	5,080
Region VII	5		5	1,604
Region VIII	5			4,278
Region IX	2		2	1,604
Region X	3		3	1,957
Region XI	2		2	2,567

Region XII	7		7	5,303
Region XIII	9		9	2,700
GRAND TOTAL	88	-	61	42,804

Operation and Management of Production Areas

Region	Physical Target Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
Region I	1	250		66,666
Region III	1	250		66,666
Region IVA	1	250		66,666
GRAND TOTAL	3	750	-	199,998

Technology Outreach Stations

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CAR	1			1,302
Region I	1			1,296
Region II	1			1,296
Region III	1			1,296
Region IVB	1			1,296
Region V	1			1,296
Region VI	1			1,296
Region VII	1			1,296
Region VIII	1			1,296
Region X	1			1,296
Region XI	1			1,296
Region XII	1			1,296
Region XIII	1			1,296
GRAND TOTAL	13	-	-	16,854

Hatcheries

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
NCR (to be lodged under Central Office)	1			6396
CAR	2			1,000

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
Region I	2		2	5,389
Region II				
Region III	1			4,000
Region IVA	2			6,000
Region IVB				
Region V				
Region VI				
Region VII	5			13,050
Region VIII	4			17,035
Region IX				
Region X	4			7,165
Region XI				
Region XII	4	4		4,000
Region XIII	3			500
GRAND TOTAL	28	4	2	64,535

Promotion /Commercialization of Matured Aquaculture Technologies including establishment of technology demonstrations

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
NCR (to be lodged under Central Office)	103	100	3	4000
CAR	70	70		2,450
Region II	32		32	4,800
Region VI	83	80	3	9,500
Region VIII	94	120	1	19,862
Region IX	10		10	1,000
Region XI	1		1	2,000
Region XII	2		2	4,164
GRAND TOTAL	395	370	52	47,776

National Centers

Region	Physical Target	Beneficiaries		Budget ('000)
		Individual	Group	
CO	3			7000
GRAND TOTAL	3	-	-	7,000

SECTION 6. Appropriations-The DA Secretary shall include in their Department's program the implementation of this Act, the funding of which shall be included in the annual General Appropriations Act and from internally generated funds of the DA.

SECTION 7. Implementing Rules and Regulations – Within sixty (60) days from the effectivity of this Act, the DA, shall promulgate the necessary rules and regulations for the proper implementation of this law.

SECTION 8. Separability Clause – If any provision or part of this Act is declared invalid or unconstitutional, the remaining parts or provisions not affected thereby shall remain in full force and effect.

SECTION 9. Repealing Clause – All laws, presidential decrees, executive orders, rules and regulations and other issuances or parts thereof, which are inconsistent with the provisions of this Act shall be deemed repealed or modified accordingly.

SECTION 10. Effectivity. This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,