



PROGRESS REPORT 2020

Ministry of Fisheries

And

**State Ministry of Ornamental Fish,
Inland Fish & Prawn Farming,
Fishery Harbour Development,
Multiday Fishing Activities And Fish
Exports**

Maligawatta, Colombo 10

Contents

	Page No
1. Ministry Vision, Mission, Policy Objectives and Scope and National Economy Contribution of the fisheries Sector to the Growth	03 - 15
2. Department of Fisheries and Aquatic Resources	16 - 26
3. National Aquaculture Development Authority	27 - 40
4. National Aquatic Resources Research and Development Agency	41 - 50
5. Ceylon Fishery Harbours Corporation	51 - 70
6. Ceylon Fisheries Corporation	71 - 80
7. Cey-nor Foundation Limited	81 - 88
8. Northsea Limited	89 - 100
9. Fishery Hrbours, Anchorages and Landing sites Construction Project	101- 111
10. Nothern Province Sustanable Development Project	112 - 115
11. Lagoon Project	116 - 119

Vision

Sri Lanka to be the leader of conservation and sustainable utilization of Fisheries and Aquatic Resources in the South Asian Region

Mission

Managing the utilization of Fisheries and Aquatic Resources for the benefit of the present and future generation and future generation

Policy Objectives

- Sustainable management of resources of resources using science – based information.
- Compliance with regional and international obligations.
- Increased marine fisheries production.
- Increased aquaculture and inland fisheries production.
- Minimized post-harvest losses and increased value addition.
- Increased per capita consumption of fish.
- Increased export earnings.
- Improved opportunities for leisure, employment and enterprises development.
- Improved socio-economic conditions of the fisher community.

Institutions Giving Contribution To The Fisheries Sector And Their Objectives



**Department of Fisheries
& Aquatic Resources
(DFAR)**

Desired objectives - Management, Development and Conservation of Fisheries and Aquatic Resources of Sri Lanka

Responsibilities- Introduction of the Fisheries and Aquatic Resources Act No2, 1996 and updating the fisheries management activities and legal provisions in compliance to the regional and international conventions and regulations



**National Aquatic
Resources Research &
Development Agency
(NARA)**

Desired objectives – To conduct researches on Aquatic resources and development, conservation and management of the same

Responsibilities- NARA, having been established in terms of the National Aquatic Resources Research & Development Agency Act No 54 of 1981 is responsible for aquatic resources and aquaculture, fisheries technology, fish and post-harvest technology and environmental, oceanographic and hydrographic studies



**National Aquaculture
Development Authority
(NAQDA)**

Desired objectives - Development and Management of culture – based inland fisheries and aquaculture

Responsibilities- NAQDA having been established in terms of the National Aquaculture Development Authority Act No 53 of 1998, is responsible for supply of fish seed in aquaculture and extension services for inland fisheries and aquaculture, shrimp culture monitoring and aquaculture training faculties



**Ceylon Fishery Harbours
Corporation (CFHC)**

Desired objectives -Planning, construction and operation of Fishery harbors and Anchorages

Responsibilities- CFHC, having been established in terms of the State Industrial Corporations Act No 49 of 1957, is responsible for the operation of 20 fishery harbors and 58 anchorages.



**Ceylon Fisheries
Corporation
(CFC)**

Desired objectives – Intervention in fish marketing providing the best advantage to both the supplier and the consumer

Responsibilities- CFC, having been established in terms of the State Industrial Corporations Act No 49 of 1957, is responsible for purchasing and sale of fish and ice, operation of cold room facilities and sale of fishery by-products.



Cey-Nor Foundation Ltd

Desired objectives- Supply of fisheries inputs and gears

Responsibilities- Cy-Nor, having been registers under the Companies Act No 7 of 2007, is responsible for manufacture and sale of fiberglass boats and supply of fishing nets and gears



Northsea Ltd

Desired objectives- Supplying adequate high grade fishing nets and other fishing gears

Responsibilities-Fishnet Manufacturing Company, re-registered under new Companies Act No. 07 of 2007.



01. Increased Contribution of the Fisheries Sector to the Development of the National Economy

Increased Contribution of the Fisheries Sector to the Development of the National Economy

Sri Lankan fisheries sector mainly consists of 517,00km sea area with abundant fish resource and 489,000 hectares of lagoons, estuaries and reservoirs that show high potential of development. Also, the Sri Lankan fisher community whose livelihood was fishing since the time immemorial and the related indirect employees constitutes the skilled human resource in the fisheries sector. It should be taken in to consideration that the government has constructed a significant number of infrastructure facilities with a view to uplift the Sri Lankan fisheries industry in to higher level which is abundant with natural and human resources

It is noteworthy that monetary provisions that has been allocated up to now by vote on accounts of 2020 to the Fisheries sector of the Ministry and the capital provisions made to the affiliated fisheries sector Institutions were utilized to the effect that the programmes identified on priority-basis were implemented successfully by the Ministry and the Institutions, overcoming numerous challenges unique to the fisheries industry, especially under covid pandemic which was a challenge to all sectors .

When considered the fisheries sector's increased contribution to the national income, the contribution of fish exports proves to be remaining at an appreciably high level. From January to September 2020, the total amount of fish and fishery product exports was reported to be 16,612 Mt amounting to an export value of Rs 31,228 Mn. Further, ornamental fish exports within the said time span, has earned an income of Rs 1800 Mn. Fish export sector could have been increased further, unless above challenges did not exist.

Wewak Samga Gamak, the housing and livelihood development programme implemented in 2017 with a view to develop the living standards of the fisher community, has proved to be producing desirable outcomes. The programme of wewk samaha gamak has launched a number of projects in order to improve th infrastructure facilities in all the districts within the period of January to Septemner 2020.

Measures have been taken to amend the rules at national level and empower the legal provisions against illegal fishing, in compliance with the conventions formulated by regional and international organizations to deter the Illegal, Unreported and Unregulated (IUU) fishing.

Also, the attention has been paid to commence a suitable project in order to prevent the reaping of fish harvest by the Indian fishermen violating illegally the maritime boundaries of Northern Sri Lankan waters. Preliminary steps have been taken to implement a project under internal water aids in order to protect the aquatic creatures and environment of the sea strip covers Mannar bay and Palk strait with the partnership of India, Sri Lanka and Bangladesh under the collaboration of the Ministry of Environment while the Ministry of Fisheries handling the leading role.

In addition, the national fisheries policy is being formulated with the technical assistance from Norway, which will pave way for a sustainable fisheries sector that is capable of meeting future economic trends of the international industry based on policies appropriate to Sri Lankan context while preliminary steps have been taken to formulate a master plan under Norwegian aids as the second step of this programme.

Likewise, NARA has pointed out that the post-harvest losses in fisheries remain at a level between 40% - 60% according to their studies and they have also recommended relevant strategies to minimize such post-harvest losses. In this regard multiple measures are being taken such as improving awareness of fishermen, manufacture and modernization of fishing vessels with cutting edge facilities, use of quality water and ice, systematic harvesting and landing of fish and maintenance of fishery harbours equipped with cold rooms and hygienic water facilities. These factors were given much emphasis in the construction of new harbours, anchorages and at the same time in the renovations of existing venues to make them technologically advanced.

As a whole, it should be stated that fruitful results could not be fulfilled as expected under the Covid pandemic and the progress of the fisheries sector could be strengthened while achieving all challenges in the coming years through the implementation of policies related to the Ministry of Fisheries in line with His Excellency the President's national policy framework "Vistas of Prosperity and splendor" alias 'Saubhagyaye Dekma'.



Contribution for Total Fish Productions

Increase of the Annual Fish Production

The total fish production of the country is 321,035 Mt from January to September of 2020. 44.4% of fish production from coastal fisheries and 33.3% from deep sea fisheries and 22.3% from inland fisheries & aquaculture in 2020.

Marine Fish Production (Coastal ,Offshore /Deep Sea)

The contribution of the coastal and deep sea sectors towards the total fish production could be increased gradually .Harvest of 106,890 Mt from Deep Sea fish production and 142,700 Mt from Coastal fish production could be obtained and the total marine fish production was 249,590Mt.



Marine Fish production - (Mt).

Duration	Deep Sea	Costal	Total
2020 Jan-Sep	106,890	142,000	249,590

Inland & Aquaculture Fish Production

During January to Septemer 2020, the total inland fish & aquaculture production was 71,445 Mt and its contribution was 22.3% to the total fish production. The production through this sector could be increased specially despite under bad weather conditions.



Inland and Aquaculture fish production – Mt

Duration	Inland	Aquaculture	Shrimp	Total
2020 Jan-Sep	58,460	8,285	4,700	71,445

The total fish fingerling production was 57.98 Million by 30th July 2020 and 23.71 Million out of the above was produced at the NAQDA breeding centres and the balance was produced by community based fish seedling production units, private ponds , reservoirs using cage nets and cages.

The total shrimp and post larva production was 51.41 Million by 30th July 2020 and 37.5 Million out of the above was produced at the NAQDA breeding centres and the private sector has contributed to produce the balance .

The total brackish water shrimp and post larva production was 429.4 Million and 423.8 Million .out of the above was produced by the private sector contribution .

National Aquaculture Development Authority has launched a large number of nontraditional fish farming projects in various districts with the objective of obtaining maximum contribution towards increasing the nutritional level of the general public , generation of jobs , improving exports and strengthening the rural economy while the possibility of increasing local fish production in the year 2020.

Statistics for the Total Fish Production (2016 –2020 Jan – Sep)

Fish Production (Mt.)

Fishing Sub-sector		2016	2017	2018	2019	2019 (Jan - Sep)	2020 (Jan - Sep)	Change in 2020 compared to 2019 (%)	Percentage share (%)
1	Off shore/Deep Sea	182,830	189,720	190,350	172,910	132,180	106,890	(19.13)	33.3
2	Coastal	274,160	259,720	249,020	242,580	180,150	142,700	(20.79)	44.4
	Total Marine	456,990	449,440	39,370	15,490	312,330	49,590	(20.09)	77.7
3	Inland Capture	58,410	68,500	71,020	73,230	54,310	58,460	7.64	18.2
4	Inland Culture	9,490	8,740	8,490	10,710	7,540	8,285	9.88	2.6
5	Shrimp Farms	6,030	4,630	8,180	6,400	5,280	4,700	(10.98)	1.5
	Total Inland	73,930	81,870	87,690	90,340	67,130	71,445	6.43	22.3
	Sri Lanka	530,920	531,310	527,060	505,830	379,460	321,035	(15.40)	100.0

Source: Statistics Unit of MFARD

Monthly Fish Production Statistics (2016 – 2020 Jan – Sep)

Fish Production by Sectors (Metric tons)								
-	Marine Fish Production			Inland Fish Production				
	Off Shore	Coastal and Lagoon	Total Marine	Capture	Aq. Culture	Shrimp Farms	Total Inland	Total Catch
2020	106,890	142,700	249,590	58,460	8,285	4,700	71,445	321,035
Jan ^Δ	15,500	19,730	35,230	4,520	410	525	5,455	40,685
Feb ^Δ	13,830	23,370	37,200	5,480	425	250	6,155	43,355
Mar ^Δ	13,820	16,490	30,310	5,205	500	480	6,185	36,495
Apr ^Δ	9,170	12,790	21,960	5,630	375	530	6,535	28,495
May ^Δ	8,970	10,080	19,050	6,380	470	445	7,295	26,345
Jun ^Δ	9,790	10,360	20,150	7,875	695	630	9,200	29,350
Jul ^{*Δ}	11,900	16,310	28,210	7,290	1,260	715	9,265	37,475
Aug ^{*Δ}	12,860	17,300	30,160	8,080	2,230	815	11,125	41,285
Sep [*]	11,050	16,270	27,320	8,000	1,920	310	10,230	7,550
Source: Statistics Unit of MFARD								

Increasing Per Capita Fish Consumption

Increasing fish consumption paves the way for the public to minimize nutritional deficiencies, eradicate malnourishment and improve good health.

The per capita fish consumption in 2019 was 45.4 grams per day and the per capita fish consumption during the period January to September 2020 was 31.6 grams per day. The current covid situation has mainly affected for this reduction. The local, marine and inland fish production and imported fish products contributed to increase the per capita fish consumption.

Import of Fish and fishery products

Sprats, Dry fish, Maldivian fish, Canned fish and feed fish are the main commodities of imported fish and fishery products which are paramount in fulfilling the gap between the domestic fish consumption requirement and local fish production. Dried fish and sprats are the major contributors the total imports. Part of the quantity of imported fish is value added and re-exported and the rest is used for local consumption. From January to December 2020, a quantity of 69,618 Mt has been imported as fish and fishery products amounting to a value of Rs. 28,848 Mn.

Fish Exports

The fisheries sector provides a priority contribution to the growth of national economy through the exports of fish and fishery products, ornamental fish and sea weed . Necessary measures have been taken to improve fish exports sector by providing proper guidance and assistance to the stakeholders in order to export high-quality and healthy fish products adhering to the regulations of the imported countries.



Export quantity and export value (2019 – 2020 January - September)

Item	Export Quantity (Mt..)		Export Value (Rs Mn.)	
	2019	2020 Sep.	2019	2020 Sep.
Live fish	-	-	2,913	1,800
Prawns	2,115	1,188	3,522	2,133
Lobster	229	64	1,003	216
crabs	1,818	961	5,029	2,249
Sea Cucumber	503	234	2,272	1,175
Other Mollusca	2,590	1,149	2,287	1,122
Shark	91	44	500	262
Shark Maws	4	1.4	77	29
Oysters & shells	275	161	149	115
Processed fish	19,885	11,191	34,278	20,768
Other	1,261	1,618	1,453	1,359
Grand Total	28,771	16,612	53,483	31,227

Source: Statistical Unit, MFARD

Ornamental Fish Exports

Introduction of new ornamental fish species, breeding activities, prevention of spreading diseases, conducting trainings & awareness programmes on provision of quality foods, production of new fish species with the assistance of NARA, technical development, diagnosing fish diseases, extending assistance to obtain loans by the farmers are the strategies adopted by National Aquaculture Development Authority (NAQDA) in order to encourage ornamental fish exports.



A number of small and medium scale farmers are engaged in ornamental fish industry in the Polonnaruwa district. Therefore, an ornamental fish breeding centre has been constructed in Sewanapitiya, in the Polonnaruwa district and measures have been taken together with provisions required to erect a sea water ornamental fish breeding centre at Bangadeniya in the Puttalam district.

Rs. 1800 Mn could be earned through Ornamental fish exports during the period of January to September 2020.

Ornamental Plants

Aqua Agri (Pvt) Ltd has entered in to an agreement to purchase and export of ornamental plants produced by the tissue culture centre of Rambadagalla ornamental fish breeding centre and 26,910 sea weed has been produced by August 2020.



Export of Ornamental Plants and Other Fish Species

	Export quantity (Mt)	Export value (Rs.Mn)
Ornamental Plants	54	5.4
Brackish water shrimp	1069.8	1874.6
Fresh water shrimp	57.38	156.94

Fisheries Social Development

Various programmes have been implemented with the objective of opening ways to provide high quality living standard to the fisher community. Criteria to achieve this end the facts on income improvement, better consuming patterns, possession of completed houses, creating job opportunities,

improving physical and mental health , strong social bondage ,incline towards good governance, knowledge on the rights available to them and environmental protection, should be paid attention. Steps have been taken to achieve this status through implementation of multiple projects related to Wewak Samanga Gamak programme, introduction of new technology, and empowering fisher community.

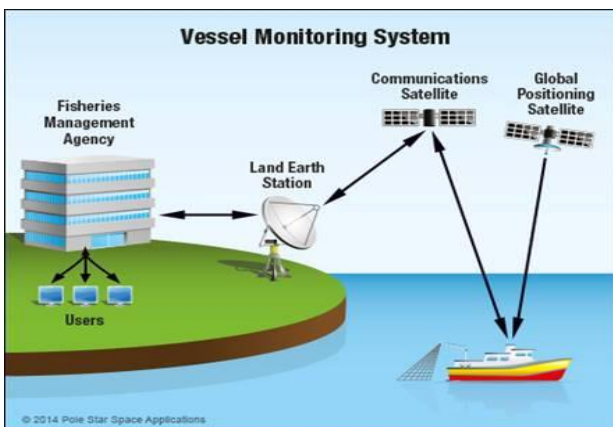
The ministry implements Village suburbs to tank/ lagoon/ sea programme as a broad programme which join hands with fisher village development. Special attention has been given to create new job opportunities , development of infrastructure facilities , introduction of new technology, skill development, empowering children, women and youth, uplifting social welfare facilities and uplifting educational skills in villages selected specially suburbs to a tank/ lagoon/ sea prioritizing the objective of giving birth to a village filled with joy. A number of programmes have been carried out to have a fisher community with better living conditions through fulfilling these objectives.

Implemented development projects		
01.	Construction of houses (renovation) Payment of Bills in hand 2019, Sea water section - 57	Ampara – 02, Kalutara – 01, Matara-03, Kilinocchi-20, Manner-03, Hambantota-04, Galle-24
02.	Construction of houses (renovation) Payment of Bills in hand 2019, fresh water section - - 156	Hambanthota-06, Trinco-09, Ampara-02, Batticalo-04, Mulathive-16, Monaragala-35, Kandy-02, Nuwaeeliya-08, Matale-09, Rathnapuraya-03, Anuradhapura-26, Polonnaruwa-12, Kurunegala-03, Puttalam-20, Manner-01
03.	Provision of sanitary facilities, Payment of Bills in hand 2019, Sea water section -28	Puttalam-08, Matara-04, Batticalo-16
04.	Provision of sanitary facilities Payment of Bills in hand 2019, fresh water section -63	Ampara-07, Trinco-01, Badulla-03, Nuwaraelliya-06, Rathnapura-03, Anuradhapura-07, Monaragala-07, Maale-03, Puttalam-0, Hambanthota-21
05.	Road development, Payment of Bills in hand 2019 23	Hambanthota-17, Batticalo-01, Trinco-02, Puttalam-01, Mulathive-01, Nuwaraeliya-01
06.	Sun cover ,Payment of Bills in hand 2019 - 20	Puttalam-20
07.	Construction of net nipple centre,(Payment of Bills in hand -2019) - 01	Killinocchi-01
08.	Community halls,(Payment of Bills in hand -2019) - 03	Matale-02, Batticalo-02
09.	Provision of water facilities,(Payment of Bills in hand -2019) - 05	Puttalam-05
10.	Side walls,(Payment of Bills in	Hambanthota-01

	hand -2019) - 01	
11.	Common wells,(Payment of Bills in hand -2019)- 01	Batticalo-01
12.	Drinking water projects ,(Payment of Bills in hand -2019) - 01	Kurunegala-01
13.	Water Filters ,(Payment of Bills in hand -2019) - 02	Polonnaruwa-02
14.	Society halls ,(Payment of Bills in hand -2019) - 01	Polonnaruwa-01
15.	Bridges,(Payment of Bills in hand -2019) - 01	Anuradhapura-01
16.	Construction of culverts ,(Payment of Bills in hand -2019) - 01	Puttalam-01
17.	Construction of ditches ,(Payment of Bills in hand -2019) - 01	Hambanthota-01
18.	Renovation of tanks ,(Payment of Bills in hand -2019)- 03	Hambanthota-03
19.	Livelihood development programme ,(Payment of Bills in hand -2019)	Net Cages, Oru & Kolle
20.	Construction of Quarantine facility centre	Manner
21.	Renovation of sea cucumber breeding centre	Manner
22.	Renovation of ornamental sea water fish breeding centre	Bangadeniya
23.	Renovation of ornamental fresh water shrimp breeding centre	Pambala
24.	Fresh water fish farming programme in domestic farming,(Payment of Bills in hand -2019)	Beneficiaries-03
25.	ornamental fish farming programme ,(Payment of Bills in hand -2019)	Beneficiaries-03
26.	Small scale ornamental fish farming programme,(Payment of Bills in hand -2019)	Beneficiaries-06
27.	Improving ornamental fish farming	Beneficiaries-03
28.	Women development programme	Puttalam
29.	Sea cucumber export village development activities	Jaffena, Kilinocchi
30.	Beach sine development	Puttalam

Development Projects Proposed to be Implemented Under Foreign Aids

1. Beruwala , Galle, Puranawella & Kudawella harbours are proposed to be developed as green harbours as the expenses of 100 million Euros under the sponsorship of French development programme and the technical feasibility report relevant to this has been completed.
2. A new project to improve refrigerator system of fish stores of the existing multiday fishing vessels in order to decrease the post-harvest loss under the aid of Food & Agricultural Organization (FAO). The contribution of the National Engineering Research Development Centre (NERDC) has been obtained in this regard. An MOU has been signed between the department of Fisheries & Aquatic Resources , NARA and National Engineering Research Development Centre (NERDC) in July, 2020 in this regard.
3. Discussions are being held to launch a project in order to uplift the fisheries industry in the identified shallow sea areas in Sri Lanka under the co-operation of World bank.
4. The project is being designed to conserve the environment in the Southern part of the Indian Ocean with the assistance of the Global Environmental Fund. Other stakeholders of this project are India and Bangladesh. It is expected that this proposed project is to be helped to prevent fish exploitation and environmental pollution in the Manner bay by the Indian Fishermen and to identify the suitable places for establishing the harbours in the Sri Lankan costal line.
5. The Bay of Bengal Large Marine Eco System project Phase 2 has recently initiated with the grant assistance of the FAO and GEF. Main objective of this project is to enhance the fisheries management and to conserve the environment. Bangladesh, India, Indonesia, Malayasia, Maldives, Myanmmer, Sri Lanka and Thailand have contributed collaboratively as the stakeholders of this project.



02.

Department
Of
Fisheries and
Aquatic
Resources
(DFAR)

Vision

To provide an optimum contribution to the national economy through strengthening the socio-economic status of the fisher communities while maintaining the fisheries and aquatic resources in a sustainable manner.

Mission

Management of fisheries and aquatic resources by adopting new technologies in compliance with the national and international laws and treaties for the productive contribution to the Sri Lankan economy through sustainable development of fishing industry.

Scope

- Registration, regulation and supervision of boat building yards.
- Granting approvals for boat designs.
- Registration, regulation and supervision of fishing gear suppliers.
- Introduction and promotion of new technological methods to the fisheries industry.
- Providing recommendations for the Environmental Impact Assessment (EIA) reports pertaining to the construction projects in coastal areas.
- Improvement to the infrastructure facilities in fisheries sector.
- Implementation of alternative income generating projects
- Implementation of fisheries subsidy schemes.
- Fisheries loan schemes.
- Social security for fishermen through the implementation of fisheries insurance schemes and fisheries pension schemes.
- Coordination of rescue operations and relief activities at the time of hazardous situation at sea
- Implementation of lagoon development programmes.

2.1 Sustainable management of fisheries and aquatic resources

It is a main role of the Department of Fisheries and Aquatic Resources to manage and regulate fisheries and aquatic resources in a sustainable manner and in that sense, the department is taking steps to issue permits for fishing boats and fishing operations and to prevent illegal, unreported and unregulated fishing activities. Permits have been issued for various fishing operations and fishing vessels in the year 2020 as follows.

Table-01: In the year 2020, progress in each activity as at 15.08.2020 is as follows.

Activity	Annual target	Progress as at 15.08.2020	Progress %
Registration of fishing boats (First time registration and renewal of registration)	47229	29793	66.6
Issue of fishing operation permits (Sea water)	44944	30566	68
Issue of permits for fishing operations at High Seas.	1282	946	73.7
Issue of skipper licenses	1000	269	26.5
Issue of permits for beach seine fishing operations	915	340	37.1
Training of fishermen and fisheries offices and conducting awareness programmes	25	25	100
Issue of permits for the export of ornamental fish	50	19	38
Issue of permits for the import of ornamental fish	66	29	43.9
Issue of permits for the export of lobsters	93	43	46.2
Issue of permits for keeping lobsters in possession	10	05	50
Issue of permits for the export of chank	35	35	140
Issue of permits for transport and keeping chank in possession	60	61	101
Issue of permits for the export of beach-demer	100	85	85
Issue of permits for transport and keeping beach-de-mer in possession	150	142	94.6
Issue of export permits for the culture of marine organism on artificial substrates.	05	02	40
Issue of transport permits to sea shells	50	22	44
Issue of import, export and re-export permits in respect of fish and fishery products.	300	148	49.3

2.2 Taking measures to maintain the required standard in fish export by means of quality control.

There is an opportunity to derive considerable foreign income through fish export for which it is important to maintain the standards of fishery products. The Quality Control Division of the Department issues permits pertaining to the maintenance of relevant standards in fish export and also inspects such institutions. Its progress is as follows.

Table -02: In the year 202, progress in activities in relation to fishery product quality control as at 15.08.2020.

Activity	Annual target	Progress (as at 15/08)	Progress
Granting approval for fish processing establishments and testing laboratories	65	14	21.5
Issue of health certificates for European countries	25000	7014	28.5
Issue of fish catch certificates	11000	5352	48.6
Issue of health certificates for non-European countries	20000	5409	27.04
Inspection of testing laboratories	06	01	16.6
Inspection of fish processing establishments	182	20	10.9
Inspection of fish packaging centres	20	7	35
Inspection of lobster holding centres	16	2	12.5
Inspection of fishery harbours and fish landing sites	18	5	27.7
Checking of local and foreign fishing vessels	100	25	25
Checking the samples for fish processing establishments(water ice, fishery, products)	500	21	42
Testing of water and ice in fishery harbours	36	-	0
Inspection of (antibiotics/malachite green/pesticide residues) in prawn farms	60	-	0
Random organoleptic checks of exportable fish	70	15	21.42
Checking shrimp farms	50	-	0
Spot inspection of import shipments (BIA)	200	01	0.5

2.3 Establishment of village fisheries women organizations

It has been proposed to establish women organizations for the empowerment of fisherwomen thereby creating self-employments and commencing new employment projects with a view to upgrading socio-economic progress in fisher families. Thus 378 women organizations consisting 11748 members have been established pertaining to 15 districts.

2.4 The programme for facilitating to produce high quality dry fish.

2.4.1. This programme has been implemented with a view to directing the fisher folk for the production of high quality dry fish by minimizing post-harvest losses. A sum of Rs.27 million has been allocated for this project under which priority is given for the fisher women.

2.4.2. Quality of dry fish is at very low level due to the method used in producing dry fish. As such, providing basic technical training and basic instruments needed to commence/upgrade the project for selected beneficiaries, introducing drying racks, providing instruments for hygienic packing of dry fish (Eg :.Vaccum packing machine) will be undertaken under this.



Figure 1 Dry Fish rack

2.4.3 258 beneficiaries have been selected from Mannar,Galle,Puttalam,Mahawewa and Jaffna districts for this purpose and by now, they have been provided with technical training together with basic awareness. Tenders have been opened and referred to the technical evaluation committee for the purchase of instruments.



Figure 2 Providing Technical Training

2.5 Facilitating to minimize post harvest fish losses

Provision of fiber glass fish packing boxes with thermal insulator for small fishing boats and harbors was launched under the development proposals -2020, aiming at facilitating to minimize post harvest fish losses. A sum of 16.2 million has been allocated for this and it is scheduled to carry out the relevant purchases under the government open procurement procedure and provide the same for the beneficiaries through the district assistant director' offices.

2.6 Increasing the lagoon fish stock:

Four million giant tiger prawn (*Penaeus Monodon*) fingerlings have been stocked in Thondaman Aru and Uppu Aru lagoon in Jaffna district incurring Rs.3.2 million allocations



Figure 3 Release of four million giant tiger prawn fingerlings



Figure 4 Release of four million giant tiger prawn fingerlings

2.7 Seabass fish culture

126000 sea bass fingerlings have been stocked in sea bass cages in Negombo, Batticaloa and Puttalam lagoons. A sum of Rs.35 million has been allocated under the sea bass fish project.



Figure 5 Seabass culture Project

2.8 Demarcation of Lagoon Boundaries:

A sum of Rs.5million has been allocated for the demarcation of lagoon boundaries. Financial progress up to now is that of Rs 2.685 million. 3256 demarcation posts have been fixed in Arugambe, Lankapatuna, Chilaw, Mundalama, Rekawa lagoons by the Civil Security Force Department.



Figure 6: Demarcation posts



Figure 7 :Carrying demarcation



Figure 8 Fixation of



Figure 9 Observing the fixation of Demarcation

2.9 Cleaning and deepening of lagoons

2.9.1 Allocation amounting to Rs.4,220,000.00 and another sum of Rs.415,000 have been dispatched to the District Secretariat of Jaffna for the removal of parts of the old bridge over Thondaman Aru lagoon in Jaffna district and the removal of sand in Ariyalai area of Jaffna lagoon respectively.

2.9.2 Bathymetric survey has been done by the Ceylon Fisheries Harbour Cooperation for the removal of sand barrier at the Nayaru Estuary and deepening the Nandikadal lagoon,

2.9.3 Approval has been sought from the Department of Coast Conservation and Coastal Resources Management to remove debris in Rekawa lagoon.

2.10 The programme of networking the functions of the Department of Fisheries and Aquatic Resources

2.10.1 Various activities of the department are expected to be networked by this with a view to providing facilities for the clients in a more efficient and transparent manner. Accordingly, the main areas to be networked are as follows.

- All registrations and issue of operation permits which are carried out manually at present will be done online.
- About 20 other duties performed in the form of paper will be done online.
- All the fish product and scientific data done in the form of paper will be retrieved online. Access to such data will be opened to NARA and the Department of Census and Statistics.
- All the document transactions within the Department will be networked.
- A system to supervise officers will be established.

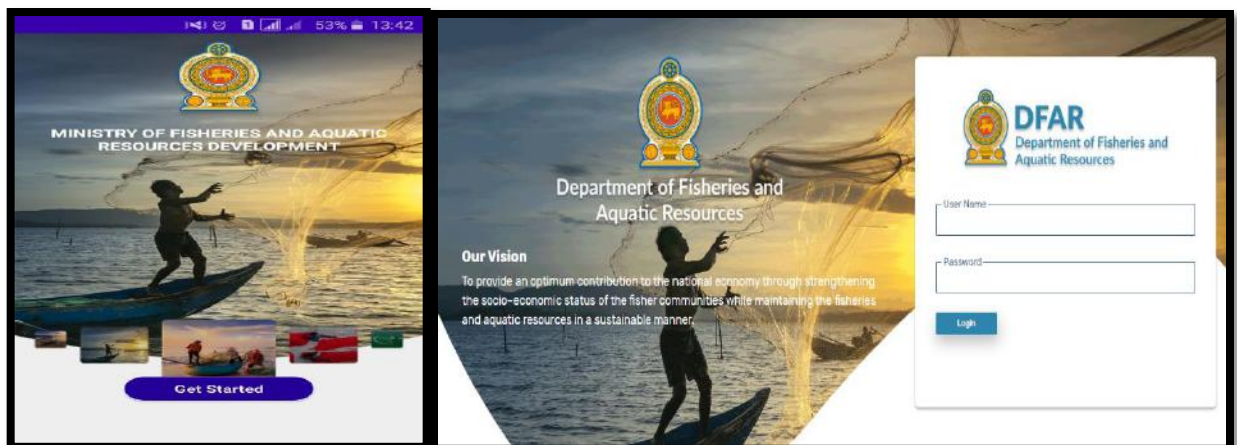


Figure 10 Networking Programme

2.10.2 Development of automated online application system of the Department is meant to convert more than 15 departmental functions including boat registration, scientific data collection etc. and many more tasks into fully pledged digital process. The online application system has two main aspects ie. Android application and JAVA application.

2.10.3 Over 18000 fishermen have already been registered by using the automated online application system and all the other functions developed in the departmental automated online application system will be commenced as from 2020.

2.11 Maintenance and incorporated management of the departmental official website WWW.fisheriesdept.gov.lk



Figure 11 Official web site of the Department

The Information Technology Division is responsible for the maintenance and incorporated management of the departmental official website. The website is updated daily and details about the departmental activities are included therein. A list of all the registered exporters, importers ,yards and suppliers is maintained within the database and it is constantly updated. Officers can log into the departmental system via the links of the website

2.12 Preparation of the Officers' Official Email Account..



Figure 12 Officers official email account

Preparation of email accounts of all the Staff Grade Officers of the Department of Fisheries and Aquatic Resources has already been completed and activities of the main office and the district offices are coordinated by this.

In particular, software update, making aware of staff grade officers and communicating special and urgent information will be done via officer’s email addresses. Preparation of email account of all staff grade officers has been finalized.

2.13 Launch of Document Management System and providing training

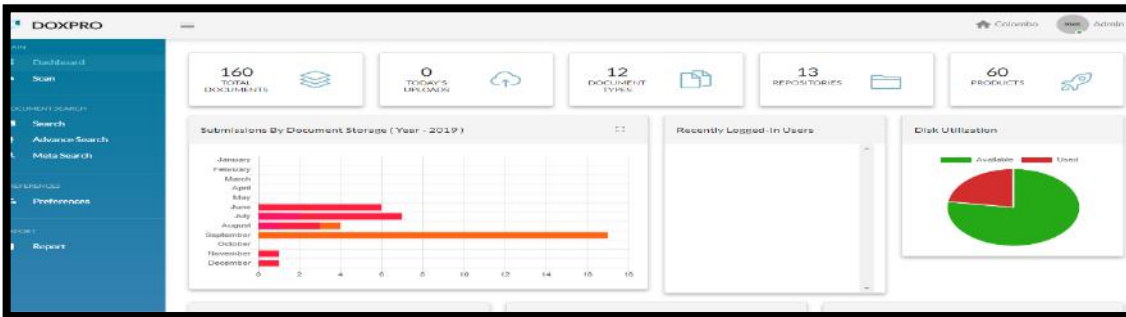


Figure 13: Document management systems

Cloud and Doxpro Document Management System has been purchased by the Information Technology Division and it is now being operated. Basic training has been provided for the officers in that behalf. The document management system has been in operation at the beginning of 2020. It is expected to reduce the use of paper by 90% within a period of two years

2.14 Designing, developing and operating of the fisheries e-messaging system



Figure 14 e- messaging system

A web based messaging system has been operated by the Information Technology Division for the use of resources available in the department and to utilize for disaster management.

2.15 Designing, developing and operating of the operation licence issuing system



Fishing Operations License For High Seas Fishing
Department of Fisheries & Aquatic Resources

Username
|

Password

Reset Login

Figure 15 operation license issuing system

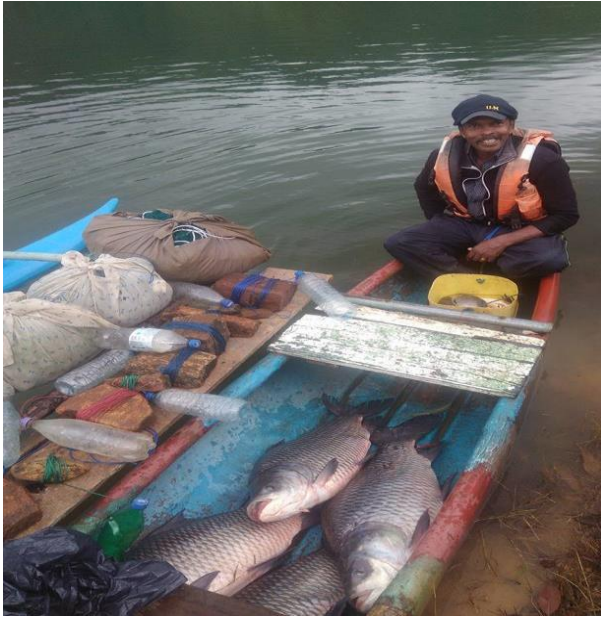
The Information Technology Division has introduced a web based operation licence issuing system as an internal product as from 01st December for the use of the officers of the department. This system has been introduced by the Information Technology Division to issue fishing operation licences for the year 2020 by inserting this process as a sub module until the completion of the departmental automated online application system.

2.16 Designing, developing and operating of the Boat Tracking Android Application



Figure 16 Android smart gadget GPS system

Android application using android smart gadget GPS system has been developed by the IT division. By now, 90 percent of its work has been completed and its operation is expected to be commenced soon .



03.
National
Aquaculture
Development
Authority
(NAQDA)

Vision

To be an apex body in the region responsible for sustainable development and management of aquaculture and inland fisheries to ensure food security in order to improve the quality of life of the people

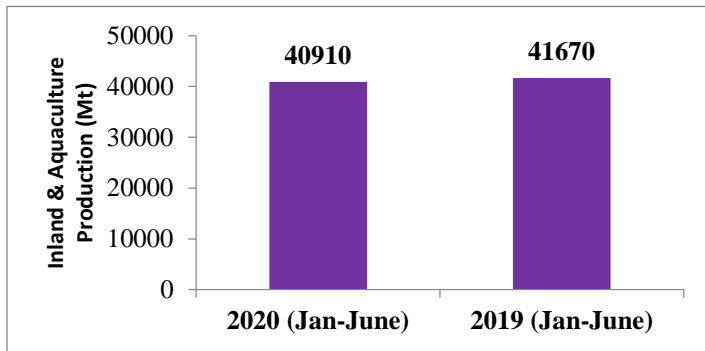
Mission

To contribute to the improvement of the social- economic conditions of rural societies and alleviation of poverty by facilitating the supply and availability of freshwater and brackish water fish through sustainable management of the aquatic resource and encouraging the development of small, medium and large scale aquatic enterprises.

Functions

- To develop aquatic resources and the aquaculture industry for increasing fish production in the country and the nutritional status of the people.
- To promote the creation of employment opportunities through the development of freshwater aquaculture, coastal aquaculture and sea farming.
- To promote the farming of high valued fish species including ornamental fish for export.
- To promote the optimum utilization of aquatic resources through environmental friendly aquaculture programs.
- To promote & develop small, medium & large scale private sector investment in aquaculture.
- To manage, conserve and develop aquatic resources and the aquaculture industry.
- To carry on business as an importer, exporter, seller, supplier and distributor of aquatic resources.
- To prepare and implement plans and programs for the management, conservation & development of aquaculture and aquatic resources.
- To conserve bio-diversity

Inland and Aquaculture Fish Production (Mt)



Stocking of Fish Fingerling and Freshwater Prawn Post Larvae (Mn)

Total fish fingerling and freshwater prawn Stocking		
	2020 (Jan- June)	2019 (Jan-June)
Fish Fingerlings (Mn)	38.65	41.45
Freshwater Prawn Post Larvae (Mn)	33.67	32.1

Stocking of Fish Fingerlings / Fry / Freshwater Prawn Post Larvae Free of Charge (January- June 2020)

Fingerlings – 4.50 Mn

Freshwater Prawn Post Larvae – 31.81 Mn

Fish Seed Production (Mn)



One of the major activities of NAQDA is the production of fish seeds for stocking of inland water bodies to enhance fish production.

Iranamadu AQDC



Fish Seed Production at Aquaculture Development Centres (Jan - June)

Post Larvae	128.16 Mn
Fry	81.27 Mn
Fingerling	18.73 Mn

Total Fish Seed Production from Aquaculture Development Centres, Community based Mini Nurseries, Private Ponds, Cages and Pens

2019 (Jan- June)	2020 (Jan-June)
48.76	39.80

Strategies for Development of Inland Fisheries



Fry to Fingerling in cages

Bringing up fish fry to fingerling in cages is being carried out successfully in perennial reservoirs. Raising of fingerling production by using of cages is one strategy which has been applying from several years .Due to the limited pond space in NAQDA owned breeding centers, bringing up of fry to fingerling outside the centers will help to increase the fish breeding capacity of NAQDA breeding centers effectively.

In 2019, 40 million of fingerling has been produced by using of cages which contributed 40% to total fish fingerling production. In 2020, it has targeted to produce 45 million of fingerling. Currently in 557 cages by utilizing for this process and from January to August 18 million fingerlings have been produced through cage culture.

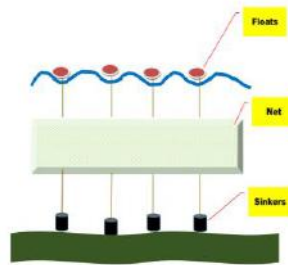
Water based mini nursery

Finding lands for making fish ponds or related activities is not easy task because; if suitable lands are available certainly those may utilize for paddy culture. But our reservoir's water surface is not optimally using for fish culture or any other purposes. Numbers of reservoirs are available for installation of fish cages. Therefore, using those cages, fish breeding can be carried out by using cages in reservoirs. A water based unit has been already established at Urusita wewa in Moneragala District. Production capacity of this unit is about producing of 01 million of fingerling annually and it has been planned to establish more mini nurseries in Ampara and Batticaloa districts too.



Barricade nets

The nets that apply for prevention of fish escaping through sluice gate of reservoir are known as barricade nets. These barricade nets are placed in the water near to slice gate. Currently those nets have been applied for some reservoirs and there the fishermen are confident that the fish resources would be protected and retained effectively, even in strong water flow through the sluice gate of that reservoir. To prove the effectiveness of barricade nets, there is a process of the data and submit



Training for Fishing gear Technology

Increasing of inland fish production is not achieved just only stocking fish seeds in reservoirs. Fisheries management including use of effective fishing gears are also plays an important role in it. The efficiency of gill nets using by fishermen can be improved it. Gill nets are prepared according to technical correct manner. Accordingly, 10 trainings were conducted by gill net specialist to make aware the fishers in 10 districts in 2019 to achieve this. Maintain of appropriate hanging ratio and selecting suitable material for upper and lower line for the gill nets were the main focused area in those trainings. A study was also carried out to assess the effect of the training and it was confirmed that efficiency of technically improved net was higher than usual gill net by 3%.

Aquaculture Development Centre, Sewanapitiya

A new Aquaculture Development Center was established in Sevanapitiya area in the Polonnaruwa District. It is expected to produce 25 million fish fry and 5.75 million fingerlings by 2020. By July, it has produced 12 million fry and 3.5 million fingerlings and has become the main supplier of fish seeds to reservoirs in the Polonnaruwa District.



Fish genetic unit Dambulla

Fish genetic unit at AQDC Dambulla was established with the purpose of

1. Increase of production of indigenous & endemic fish production
2. Conservation of endangered fish species
3. Production of hybrids

Due to effect of climate change the natural breeding is reducing day by day and therefore fish of Giant snake head, Snake head, Giant freshwater shark, Mashier , Olive barb, butter catfish , Stinging catfish, Long level finned eel, Marbled spiny eel, Climbing perch, Stone sucker & Hirikanaya species have been culturing with purpose of breeding. Giant freshwater shark, butter catfish, Stinging catfish, Stone sucker & Hirikanaya have been already bred.



The First well – designed Pond based commercial semi intensive tilapia farm of Sri Lanka

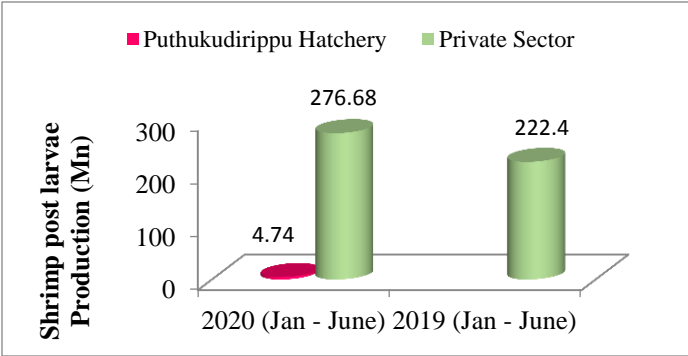
With the instructions of National Aquaculture Development Authority, Mr. Indika Abeyaratne started his commercial scale Tilapia Farm at the location of Manativu, Annaikattu in Puttalam district. This is originally a shrimp farm and with the prevailing issues of shrimp culture, he converted a portion of farm for Tilapia farming from 2016. Currently this Tilapia farm covers total area of 22 ha. The stocking density of tilapia is 5 - 8 pieces per square meter and average product of one pond varies from 5 to 12 tons. Fish production of the farm from 2017 is shown in following table.

Year	Fish Production (Kg)
2017	73, 315
2018	139, 236
2019	311, 238
2020 (up to August)	190, 115

Current production cost per one kilo of tilapia is around Rs.250/= and selling price is around Rs.320/= . All of the production goes to local market and they have planned to do some value addition by making tilapia fillet from this month.



Shrimp Post Larvae Production



Puthukkudirippu, shrimp hatchery operates under Public- Private Sector Partnership Basis and is the only hatchery established in the Eastern Province to cater the shrimp post larvae required for the shrimp farming industry in the Batticaloa district

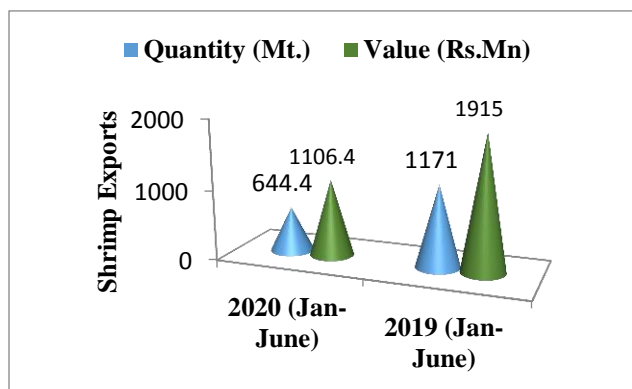
Brackish water Shrimp Farming

Shrimp Production

2020 (Jan-June)	2019 (Jan-June)
2859 Mt	3614 Mt.



Export value & Quantity of Shrimp

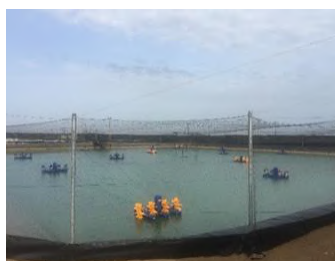


It was made to understand that with the existing area of shrimp farms, maximum sustainable shrimp production is being obtained at present in North Western Province. In order to increase the shrimp production in Puttalam district NAQDA has planned to intensify the shrimp culture activity through introduction of water recirculation system and enhancing the biosecurity of farming area. Also, in

order to increase the shrimp aquaculture production, NAQDA has taken steps to introduce the *Litopenaeus vannamei* species which has a high growth rate and high productivity compared to *Peneaus monodon*. Following the success of the pilot project carried out on this species of shrimp in the Mannar District last year, the farming of this species is being carried out in the Puttalam and Batticaloa Districts this year as well.



Litopenaeus vannamei



L. vannamei
ගොවිපල, මන්නාරම

Litopenaeus vannamei Production

District	No. of Farms	Production(Jan-June)
Puttalam	43	130 Mt
Batticaloa	1	40.3 Mt
Mannar	2	518.9 Mt
Total	46	689 Mt

Introduction of a specific pathogen free (SPF) *Peneaus monodon* brood shrimps

At present brood shrimps are collected from the sea and most of the brood shrimps are infected with WSSD disease. Therefore, there is a tendency of transferring diseases to post larvae and also it is difficult to find adequate quantities of disease free shrimp brooders from Sea. As a remedy for this, specific pathogen free (SPF) *Peneaus monodon* brood shrimps were imported and at present breeding is carried out using these brood shrimps and these

shrimp post larvae were distributed among the farmers in Puttalam and Batticaloa Districts and getting higher shrimp production. Accordingly, by May 2020, 1018 of *Penaeus monodon* brood shrimps have been imported.

Zero water exchange system with Shrimp circular tanks for constant higher production

Circular tanks are easier to build in less space, and have good water circulation for feed distribution and for sludge removal (self-cleaning). Based on the existing culture condition, a system that enables to minimize water consumption, improve the hygiene of the culture and at the same time maintain a more stable yield production is urgent to be developed by using a zero water discharge system. The system consists of



- a) circular tank consisted of Root blower(5hp) with aero tube airline system (40 lines), two paddle wheels (2hp) and central drainage system.
- b) stock tank
- c) water purification tank

Hundred metric tons circular tank has been introduced for Sri Lankan Shrimp farmers. In a square meter of this tank 500 post larvae can be stocked and from one unit 7.5mt can be obtained within 3 months as the harvest from this harvest Rs. 5.4 million can be obtained as an income.

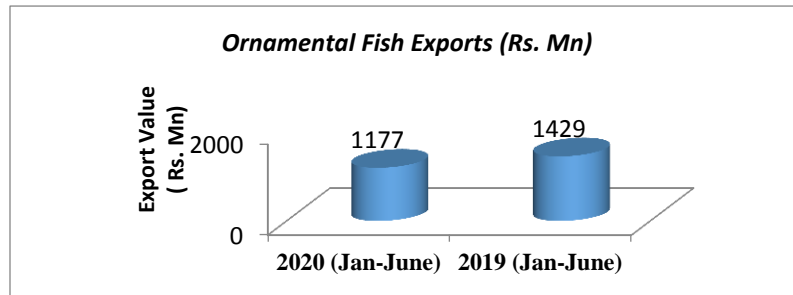
Ornamental Fish and Aquatic Plant Farming

NAQDA is involved in development of new ornamental fish strains, development of technology, provide brood fish, fish disease diagnosis, provide training and technical assistance etc. to support development of ornamental fish and aquatic plant culture and exports.

2020 (Jan - June)	
Ornamental fish sales	1.48 Mn
Supply of Brood fish	37,901
No .of people trained	85



A tissue culture laboratory established at Rambodagalla is involved in tissue culture of ornamental aquatic plants. The main objectives are of this center technology transferring and to earning the foreign exchange by exporting aquatic plants. 16,908 numbers of aquatic plants have



Sea weed Farming

Sea weed farming carrying out with community participation in Jaffna, Kilinochchi, Mannar, Puttalm Districts and Sea weed production is 91 Mt (wet) up to June 2020.



Crab Breeding and Farming

There are two hatcheries operated by the private sector in Iranawila and Ambakandawila in Puttalam District and 0.14 Mn of crablets were produced by June 2020. Upto June 2020, the crab harvest is 9.5 Mt. and Valued Rs. Mn 19.

Freshwater Prawn Exports

Up to June 2020, 523 Mt freshwater prawn was harvested and 53.23 Mt was exported

Vertical crab farming



Vertical crab farm



water recirculation system



crab boxes

This is a latest crab farming method and in this method, crabs are grown in plastic boxes inside a room with advanced water recirculation techniques. A vertical carb farm consists of two main sections which crab rearing section with boxes and water recirculation section. RAS (Recirculating Aquaculture System) used to solids removal, oxygenation, ammonia removal and increase water use efficiency. This system includes Biofilter Beads & UV filtration also for water conditioning with disinfection.

Boxes use to rear crabs and boxes have design with methods to water circulation, monitoring, cleaning and feeding crabs. In this method, usually requires human intervention to clean the boxes and feeding individually.

Leftover feed and waste need to be removed from the culture water to avoid contamination.

Normally, lids of the boxes need to be opened at least 2-3 times per day for feeding, monitoring, and cleaning. Boxes and piping are occasionally disassembled for disinfection to ensure low bacterial count in the system. plastic boxes typically have a lifespan of 8-10 years.

This method has several advantages compared to a crab pond such as need less labors, zero catabolism with higher survival, easy monitoring, and predictable production, less space requirement.

The first commercial scale vertical crab farming project is started in this year at Chilaw. Upto now this farm has 4000 boxes that can accommodate 4000 baby crabs in one cycle. Culture period depend on the size of baby crabs stocked.

Sea cucumber Farming

Farming is carrying out by private sector in Mannar, Kilinochchi and Jaffna.



2020 (January - June)	
Sea cucumber juvenile Production	0.37 Mn
Sea cucumber harvest	38 Mt

Sea bass Breeding and Farming

The private sector is engaged in sea bass farming in Gampaha, Batticaloa, Galle, Trincomalee and Puttalam Districts. Further, a private company is carrying out a sea bass farming project in the Trincomalee Sea at a cost of US \$ 4 million.

2020 (Jan-June)	
Seabass fingerling production	1.71 Mn
Seabass fingerling stocking	780,000
Seabass harvest	50 Mt



Milk Fish Farming for Bait

Milk fish farming for bait is carried out in Jaffna, Kilinochchi, Mannar and Puttalam districts and up to June 2020, 9.2 metric tons was harvested.



Establishment of New Aquaculture Development Centres

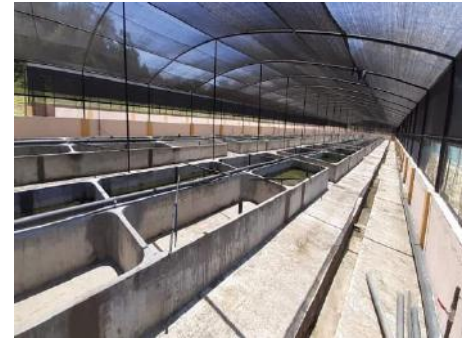
Establishment of Sea cucumber Hatchery, Oleithuduwai, Mannar

The construction of the Sea cucumber hatchery in Oleithuduwai, Mannar is nearing completion and the estimated cost is Rs. 150. Objective of this project is to produce sea cucumber juveniles to promote sea cucumber farming in Sri Lanka. Annual production capacity is 1 million sea cucumber juveniles, and this will increase the aquaculture production by 150 metric tons and expected to contribute Rs. Mn. 5250 to the economy.



Establishment of Ornamental fish Breeding Centre, Polonnaruwa

Construction of ornamental fish breeding center at Sevanapitiya, Polonnaruwa is nearing completion and the estimated cost is Rs. 250 million. It is expected to produce high quality goldfish and koi carp to distribute among the farmers in Polonnaruwa district with the objective to maintain the sustainability of the ornamental fish industry in the Polonnaruwa district, increasing the export income through increasing ornamental fish production and improving livelihoods.



Establishment of Crab Cities

The objective is to improve the environment for crab farmers, increase the crab production with eco-friendly manner, economic development in the area, increase export earnings, and generate direct and indirect job opportunities. Sites have been identified at Rakawa & Galmulla in Hambantota district and Mannkerni in Batticaloa district and Rakawa construction was completed. Procurement process is in progress for Galmulla. Land Clearance is in progress for Mannkerni Crab city. The total estimated project cost is Rs. Mn 1000



Rakawa Crab city construction

Establishment of Marine Ornamental Fish Breeding Centre, Bangadeniya, Puttalam

Since there is a great demand in the export market for artificially bred marine ornamental fish, a marine ornamental fish breeding center is being constructed at Bangadeniya in Puttalam district with the objective of introducing breeding technology to Sri Lanka and the estimated cost is Rs.250 million. Further, it is expected to increase export income through increasing marine ornamental fish production.



Establishment of Milk Fish Hatchery, Bangadeniya, Puttalam

NAQDA has taken steps to establish a Milk fish hatchery in Bangadeniya in Puttalam district with an annual production capacity of 10 million fry and the construction is in progress. Since the cost of importing bait fish is very high, the objective is to promote the milk fish farming for tuna bait. Estimated cost is Rs. 320 and construction is in progress.



Livelihood Development and Housing program

Improvement of livings standards and generating job opportunities in fishing villages, *Wewak Samaga Gamak* and *Diyawara piyasa* Programs are being implemented since 2016.

During the period of 2020 January to July Rs. 8.7 million have spent on development of 156 houses and 63 sanitary facilities including 16 districts.



04.
National Aquatic
Resources
Research and
Development
Agency
(NARA)

Vision

To be the premier institution for Scientific Research in Conservation, Management and Development of Aquatic Resources in the Region.

Mission

To provide innovative solutions for national development issues in the aquatic resources sector utilizing scientific and technological knowledge & resource base.

Functions

- Oceanography and Hydrography
- Improvement and development of fishing craft, fishing gear and equipment, and fishing methods
- The social and economic aspects of the fishing industry, including the welfare of fishermen and their dependents
- The processing, preservation and marketing of fish and aquatic products
- The development, management and conservation of aquatic resources in the inland waters, coastal wetlands and off-shore areas
- Provide advisory and consultancy services on scientific, technological and legal matters relating to the exploitation, management, conservation and development of aquatic resources.
- Co-ordinate the activities of institutions engaged in the exploitation, planning, research, development, conservation, control and management of aquatic resources
- Undertake the collection, dissemination and publication of information and data useful for the management, conservation and development of aquatic resources and the fishing industry in Sri Lanka.
- Provide training for persons required to carry out or assist in the work of the Agency.

4.1 DEVELOPMENT OF AQUACULTURE

4.1 Strategies to develop aquaculture

4.1.1 Zoning for aquaculture and site selection

The selection of the geographical areas designated for aquaculture development and careful selection of farm sites are essential first steps to ensure the success and sustainable and environment friendly aquaculture. NARA is engaged with zonal plan preparation for brackish water shrimp culture development in Batticaola and Trincomalee districts, edible oyster and sea cucumber farming in Northern coastal waters and demarcated 83 nos of one acre blocks and 2 nos 10 acre blocks for sea cucumber farming in Northern coastal area around Nainathivue island. However, Continuation of this process is essential to develop Zonal plans for selected well recognised aquaculture commodities.

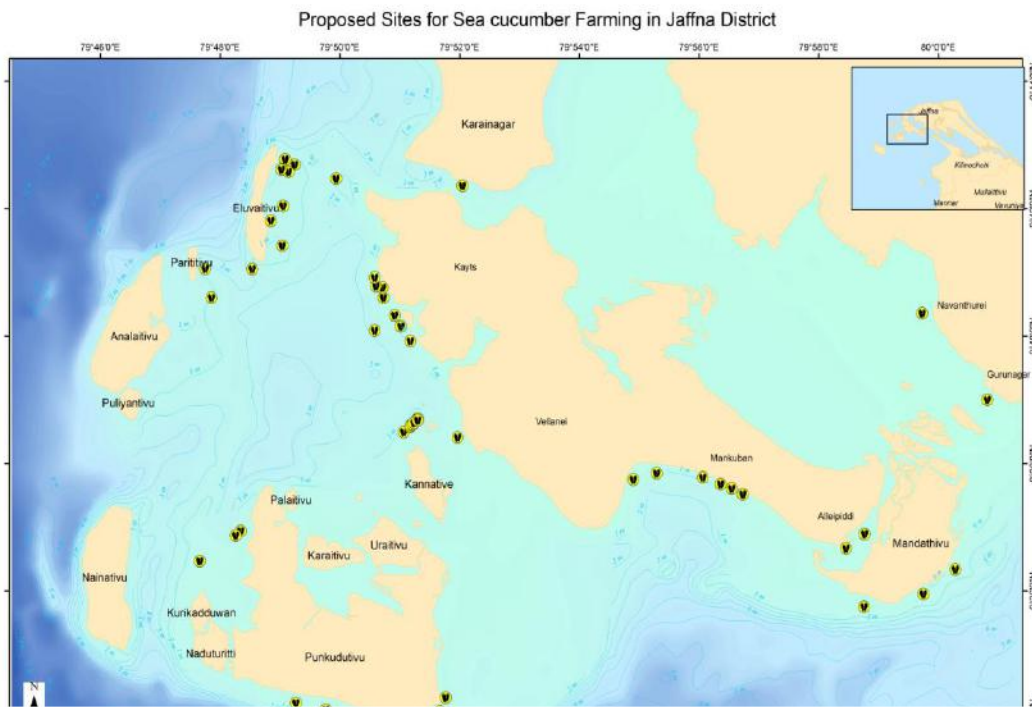


Figure Error! No text of specified style in document.-2 Proposed site for Sea

4.1.2 Establishment of marine multi species hatchery and production of healthy aquaculture seed

Major challenges in production of fish seed especially for sea cucumber and crab are high mortalities during larval developments, lack of good quality broodstock and water quality maintenance. Gaps in breeding and larval rearing technology are need to be addressed thoroughly and methodologies require to be developed, hence more research and development programs requires facility for multi species breeding and larval rearing

Establishment of marine multi species hatchery in 3 acre land at Kudawa, Kalpitiya is planned and design has been completed with consultation assistance from Food and Agriculture Organisation (FAO). Production from marine multi species hatchery will be allocated for natural stock enhancement and community-based livelihood development projects. Initially targeting development of edible oyster, Asian green mussel, Brown mussel, Sea cucumber, mud crab, Blue swimming crab, sea bass and groupers. Larval rearing issues in high value species and marine fish breeding are expected to be addressed using this facility.

4.1.3 Feed Development

4.1.3.1 Formulated Feed

With the intention of increasing commercial aquaculture production in the country NARA, under the guidance of Ministry of Fisheries and Aquatic Resources, had taken necessary actions to **install** medium scale fish feed production plant at Ekala, Ja-ela collaborated with Agristar Compost (pvt) Ltd, the private sector company as a public private partnership through the financial support of The Food and Agriculture Organization (FAO) .

The main objective of this project is to ensure regular supply of cost effective and nutritive fish feed at an affordable price for the aquaculture farmers in the country. Initially, this project was implemented for promoting sea baas aquaculture in the country and aimed to produce required feed for sea bass using this fish feed plant. In the meanwhile, with the increasing demand of fish feed, a decision was taken to produce fish feed for other fish varieties including tilapia, milk fish and ornamental fish varieties.

Fish feed production and sales for months of February, March, and July and up to 15th August 2020 as follows

Table Error! No text of specified style in document.-1: Fish feed production (From the manufacture)

Month	Ornamental Fish	Tilapia	Milk Fish	Crab	Total (Kg)
February	323.45	277.5	0	0	600.95
March	1394	12.4	0	0	1406.4
July	670.5	33	50	100	853.
August	86.45	60	0	500	646.45
Balance	661	245	235	10	1151
Total					4658.3

According to the feed requirement considering life stage of the fish and nutritional requirement, floating, sinking and powder mash feed can be produced using this setup. Furthermore, retail fish feed production for ornamental fish is carried out by Panapitiya Regional Research Centre of NARA at Kalutara.



Figure Error! No text of specified style in document.-3. Minister visit to feed

4.1.3.2 Live feed production - Increasing Local Brine Shrimp Production in salterns

Brine shrimp/Artemia is imported approximately 20 metric ton annually at the cost of 8500.00- LKR 10500.00 per 425 grams. NARA and Lanka Salt Limited were appointed to develop artemia production in solar salterns by the presidential task force for Poverty Alleviation and Livelihood Development headed by Hon. Basil Rajapakse. Artemia development program consists of two targets as training saltern



Error! No text of specified style in document.-4: Training programs conducted for saltern staff at Palatupana solar Saltern staff to collect artemia as short term and culturing the organism as

4.1.4 Management of water quality

4.1.4.1 Biofloc Technology (BFT)

BFT is a new technology to the country. It controls water quality and harmful pathogens and provide microbial protein feed to organisms. It is environmentally friendly and sustainable process allows less water changes and reduce cost for water pumping and feeding. Researches have been completed for culturing Guppies and Tilapia in high densities by NARA and training programs for farmers are expected to carry out within the year.



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4.2 COMMUNITY EMPOWERMENT AND DEVELOPMENT ENTREPRENEURS

Community based aquaculture programs have been initiated to culture seaweeds, mud crab and milk fish for live bait for long line fishery . Products and value-added products from capture fishery and aquaculture, commercialisation of such products is facilitated to create entrepreneurs. aquaculture must have to move towards to contribute more effectively to the reduction of poverty and malnutrition, and to become ecologically more sustainable.

4.2.1 Seaweed production

Community base seaweed culture in North province was initiated mainly full fill two objects, such as, comparing growth changes due to the different environmental factors of Cottoni types seaweeds and enhancement of community base seaweed culture among fisher community in Northern Province.

Three locations were selected as suitable for seaweed culture such as Walaipadu- 35 family, Walaipadu-Keerikuda-10 family and Kiranchi-near to Erramathive island-7 family. The beneficiaries are provided with materials (net, nylon ropes, and seed materials) and technical support in filed. Monoline culture was practiced all the sites except Kiranchi North where cage culture also practiced.



4.2.2 Pond Culture of Wild Collected Milk Fish (*Chanos chanos*) in Mannar as Bait for Tuna Fishing Industry

Live bait requirement for tuna fishing is estimated as 7000 mt per year. The requirement is filled by locally collected 3000 mt of flying fish, mackerel fish and milk fish and rest are met by the imported bait.

It is planned to implement the culture programme in selected ponds and natural water bodies located at Mannar : Sinnathivu, Arrippu , Wallippadu , Pallikuda, Parapankandal and ponds in Kalpitiya RRC with the participation of community living in those areas There about 110,000 juveniles were distributed among those sites to culture milkfish for bait.

Site juvenile stocked	No. of Juveniles
Kalpitiya	15,000
Sinnathivu	30,000
Wallippadu	15,000
Arrippu	17,000
Parapankandal	31,500
Total	108,500

Table Error! No text of specified style in

Total of 10 number of marginal fisher folks were engaged in wild collection of.



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4.2.3 Green Mussel and Pearl oyster Farming

Green mussels are available in cod bay in Trincomalee bay; however, stock of green mussel requires enhancement before exploiting in commercial level. Five rafts have been deployed to culture green mussel in the bay. Perl oyster could be found in 12 – 15 km far from Mannar (GPS coordinates where E 79.43.49.29 / N 8.44.49.29, E 79.43.27.89 / N 8.44.50.41) in 45 feet depth in the sea. Five hundred mature and spat seed Samples were taken to culture in selected locations Kiranchi, Walleppadu and Trincomalee bay. The main objective of the pearl oyster farming is to regain pearl industry in the country



Error! No text of specified style in document.-7: Raft preparation to



Error! No text of specified style in document.-8: Raft preparation to

4.3 PRODUCT DEVELOPMENT

Trainings were conducted for 200 fisher women in Northern Province to produce sea weed based jelly, pudding and yoghurt. Other value added product from fish and shellfish such as soup, pickle, chillie paste and crispy oysters.



Staff of Puttlam “Hella bojun hala” were trained in seaweed based jelly and pudding production. These products are available in two hella bojun stalls at Pambala and Chilaw.

4.4 REDUCTION OF POST-HARVEST QUALITY LOSSES IN FISHERIES

Introduction of economically viable engineering solution to provide best refrigeration system to existing multiday boats

Fish quality losses can be defined as degradation of quality of fish from harvest to consumption. Loss of nutrient composition, edibility and unacceptable quality are main causes for quality losses. Thirty to forty percent of fish harvests are of poor and unacceptable quality across many fishery harbours and in some fishery harbours especially in the southern part of the country fish quality loss is more than 60% to 70%. Annual economic loss is estimated as more than eleven billion Sri Lankan rupees (LKR 11 billion).

Studies were conducted across the production chain and introduce guidelines for proper handling of fish, production of uncontaminated ice to freeze fish, to keep clean fishery harbours and clean fish outlets. Poor refrigeration condition in fish holds and fish storage is identified as main cause to quality change of fish. An economically viable engineering solution to provide best refrigeration system to existing boats is in progress with the inter institutional collaboration among NARA, National Engineering Research and Development Centre (NERDC) and Department of Fisheries and Aquatic Resources (DFAR).



Error! No text of specified style in document.-9: Signing of Memorandum of understanding (MOU) among NARA, NERDC and



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Development of Multispectral Imaging and Mobile phone Applications for Fish Quality Grading and Identification of Freshness.

A mobile app is being developing with the technical collaboration of Faculty of Engineering, University of Peradeniya for fish quality grading and freshness identification Preliminary studies for Yellowfin tuna, Hurulla and Salaya is completed.



05.
Ceylon
Fishery
Harbours
Corporation
(CFHC)

Vision

Striving to become the top facilitator in infrastructure in the region with the conversion of entire fishery harbours chain to in Green Harbours ensuring the Blue Economy development in Sri Lankan fisheries.

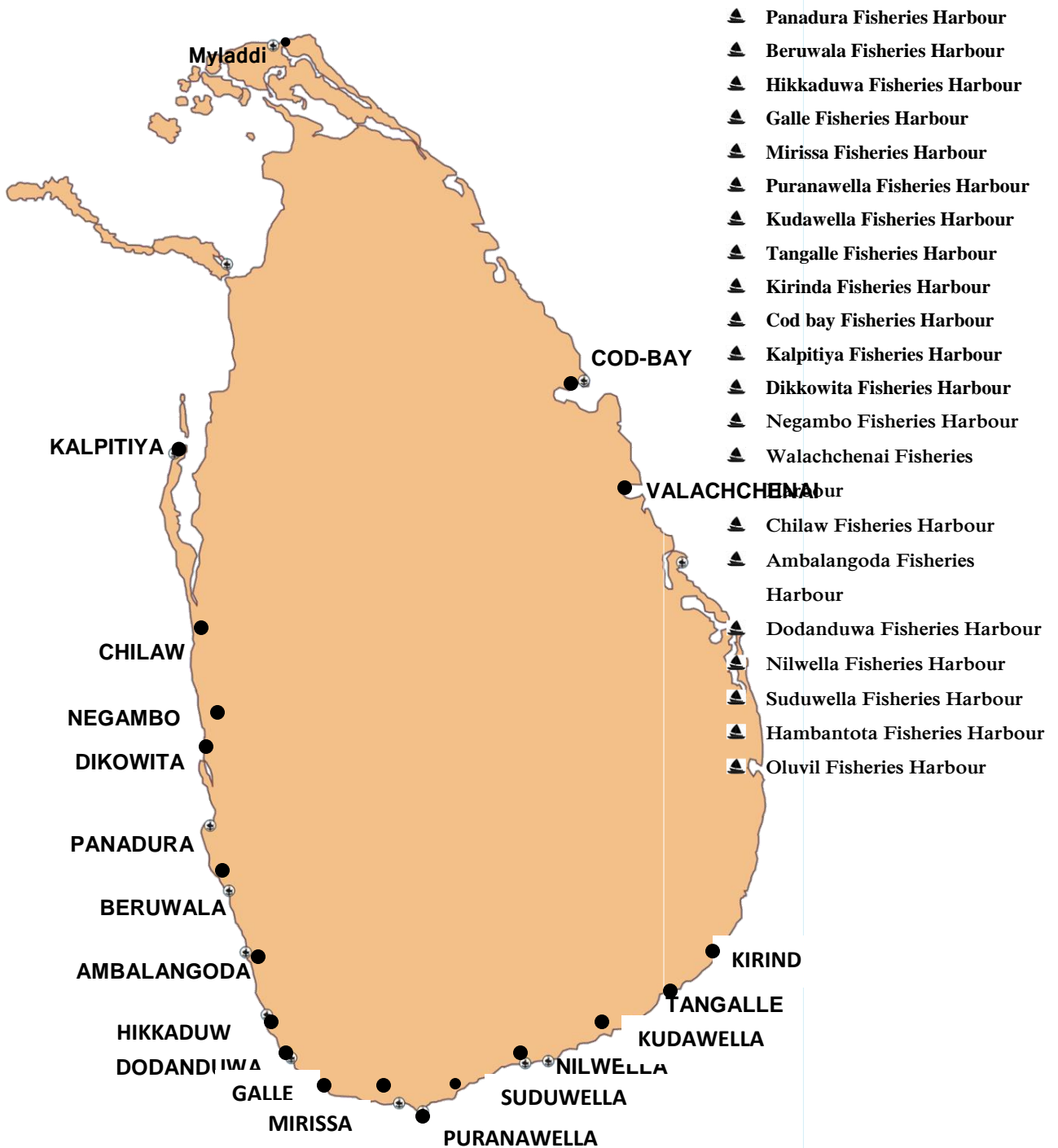
Mission

To deliver superior quality and state-of-the-art infrastructure ensuring income, efficiency and environmental & organizational sustainability

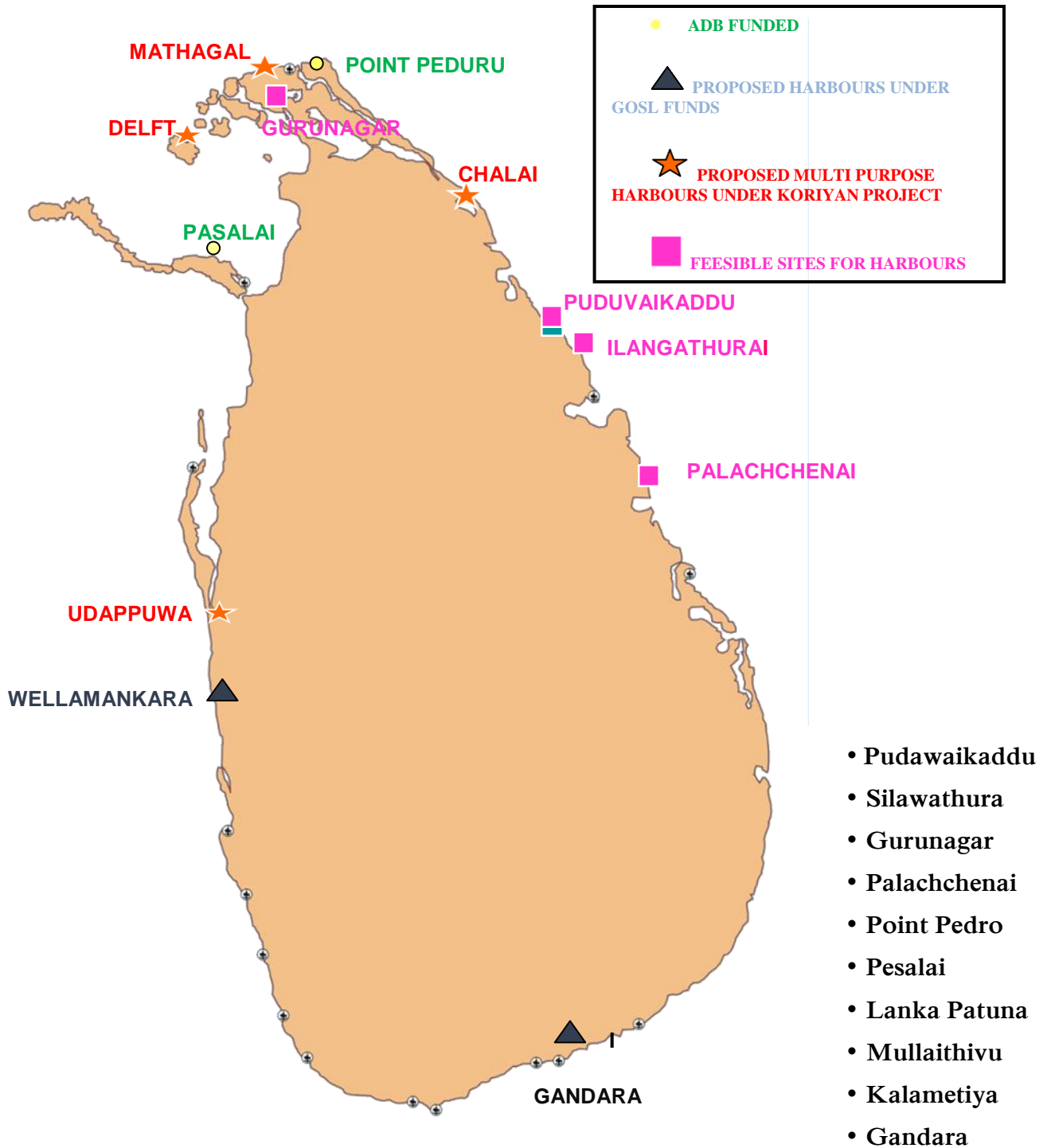
Functions

- Planning, designing and constructions of fishery harbours, anchorages, marine structures and other shore facilities,
- Establishment, operation, control and maintenance of Fishery Harbours, anchorages, marine structures and other shore facilities.
- Management of fishery harbours, anchorages, and other shore facilities.
- Provision of repairing and maintenance facilities for fishing crafts.
- Establishment, Operation and Maintenance of cold room, ice plants and other refrigeration facilities.
- Supply of water, fuel, lubricants, electricity, ice, cold room facilities and any other services and any other services incidental thereto for the purpose of fishery industry and fishermen.
- The provision of security to fishery harbours, anchorages, marine structures and other organizations within the Ministry of fisheries an Aquatic resource, and to recover charges, fees and any other payments on account of it
- The monitoring, control, surveillance of Sri Lanka's Exclusive Economic Zone (EEZ)

5.1 Fishery Harbours in operation



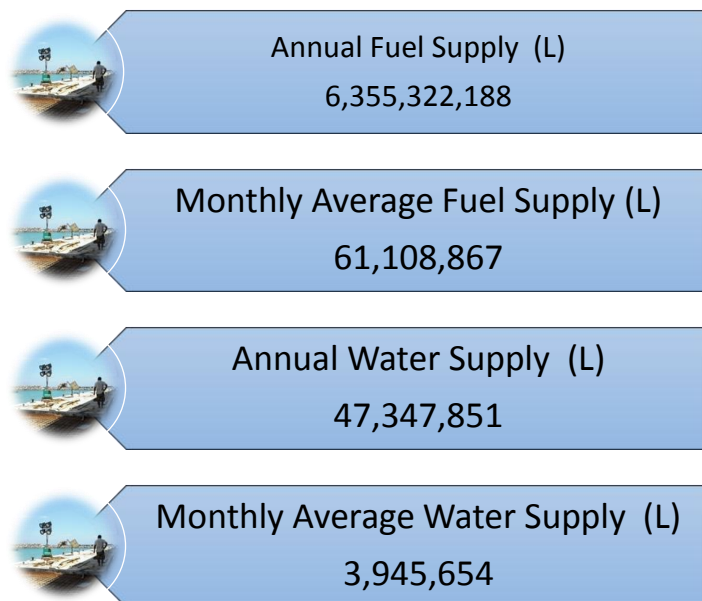
5.2 Proposed Fisheries Harbours in Sri Lanka under Construction and Planning



Key services provided by the harbour operational system

- ▲ Provision of fuel facility
- ▲ Water facility
- ▲ Ice facility
- ▲ Net mending halls
- ▲ Vessel repairing
- ▲ Canteen facilities
- ▲ Vessel lifting and dragging facilities
- ▲ 24 hour security service
- ▲ Maintenance of sanitary facilities
- ▲ Harbour dredging and maintenance facilities
- ▲ Harbour anchoring facilities
- ▲ Office facilities
- ▲ Banking facilities
- ▲ Facilities required for particularly industry-related investments
- ▲ Facilities for ships and whale watching vessel facilities

5.3 Fuel and water supply capacities of our ports - 2020



5.4 Overview of Fuel Storage Facilities and Sales - 2020

Fisheries Harbour	Fuel Capacity (L)	Annual sales (L)
Negambo Fisheries Harbour	36000	257,231,706
Dikkowita Fisheries Harbour	114000	1,296,674,289
Panadura Fisheries Harbour	36000	4,441,130
Beruwala Fisheries Harbour	79400	714,066,338
Ambalangoda Fisheries Harbour	72000	211,081,422
Hikkaduwa Fisheries Harbour	36000	80,906,903
Dodanduwa Fisheries Harbour	13200	30,483,543
Galle Fisheries Harbour	57500	628,041,533
Mirissa Fisheries Harbour	86000	469,264,671
Nilwella Fisheries Harbour	62500	260,574,781
Puranawella Fisheries Harbour	72000	418,221,257
Suduwella Fisheries Harbour	18000	135,884,623
Kudawella Fisheries Harbour	60000	651,977,673
Tangalle Fisheries Harbour	36000	144,590,764
Hambantota Fisheries Harbour	36000	53,629,640
Kirinda Fisheries Harbour	36000	62,160,525
Walachchenai Fisheries Harbour	62000	178,899,606
Cod bay Fisheries Harbour	54000	673,472,271
Kalpitiya Fisheries Harbour	36000	68,435,635
Chilaw Fisheries Harbour	-	-
Milad Fisheries Harbour	46000	15,283,828
Total	1084600	6,355,322,188

5.5 Storage facility and Sales - 2020

Harbour	Water capacity (L)	Annual sales (L)
Negambo Fisheries Harbour	50000	1,107,015
Dikkowita Fisheries Harbour	400000	7,422,358
Panadura Fisheries Harbour	200000	80,017
Beruwala Fisheries Harbour	80000	3,243,367
Ambalangoda Fisheries Harbour	128000	1,452,286
Hikkaduwa Fisheries Harbour	32000	917,634
Dodanduwa Fisheries Harbour	5000	186,668
Galle Fisheries Harbour	63000	6,130,049
Mirissa Fisheries Harbour	18000	5,686,567
Nilwella Fisheries Harbour	12000	1,858,791
Puranawella Fisheries Harbour	100000	3,551,702
Suduwella Fisheries Harbour	20000	1,107,817.09
Kudawella Fisheries Harbour	214000	7,270,038
Tangalle Fisheries Harbour	54000	1,375,138
Hambantota Fisheries Harbour	12000	427,286
Kirinda Fisheries Harbour	75000	144,898
Walachchenai Fisheries Harbour	87000	1,041,643
Cod bay Fisheries Harbour	230500	3,138,880
Kalpitiya Fisheries Harbour	50000	889,433
Chilaw Fisheries Harbour	20500	61,340
Milady Fisheries Harbor	80000	251,848
Total	1931000	47,347,851

5.6 Capacity of Ice Plants –2020

Ice Plant	Fisheries harbor/ Landing site	Production Capacity Mt / Days	Ice Cube / Ice sheets	Mobile Ice plant (Yes /No)	Present status
Kirinda	Kirinda	5	Cube	Yes	Active
Hambanthota	Hambanthota	20	Cube	No	Proposed
Tangalle	Tangalle	5	Cube	Yes	Not in Operation
Tangalle	Tangalle	5	Cube	Yes	Active
Kudawella	Kudawella	10	sheets	No	Active
Puranawella	Puranawella	35	Cube / sheets	No	Active
Puranawella	Puranawella	20	Cube	No	Proposed
Galle	Galle	5	sheets	No	Active
Galle	Galle	5	sheets	No	Active
Hikkaduwa	Hikkaduwa	20	Cube	No	Proposed
Dodanduwa	Dodanduwa	10	Cube	No	Proposed
Ambalangoda	Ambalangoda	20	Cube	No	Active
Beruwala	Beruwala	7.5	Cube	No	Active
Beruwala	Beruwala	5	Cube	No	Active
Panadura	Panadura	5	sheets	No	Active
Negombo	Negombo	20	Cube	No	Active
Chilaw	Chilaw	20	Cube	No	Active
Kalpitiya	Kalpitiya	10	Cube	No	Proposed
Cod bay	Cod bay	20	Cube	No	Proposed
Cod bay	Cod bay	50	Cube	No	Active
Dikowita	Dikowita	20	Cube	No	Active
Walachchena	Walachchena	50	Cube	No	Active
Ice production capacity		367.5			

5.7 Analysis of harbour anchorages facilities - 2020

The number of multi-day fishing vessels registered with the Sri Lanka Fisheries Ports Department and operating in the year 2020 is amounted to 3921 and the number of fishing vessels operating which registered under fisheries harbors is about 3874.

This is a percentage of 98% and the fish production that we bring into the country through multi-day vessels through our harbors is amounted to 179173.4 Mt. The fish harvest entering the country through this is 90472.8 metric tons.

The number of one day vessels operated by our harbors is 266 and it represents 33% of the total number of one day vessels. The fish harvest from this vessels account for 90472.8 Mt

Summary of fishing vessels registered under our fishing harbours

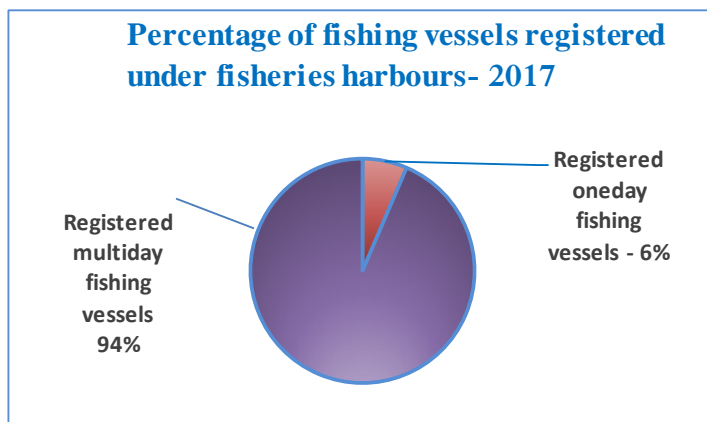
✚ OFRPB (1)(17-23ft)	03
✚ 1 Day (3) (28 - 34ft)	263

The total number of one-day fishing boats receiving port facilities 266

Multiday (IMUL)

🐟 feet 34 - 28 feet	332
🐟 feet 34 - feet 40	1896
🐟 feet 40 - feet 50	1612
🐟 feet 50 - feet 60	27
🐟 feet 60 and high	07

Total Number of multiday boats with harbor facilities - 3874



5.8 Overview of the harbor facilities

Harbour	Inception year	Area (Ha)	Harbour basin (Ha)	Length of the breakwaters (m)	Depth (m)
Kalpitiya	1968	0.49	2		2.5
Chilaw	2009	1			2.5
Mirissa	2007	0.42	2	456	3
Dikkowita	2013	8.1	11.7	1170	3.5-5.0
Modara	1965	0.92	2.3	140	4.0-5.0
Panadura	1998	2.13	2.7	270	2.5-3.0
Beruwala	1965	7.05	10	426	2.5-3.0
Ambalangoda	2010	1.74	6.4	375	3.5
Hikkaduwa	2001	2.94	6.3	325	2.5-3.0
Dodanduwa	2010	1.41		100	3
Galle	1965	1.5	4	235	3.0-6.0
Mirissa	1966	2.44	7.2	478	2.5-3.0
Puranawella	1980	4.96	14.2	400	2.5-3.0
Kudawella	1998	4.24	13.1	700	2.5-3.0
Tangalle	1965	1.45	2.5	221	2.5-3.0
Hambantota	2010	1.65	5.8	275	3.5
Kirinda	1985	3.5	3.6	450	2.5-3.0
Walachchenai	2011	1.71	3.7		3
Cod Bay	1965	9.23	20		6
Nilwella	2012	1	5	428	3

 Fisheries Harbours older than 20 years



Hambantota Fisheries Harbour

5.9 Recent Infrastructure Development

Chilaw Fishery Harbour Development



Fully constructed auction hall



Fuel tank constructed inside the harbour

Mirissa Fishery Harbour Development



Fully constructed net mending hall



Constructed new auction hall

Galle Fishery Harbour Development



Renovated internal road system



Whale watching services

Kudawella Fishery Harbour Development



New Service Jetty



. Renovated Fuel Tank

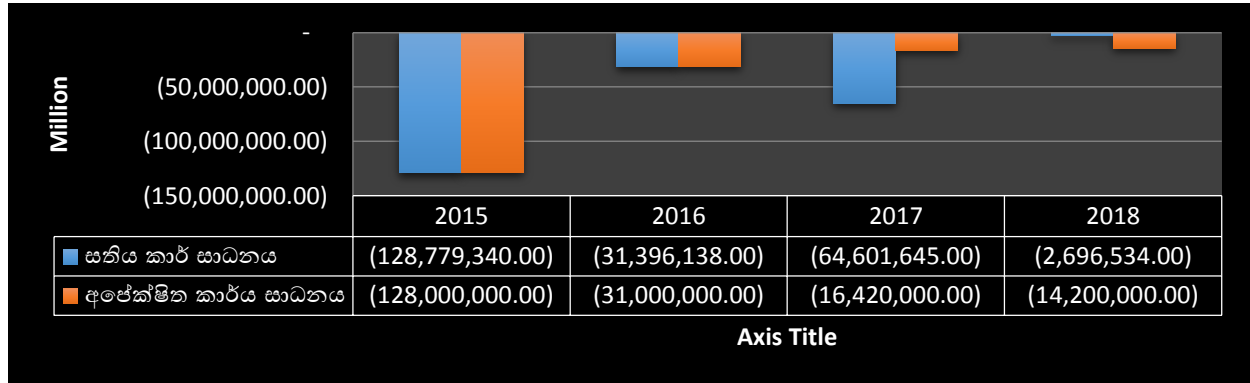
Kalametiya Fishery Harbour under construction



5.10 Analysis of Financial Status

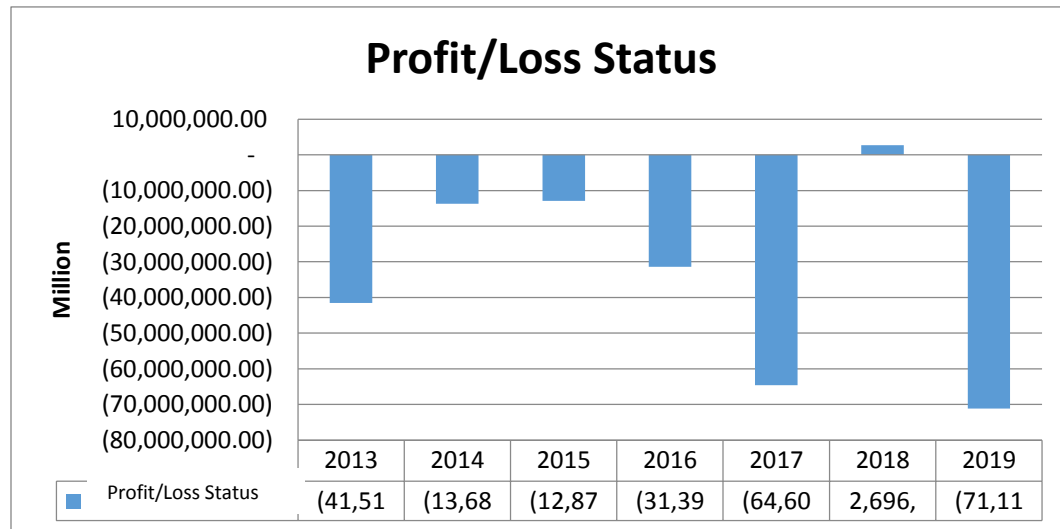
Perational Data Analysis

This graph shows financial performance compared to the financial objectives mentioned in the combined plan 2016 and 2020.



Financial Performance 2015-2018

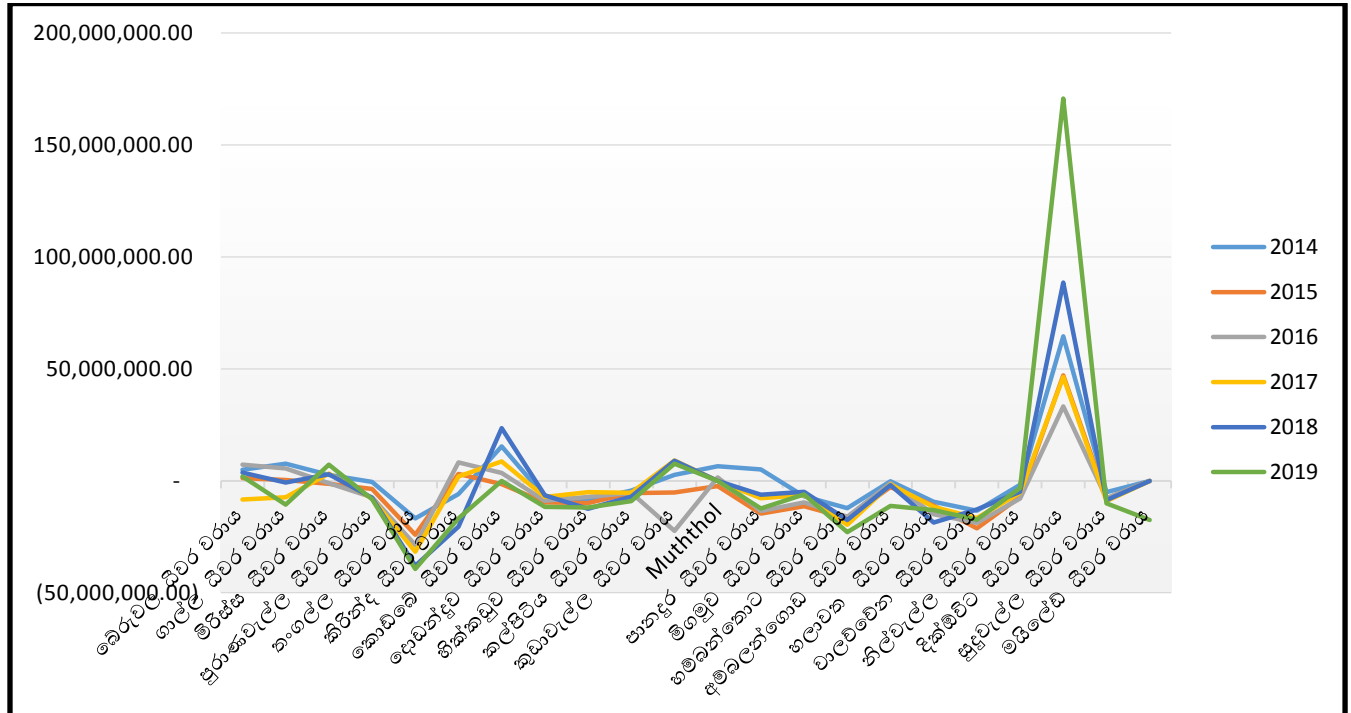
It shows a profit of Rs. 2 million in 2018 compared to Rs. 64.60 million in 2017. The decline in operating results in 2017 was due to an increase in operating costs



2015-2019 Toal Number of Operati

Operations of Fisheries Harbours

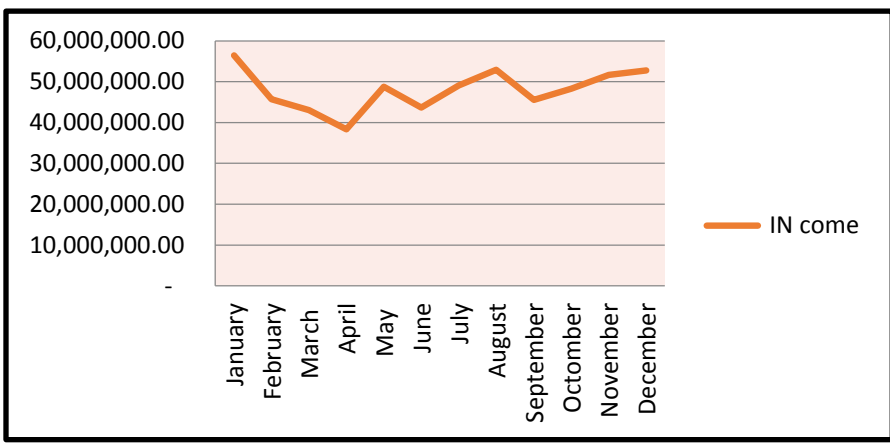
After considering the active performance of fisheries harbours, 8 fisheries harbours had been able to make profit from 2013 to 2018. Fishing operations were fluctuated as a result of weather conditions and other situations during this period.



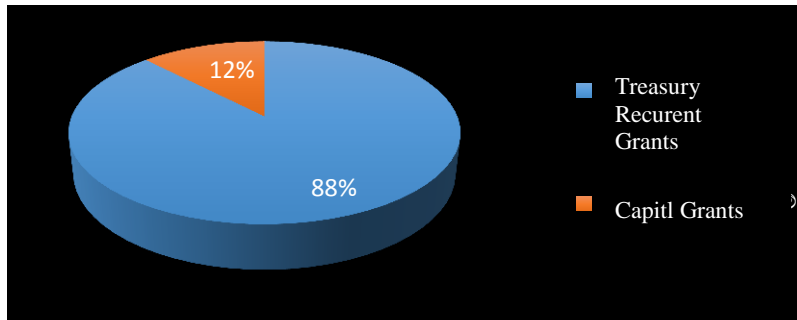
2013-2019 Fisheries harbours Operations

Progress of harbour Operations - 2019

2019 වර්ෂයේ ජනවාරි සිට දෙසැම්බර් මාසය දක්වා වරායන්හි මෙහෙයුම් ප්‍රතිඵල



Fund allocation for fisheries harbours - 2019

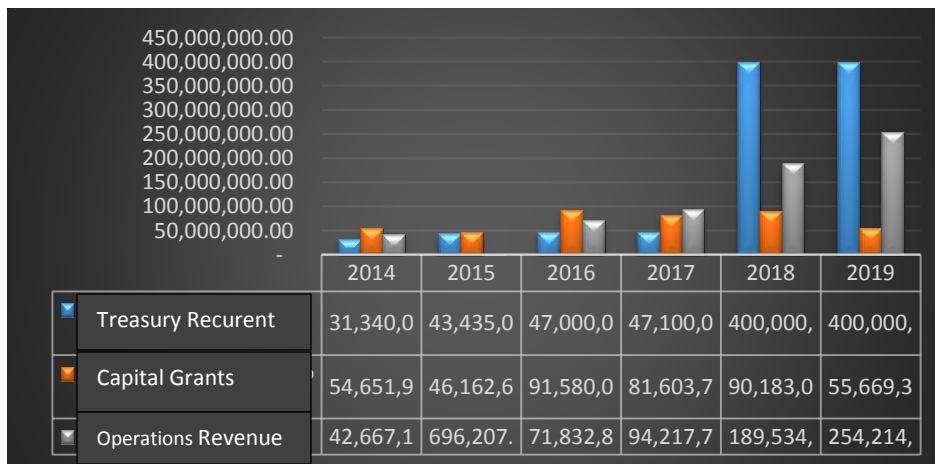


Fund allocation for fisheries harbours - 2019

Comparison of treasury grants and Revenue 2013-2019

From 2013 to 2019, the contribution of postal operating income represented a modest level of growth, during which recurring receipts from Treasury grants increased.

Comparison of Revenue 2014-2019

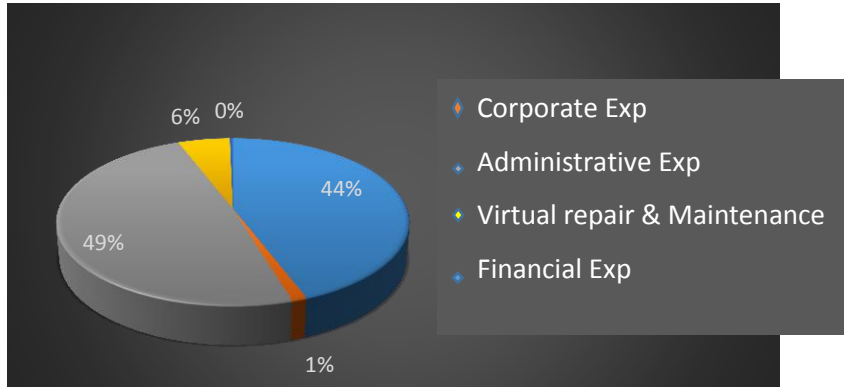


Harbour expenses -2019

The total expenditure has declined by Rs 33 Mn in 2019. The reasons for the decline are as follows

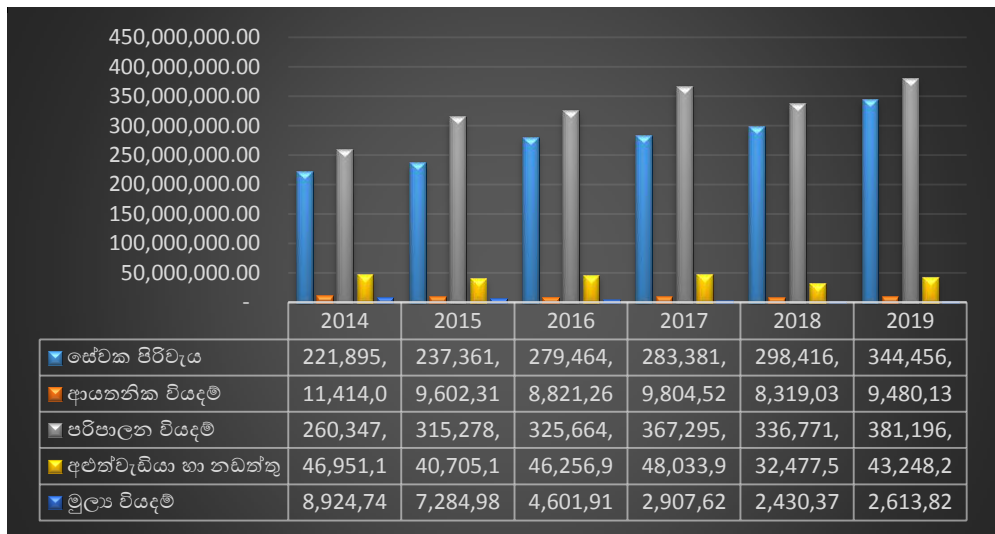
- Reduce administrative costs
- Reduced repair and maintenance costs

In 2019, 50% of expenses account for administrative fees, 44% for employee benefits, 5% for repair and maintenance and institutional fees.



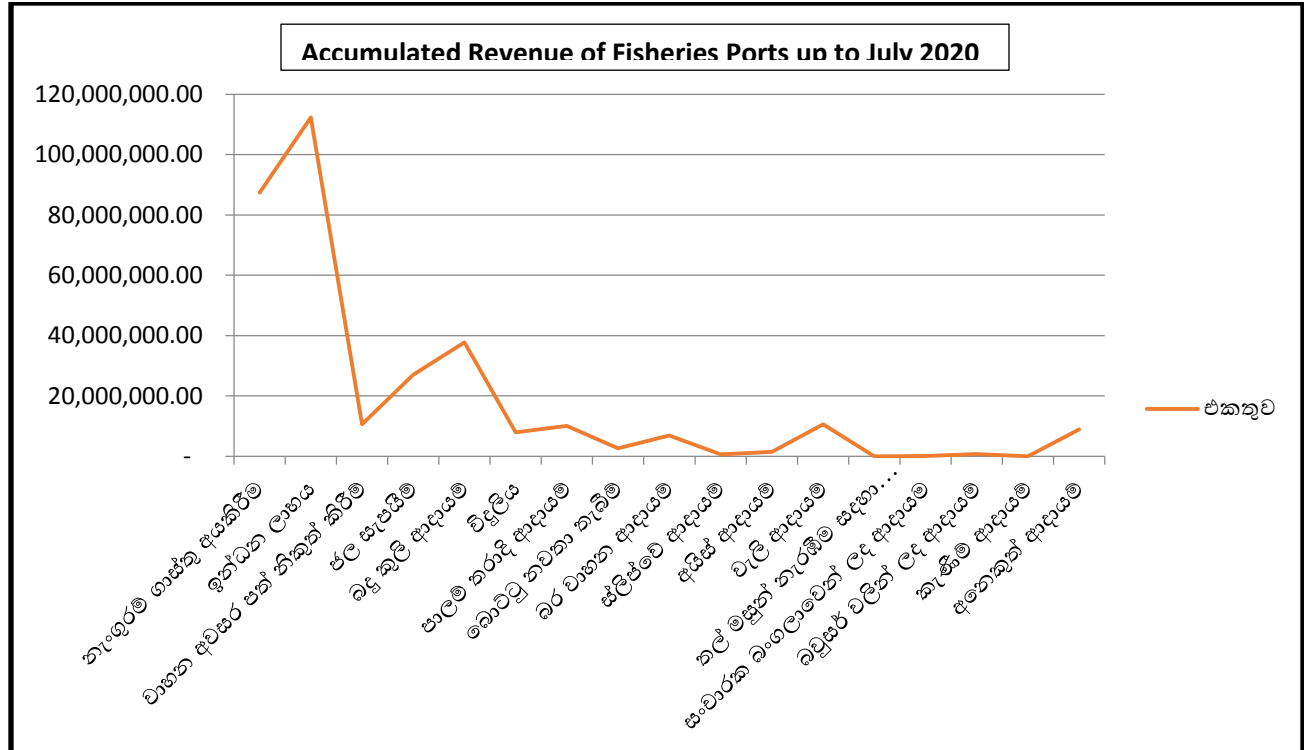
Harbour expenses -2019

According to this figure, administrative and staff costs have risen steadily during this period, with other harbour operating costs in the range of 4-50 million.



5.11 Revenue from fishing harbors - up to July 2020

Revenue	Rs.
Charging of anchor fees	87,388,435.60
Fuel profit	112,305,541.13
Issuing vehicle permits	10,514,751.79
Water supply	27,049,710.01
Tax revenue	37,693,179.65
Electricity	7,914,255.81
Bridge Scale Revenue	10,050,092.62
Boat parking	2,577,555.00
Heavy vehicle revenue	6,819,437.94
Slipway revenue	582,722.30
Ice revenue	1,392,664.59
Sand revenue	10,606,427.08
Proceeds from whale watching boats	-
Income from the circuit bungalow	111,700.00
Revenue from bowsers	663,643.53
Excavation revenue	-
Other income	8,909,405.46



5.12 Service improvement

Short term plans

- ✓ Regularization and improvement of ongoing services.
- ✓ Minimize the time of services provided at the harbours for vessels
Ex increasing frequency
- ✓ Launching a program to supply adequate amount of ice and quality ice.
- ✓ Supply of fishing gear and essential consumer goods in the harbours at reasonable prices (by institutions such as CWE)
- ✓ Adopt possible measures to minimize post-harvest damage.
- ✓ Increasing welfare activities for fishing families.
- ✓ Providing banking services, insurance services and loan facilities for fishermen.

Provision of long term facilities

- ✓ Designing new fishing harbors and anchorage depths to accommodate larger fishing vessels in line with national and ministry goals.
- ✓ Maximum adaptation of harbour management, fish handling and waste management in our ports in terms of accepted standards.
- ✓ Maintaining the depth of harbour docks as required.
- ✓ Renovation of anchorages, landing sites and harbours in the North and East as required (Continued in parallel with the resettlement process)
- ✓ Improving harbor facilities in line with the increasing number of Vessels Island wide.
- ✓ Facilitate the implementation of Vessel Monitoring System (V.M.S).

5.13 Revenue improvement

Short-term solutions

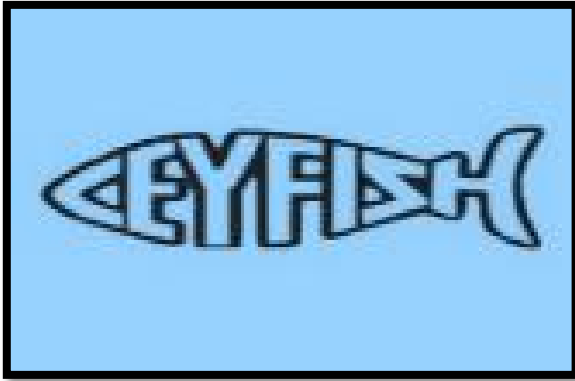
- ✓ Development of essential infrastructure.
- ✓ Establishment of good governance system using accepted methods to minimize all identified costs such as transport, electricity, water, telephone etc
- ✓ Sale of sand removed from excavations during port basin maintenance for development activities.
- ✓ Introducing the bridge scale system in every port and generating revenue and collecting data through it.
- ✓ Useful use of movable and immovable property which is not currently utilized for income generation. (For projects related to fisheries industry)
- ✓ Updating leases and reducing the duration of contracts and revising their prices.

Long-term solutions

- ✓ Carrying out all excavations in fishing harbors by excavating vessels belonging to the Ceylon Fisheries Harbor Corporation.
- ✓ Installation of bridge scales for each port.
- ✓ Revise service charges related to whale watching activities and upgrade facilities. නව සේවක
Approval of estimates
- ✓ Adoption of the new Corporation Act.
- ✓ Obtaining agreements with outside parties for excavation work through the project of the Neela Diyawara Mining Division.
- ✓ Establishment of Marinas (anchorage facilities) for yachts in ports.
- ✓ Facilitate dolphin and whale watching in the harbor.
- ✓ Increase revenue by having circuit bungalows in every port.
- ✓ Establishing the relevant revenue percentages for the Corporation by establishing the Tuna Industry Quality Assurance in Sri Lanka through Tuna Branding and thereby making Sri Lanka a Tuna Fishing Landing Center in South Asia.
- ✓ Increasing the depth of existing ports for trawlers and mother vessels

5.14 Mining vessels belonging to the Ceylon





06.
Ceylon
Fisheries
Corporation
(CFC)

Vision

To be the Leading Commercial Organization, Guiding and promoting fish production and trade for the benefit of the Consumer and the Producer.

Mission

- To be an effective organization to contribute more to the Gross National Product
- To be the most significant organization responsible for marketing of fisheries production, processing and marketing.
- To (harness) strengthen the economic activity of fishermen and to obtain greater (achievement) development of its production capacity
- Would engage in production and marketing, quality fish and value added products at a reasonable price, using modern technology
- To provide protein to the nation

Objectives

- Facilitating strategic investments having analyzed expenditure and benefits
- Improving our service beyond the expectation levels of the customers
- Providing a reasonable price to the fishermen and providing good quality fish to the consumers at a reasonable price
- Performing as a national institute that is capable of maintaining a fixed price in open market
- Actively achieving export opportunities for selected fish varieties in Sri Lanka

Present Status

The total staff of the Ceylon Fisheries Corporation is 715 and 239 are employed in the Head Office and 470 employ in outlets. Out Of these, 35 managers engage in works

The Ceylon Fisheries Corporation consists of 22 outlets and divisions related to the purchasing and selling fish and it comprises 15 purchasing and marketing centers and 05 purchasing centers and 02 sales divisions at the head office. The Ceylon Fisheries Corporation also comprises 95 outlets island wide.

At present, the loss incurred in the overall operational process of the Ceylon Fisheries Corporation (January to June 2020) is Rs. 39,172,029.00.

Among this, Negombo, Anuradhapura, Kurunegala, Metro, Bandarawela, Public Service supply division and Sales outlets run profitably. In addition, outlets in Beruwala, Kalmunai, Chilaw, Kudawella and Jaffna continue to minimize their losses.

Sales Outlet Island wide owned by CFC

<u>Pruchasing centers</u>	<u>marketing centers</u>	<u>selling and purchasing centers</u>
Trinco	Anuradhapuraya	Negombo
Pesale	Rathnapuraya	Beruwala
Kudawella	Kurunegala	Metro
Puranawella	Kandy	Galle
Kalmunai	Bandarawella	Hambanthota
		Tangalle
		Minneriya
		Point Peduru

Sri Lanka



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New stores opened in 2020

13 new outlets were declared opened from January 2020 to August 2020 in following areas

1. Mpdara Mega Outlet
2. Kuliyaipitiya
3. Nittabuwa
4. Naththandiya
5. Naiwala
6. Delgoda
7. Alllawa
8. Pulingupitiya
9. Panadura
10. Polgahamula
11. Mega Sathosa - Kandy
12. Pannala
13. Gothatuwa



Opening Gothatuwa outlet



Opening Delgoda outlet



Opening Naiwala outlet



**Opening
Pulingupitiya outlet**



**Opening
Polgahamula outlet**

New stores to be open at

1. Kandana
2. Ja ela
3. Ruwanwella
4. Gampola
5. Kandy road
6. Balangoda
7. Palmadulla
8. Samanthurei

At present, the Fisheries Corporation purchase About 350Mt of fish monthly and Sales volume of its outlets island wide is about 370 Mt .

Special projects carried out by the Fisheries Corporation during the corona

In this regard, the Treasury has invested Rs. 50 million each for a special project two times to supply fish to the public and its progress is as follows.

Total sales volume Rs. 129,650,226.00

Profit Rs. 7,480,707.00



The Ceylon Fisheries Corporation (CPC) expects to achieve a profit margin of Rs. 500 Mn by minimizing losses.

Sales plan to increase sales volume from 340 MT to 500 MT is as follows.

- The Ceylon Fisheries Corporation currently comprises 95 outlets with a monthly sales of 340 MT.
- It is expected to increase sales at the outlets by 20 MT.
- It is expected to open 20 new outlets this year, with a sales growth of 70 MT.
- It is also expected to increase production and sales volume to 25MT.
- It is expected to increase sales volume by 45 MT from supplying fish to government institutes and other projects.

Grade A store sales capacity - more than 12000 kg

There are currently 03 stores selling this range.

Grade B store sales capacity - between 6000 kg and 12000 kg

There are currently 12 stores selling this range

Grade C store sales capacity is between 2500 kg and 6000 kg

There are currently 22 stores selling this range

Grade D outlet sales capacity less than 2500 kg

There are currently 58 stores selling this range

All of the above outlets are expected to increase current sales to 20 MT, which is expected to cost Rs 10 million to modernize the outlets. The expected expenditure of Rs. 10 million will spend as follows.

- 03 A grade shops = 0.5Mn
- 12 B grade shops = 2Mn
- 22C grade outlets = 3Mn
- 58 D grade stores = 4.5Mn

01. Opening of new stores in order to increase sales volume up to 140 MT

It is expected to open 40 new stores and those stores have planned to open under the following outlets.

(Monthly sales volume in stores assume as an average of 3500 kg)

1. Negambo Outlet	- 3	A -1, B-2
2. Metro Outlet	- 8	A -3, B-5
3. Beruwala Outlet	- 4	A -1, B-3
4. Galle Outlet	- 3	B-3
5. Kurunegala Outlet	- 4	A -1, B-3
6. Kandy Outlet	- 4	A -1, B-2, C-1
7. Rathnapura Outlet	- 3	B-1, C-2
8. Bandarawela Outlet	- 3	C-3
9. Anuradhapura Outlet	- 2	C-2
10. Puranawella Outlet	- 2	C-2
11. Hambanthota Outlet	- 2	C-2
12. Kalmunai Outlet	- 1	C-1
13. Chillaw Outlet	- 1	C-1

Expenditure

it is expected to incurred cost around Rs 4 million to start a **Grade A** shop and cost incurred is summarized as follows.

- Security deposit of Rs. 500,000
- 20 lakhs for construction
- 1.5 million for purchase of assets (e.g. refrigerators)

it is expected to incurred cost around Rs 3million to start a **Grade B** shop. Cost incurred is summarized as follows.

- Security deposit of Rs. 300,000
- 6 laks for construction
- 6 laks for purchase of assets (e.g. refrigerators)

it is expected to incurred cost around Rs 2 million to start a **Grade C** shop. Cost incurred is summarized as follows.

- Security deposit of Rs. 200,000
- 3 lakhs for construction
- 5 laks for purchase of assets (e.g. refrigerator)

Human Resources-

- ❖ After 2011, Graduate Managers have not been recruited to the Ceylon Fisheries Corporation and the Corporation should recruit at least 10 young managers who have novel ideas.
- ❖ Details of employees to be employed for 40 new stores
 - For grade A (05 employees each) $7 * 5 = 35$
 - For grade B (04 employees each) $04 * 19 = 76$
 - For C grade (03 employees each) $03 * 14 = 42$

02. Transport facilities

Since the above sales target cannot be achieved with the current number of freezer trucks owned by the Ceylon Fisheries Corporation, It is expected to purchase about 25 new freezer trucks for this purpose.

At present the Ceylon Fisheries Corporation owns about 50 trucks and these 50 trucks do not have new freezer facilities. In addition these trucks are about 50 to 15 years older and incur huge maintenance cost

At present, it costs around Rs. 8 million to purchase a frozen truck in the market and it will cost around Rs. 200 million to purchase these 25 trucks.

it is vital to purchase these 25 trucks to transport fish to those outlets when opening 40 new outlets.

03 Cold room facilities

The Ceylon Fisheries Corporation had a cold room complex at its head office with a capacity of 1000 MT. During the period when the cold room complex was in operation, it made a huge profit (around Rs. 03 million per month) and even paid the salaries of the workers at head office. When the fish harvest is high and the fish are bought and stored at low prices It will lead to disseminate fish to the market in times of scarcity. Moreover it is possible to make an extra profit by giving the fish storage complex to the private sector. Thus it has been proposed to start a new cold room complex as follows.

i. Freezer facilities

02 rooms with a capacity of 2.5Mt

- expected cost around Rs. 40 million.

ii. Cold room facilities -

10 cold rooms with a capacity of 100 MT

- expected cost around Rs. 70 million at a cost of Rs. 7 million per room.

Accordingly, the total cost of starting a new cold storage complex will be around Rs. 110 million.

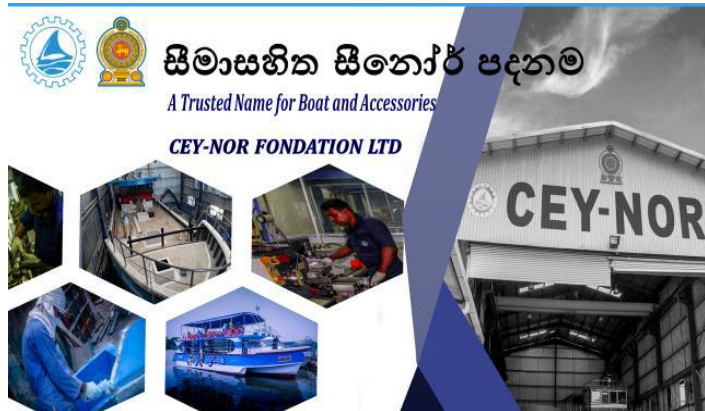
In addition, following issues are faced by the Ceylon Fisheries Corporation.

- Upgrading the facilities at existing head office
- Establishment of a computerized operating system for efficient monitoring and directing of direct operations of outlets, stores, and headquarters around the island.
- The purchase of 50 new display refrigerators to CWE (one lakh each) will require around Rs. 5 million and expected about Rs. 5 million for a vacuum machine for production and packaging.

Out of the above 40 new stores, It has been planned to open 20 outlets before 31st December 2020. Accordingly, It is expected to add 70 MT of sales volume to the current market.

In this circumstances, It is expected that the total sales of the Ceylon Fisheries Corporation will be as follows as at 31.12.2020 .

Current Sale	- 340 MT
Sales Growth in Existing Stores	- 20 MT
Sales in 20 new stores	- 70 MT
Sales in other sectors	<u>- 70 MT</u>
(Eg Packet / Hospital)	<u>- 500 MT</u>



07.

Cey-Nor
Foundation
Limited

Vision

To be the leader in the manufacturing of fishing vessels, leisure crafts and fiberglass related products to be an internationally recognized boat builder.

Mission

Operating as an efficient and effective government-owned company supplying high-standard fishing craft and fishing gear at competitive prices

Objectives

- To become a recognized exporter of fiberglass boats
- To become a fiberglass boat builder with international reputation
- To be an investor in fiberglass boat building sector in foreign countries
- To be an effective contributor to the development of Fishing Industry in Sri Lanka by supplying high-quality fishing boats & fishing gear
- To be a provider of excellent customer services

Products manufactured by Ceynor Foundation Limited

Fishing Boats & Whale Watching Boats

- 18 ft Multiday fishing boats
- 55 ft Multiday fishing boats
- 50 ft Multiday fishing boats and whale watching boats
- 49.5 ft Multiday fishing boats
- 32 ft Multiday fishing boats
- 36 * 18 Floating Restaurant
- 13.5 Recreational Vessels
- Canoes
- Floating house
- Paddle boat
- Vessels with externally fixed engines

Other Fiberglass Related Products

- Fish container
- Mobile toilet
- Fish keeping ice box
- Fresh water and sea water canoes
- Fish stalls
- Fish pallets
- Security room
- Life rinss

Product Orders Which are Being Built

Private Sector Orders

NO	ORDER NO	NAME OF CUSTOMER	DESCRIPTION
1	1287	Colette Blanche offshore, Mauritius	55 feet fishing boat
2	1376	Colombo Engineering enterprises	Colombo skipper boat repair

State Sector Orders

NO	ORDER NO	NAME OF CUSTOMER	DESCRIPTION
1	1181	Mr. Indralojan, Hospital Rd, Kalmunai	59.5 feet Fishing Boat
2	1339	DFAR	Ice Box 7' x 3' x 3'
			Ice Box 4' x 1.5' x 2'
3	1340	NARA	2.4m Hatchery Jar
			8' x 4' x 2' Tank
			Hatchery Tank 1.1m dia, 1.2m high
			Glass Tank 3' x 1.5' x 1.5'
			Hatchery Tank 0.75m dia, 1.05m high
4	1374	CFHC	Fiberglass 18' x 8' Floating Pier

Future Plans

➤ Long Term Plans

Manufacture of vessels moulds.

- (i). 45 ft & 491/2ft
- (ii). Clincer boats
- (iii). Paddles boats
- (iv). Floating restaurant

Arranging a formal programme to dispose fiberglass waste.

Commencement of Karainagar project

These vessels moulds are not available with the institution for the time being and various issue have been occurred due to outdated nature of the mould for paddle boats avail in the institution. As production are carried out on order basis, capital provision are not available to spend in order to have a new vessel mould.

Various environmental issues have been occurred due to the undecaying nature of fiberglass which is the main raw material used for our products. It has been planned to establish a fiber recycling plant as a remedy and alternative income generation project.

We have been provided with the Karainagar dockyard which possesses a monopoly market opportunity which had been developed as a project of the fisheries ministry. No competitive dockyards are available in the locality and Cey-Nor brand is highly renowned in the area. As the dockyard located area is represented by the Cabinet Minister of Fisheries, many developing opportunities are available for economic development under correct plans.



Picture 01: Paddle Boat

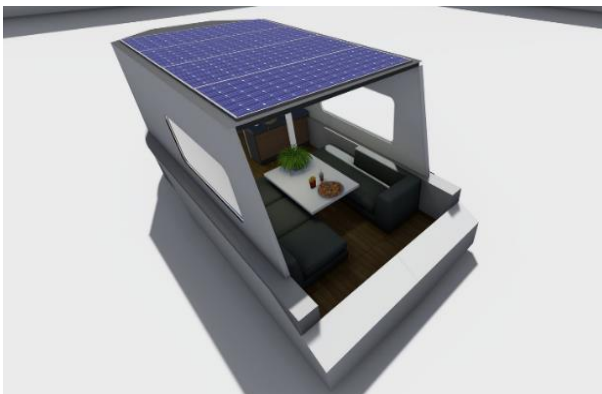
➤ Short Term Plans

Making approaches for the building of environmental friendly vessels with solar panels.

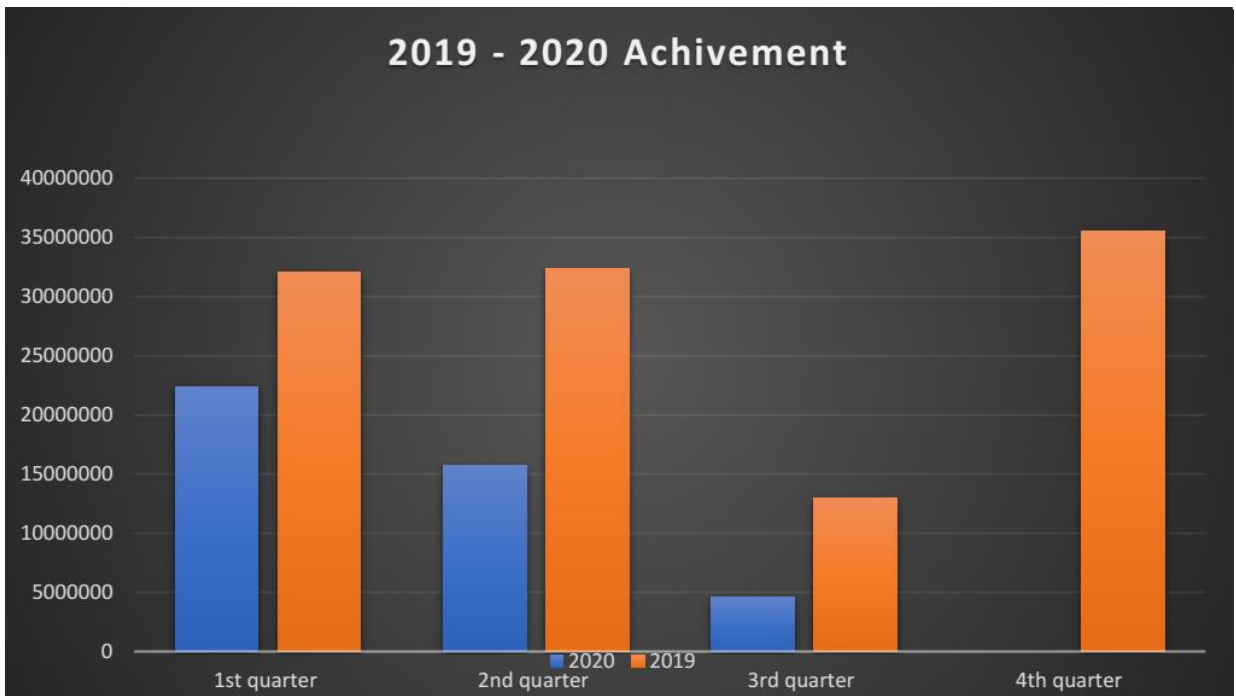
Provision of specific loans for the purchasers in the fisheries & Tourism sector.

Environmental sound pollution largely takes place by the vessels currently in use and water pollution occurs by the vessels run using diesel, petrol, kerosine engines. The fish breeding is adversely affected by this situation. It is mostly suitable for the buildings of boats using environmental friendly power energy source. This will not only environmental but also economically benefited to vessels owners as well.

Purchasers find it difficult to invest money as one time payments for our fiberglass products i.e. whale watching boats and floating restaurants as they are over Rs. 10 million. Hence, requirement of a loan scheme method has been occurred which enables making the payment in premium under concessionary interest rates.



Picture 02: Floating Market



Our Products In The Year 2020



Live fish transport tank - Ministry of Agriculture, North central province



Colombo engineering boat for repair



Lanka boat 2 repaired boat - Ceylon petroleum co-operation



• 50 ft whale watching boat, Mirissa – Mr. Geeth Sanjeewa



Fish boxes – Department of Fisheries and Aquatic



Fiberglass Paddle boat with canopies – Urban council , Vavuniya



Canoes & outriggers – Aquaculture Development Office, Trincomalee / ministry of Agriculture , Badulla



08.

Northsea
Limited

Vision

Be of excellent contributory to the Fisheries sector by supplying adequate high grade fishing nets and other fishing gears to meet the requirements of the local fishermen so as to achieve enhanced harvesting of sea food

Mission

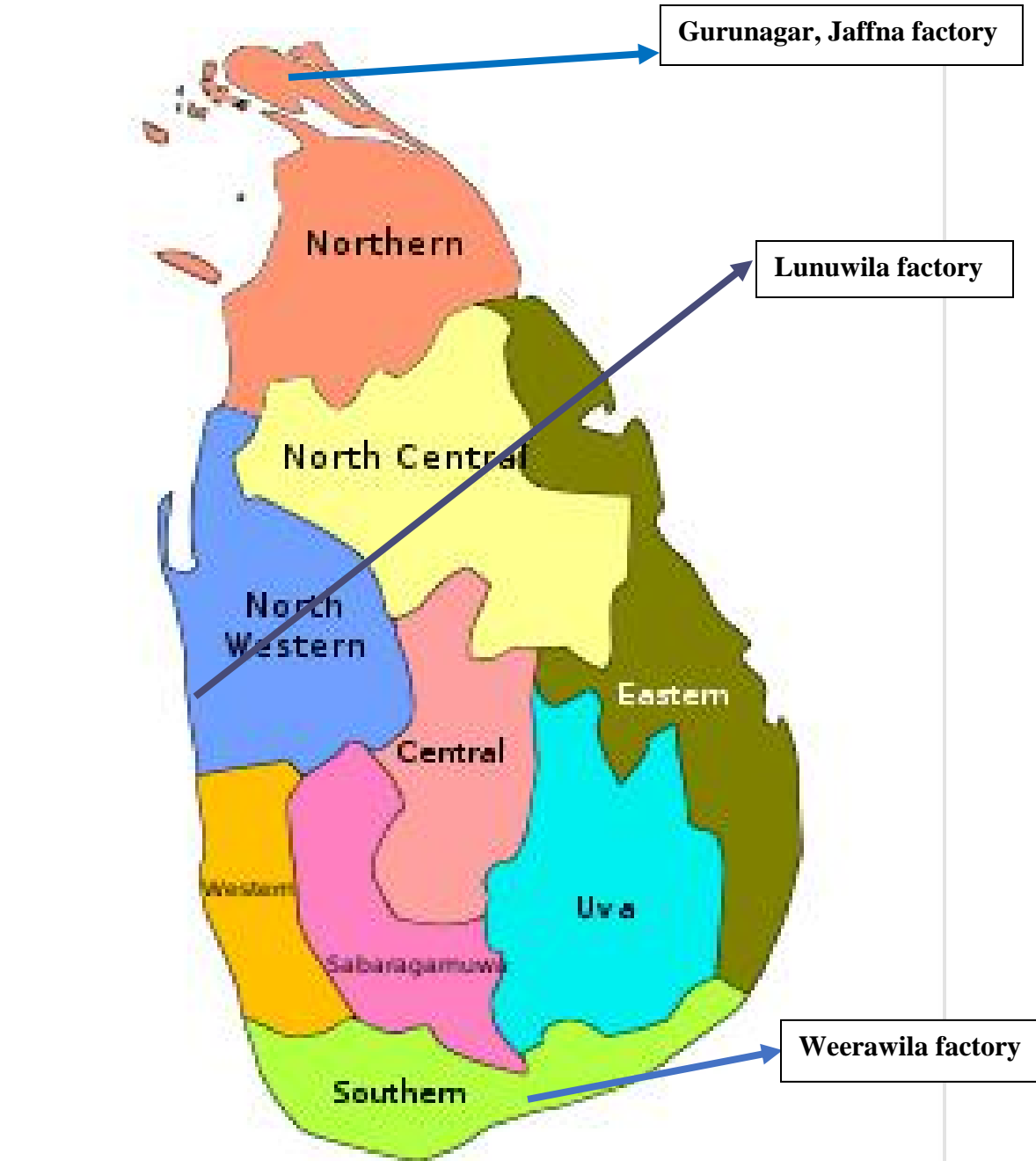
Manufacturing and supplying standard quality of fishnets and other fishing gears to meet seasonal demand in order to encourage fishing activities and seafood production of the country.

Objectives

- Production of Fishnets and servicing of fishermen
- Meeting the Seasonal Demand of the Fishing Community by producing appropriate high grade fishing nets and other fishing gears.
- Enhance efficiency of operations by increasing productive hours
- Manufacturing and supplying of fishnets and fishing gears as well as mending twine for the fishermen in the country.

Policy

The company will give all opportunities to village level fishermen co-operative societies doing business activities as welfare bearing in mind that this is a government organization, giving priority to fishermen welfare which in turn contribute to the country's economy



Organization

Northsea Ltd is a 100% Treasury owned Fishnet Manufacturing Company, established in June 2001 under Companies Act No. 17 of 1982 and re-registered under new Companies Act No. 07 of 2007.

Northsea Ltd which is currently coming under the purview of the **Ministry of Fisheries** had only one fishnet factory at Gurunagar - Jaffna and subsequently the fishnet factories at Lunuwila and Weerawila were transferred to Northsea Ltd from Ceynor Foundation Ltd vide Cabinet Decision, dated 02nd November 2010 and the Northsea Ltd took over the two factories and commenced operations from November, 2011. The total employment of the company during this period was 259 nos.

The company has been involved in serving the fisheries sector which contributes to the economy of the country in terms of employment, income generation and sea food production. The fishing is engaged in the marine and fresh waters of Sri Lanka and it constitutes an important role in the livelihood activities of the people who live in coastal and dry zone reservoirs of the country. There are more than 150,000 nos. fishermen and their families depending on the fishing activities.

The demand for fishnets is about 4,743 Mt per annum, whereas 47% of fishnets are supplied by the local manufacturers (5 nos. of factories with the capacity of 200 – 300 Mt per annum), and the Northsea Ltd is operating with the capacity of 720 Mt per annum and is able to cater 5% of the demand of the fishnets.

Suppliers of the Country

No	Name of Supplier	Place of Location
01	Northsea Ltd	Jaffna, Lunuwila, Weerawila
02	Malba International (Pvt.) Ltd	Ja-ela
03	Jafferjee Brothers International (Pvt.) Ltd	Colombo
04	Sadasarana (Pvt.) Ltd (I.P Fishnet)	Chillaw
05	NEFARD Foundation Ltd	Jaffna
06	Rajah Fishnet (Pvt) Ltd	Oomanthai
07	Lake FBS Pvt Ltd	Hambantota
08	J.P. Fernando & Sons	Colombo

Main Importers in the Country

No	Name of Importers
01	Lafeer & Sons
02	F.B.S. Lanka (Pvt) Ltd
03	J.P. Fernando & Sons

Finance

The company manages the day to day working capital requirement with its own funds generated through the sale of fishnets.

Hence It has to achieve target sales of approximately Rs.41.26 Million per month to overcome the costs, breakeven at the contribution margin of 30% and realize profits. Also the factories should endeavor to utilize the current plant capacity of Rs.62.3Mn by maximizing efficiency of operations and thereby performance.

The Total fishnet production capacity of the

No	Description	Gurunagar	Lunuwila	Weerawila	Total
01.	Total production capacity – p. a	300 Mt.	240Mt.	180Mt.	720 Mt

Currently, the Northsea Ltd is not depending on the Treasury for funds for its recurrent expenditure and is operating with its own generated fund from the sales of fishnets.



Land and Building

Land and Building

The company owns the land in which the Lunuwila factory operates and the Weerawila and Jaffna factories operate on lands owned by other Government institutions of which details are as follows;

No.	Place	Area of Land	Space of Building	Remarks
01.	Gurunagar- (Jaffna)	350 Perches	16,220q.ft.	Government institution
02.	Lunuwila- (Puttalam)	568 Perches	25,539q.ft.	Own land
03.	Weerawila-(Hambantota)	137 Perches	15,000q.ft.	Government institution- Paddy Marketing Board

Production and Operating Facilities

The factories are equipped with Netting, Twisting and Processing Machinery of which details are as follows;

No.	Description	Type of net Produced	Gurunagar	Lunuwila	Weerawila
<i>a.</i>	<i>Netting Machinery</i>				
01.	Amita 6mm pitch	2-3 ply	1	-	-
02.	Amita 7mm pitch	2-6 ply	2	7	4
03.	Amita 7mm pitch	2-9 ply	-	-	1
04.	Amita 9mm pitch	9-15 ply	1	1	-
05.	Amita 9mm pitch	4-18 ply	-	-	1
06.	Amitech 7mm pitch	9-15 ply	-	-	4
07.	Amita 11mm pitch	12-24 ply	1	-	1
08.	Amita 14mm pitch	24-36 ply	1	4	-
	Total		6	12	11
	Total Annual production capacity		300Mt.	240Mt.	180Mt.

No.	Description	Type of net Produced	Gurunagar	Lunuwila	Weerawila
<i>b.</i>	<i>Twisting Machinerics</i>				
01.	Lezzani	4-9 ply		2	
02.	Collins	12-36 ply		2	
03.	Amitech	12-36 ply		1	
04.	Memmingem	12-36 ply		1	
05.	Jmw	15-60 ply	1	0	
	Jmw	2-9 ply	1	0	
	Total		2	6	
	Annual production capacity			120 Mt	
<i>c.</i>	<i>Processing Machinery</i>		Available	Available	Not Available

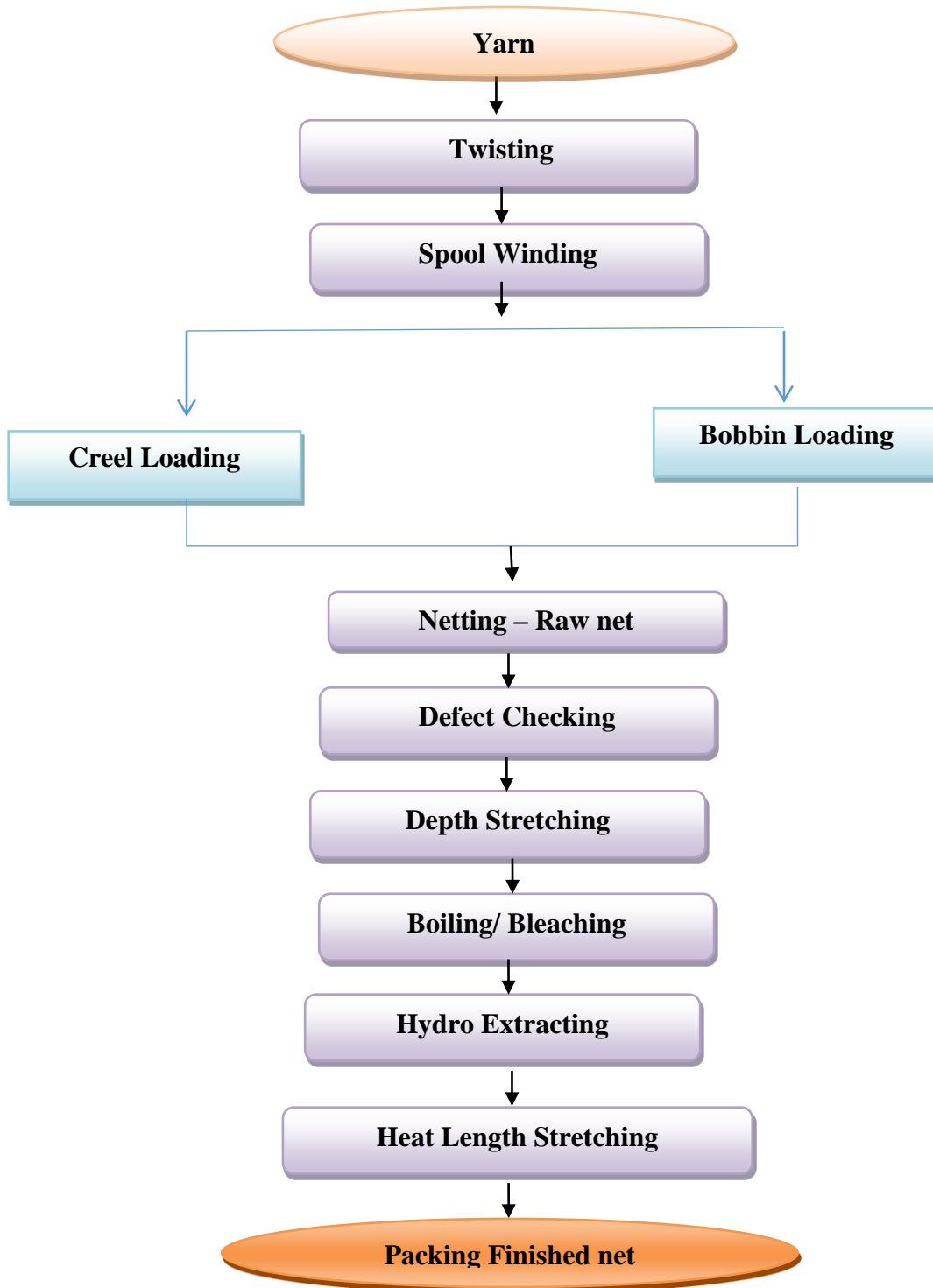
Production and Sales of Fishnets for the Year 2020

(2020 Jan - Sep)

Factory	Production		Sales	
	Targeted Production	Achieved Production	Targeted Sales	Achieved Sales
Gurunagar	93 Mt	35.03 Mt	276.81 Mn	49.161 Mn
Lunuwila	94 Mt	47.64 Mt	270.3 Mn	64.117 Mn
Weerawila	88.2 Mt	17.46 Mt	168.74 Mn	48.103 Mn
Total	275.20 Mt	100.13 Mt	715.85 Mn	161.38 Mn

Production Process

The factories and the technical staff have more than 30 years of experience in fishnet production. The typical production process is mentioned below.



Net Machine - Lunuvila



Depth Stretch Machine, Dye Plant with hoist, Heat Length Stretching Machine, Centrifugal Separator - Lunuvila



Twisting Machine Jafena



Cable ring twisting machine, Precision cross winder - Jafena



Net Machine - Jafena



Net Machines Weeravila



ECONOMIC AND SOCIAL DEVELOPMENT

The manufacture of fishnets would enrich the lives of fishermen and enable them to earn the income necessary for their welfare by meeting the consumer needs, which in turn would contribute to the Country's economy in terms of National income, Gross Domestic Product (GDP) and Gross National Product (GNP).

The Target Market share of the Company is 13.47% which would avail the fishing community of quality fish nets at reasonable prices, thereby enabling them to indulge in fishing activities and enhance their earnings capacity and sustainability.



09
Development
and
Rehabilitation
Fishery
Harbours
Anchorages
and Landing
Sites Project

9.0 Development and Rehabilitation Fishery Harbours, Anchorages and Landing Sites Project

Approval has been given by cabinet decision no. AMP/13/1207/532/010 dated 13.09.2013 to establish Fishery Harbours, Anchorages and Landing Sites construction and development project under this ministry this unit has developed seven (07) fishing harbors and the construction of two (02) new fishing harbors is in progress and five (05) projects are currently under implementation. The financial allocation allocated for this project for the period 2014-2020 is Rs. 9,6310,3489 million and Rs. 6211.92 million has been expended during this period.

Expenditure incurred from the year 2013 up to now (2020.08.15) is as follows.

Year	2014	2015	2016	2017	2018	2019	2020	Total
Cost (Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)	(Rs Mn.)
							(2020.08.15)	
Amount allocated	453	1,600	1,750	1,597	2,639	1600	709	10,348
Amount spent on construction	249	1,012	1,188	1,156	993	1,106.9	507.02	6,211.92

9.1 Key areas of the project

- Development of fishing harbors , Anchorages & Landing sites
- Construction of new fishing harbors, Anchorages & Landing sites
- Construction of boat yards
- Lagoon development activities

9.1.1 Ongoing Projects

9.1.1.1 Construction of Kalametiya Fisheries Harbor

Construction of Kalametiya Fisheries Harbor commenced on 14.07.2014 and at present the physical progress of this project is 99%. The initial value of this project is Rs. 1280.79.

This project includes the following items.

- ✚ Construction of breakwater (310 m),
- ✚ Construction of Groyne (55 m)
- ✚ Quay wall construction (80 m)
- ✚ Shore facilities

Construction of fish auction hall, two net mending halls, Canteen, sanitary facilities, auction hall, shops, staff accommodation, Fisheries Inspector and Coast Guard offices, accommodation and water tank are in the scope of the project. The project is scheduled for completion in September 2020.



9.1.1.2 Construction of Vellamankara Fisheries Harbor

- ✚ Project commencement - 25.06.2018
- ✚ Initial value of the project - Rs. 2355

This project includes the following items.

- ✚ Construction of breakwater (567 m)
- ✚ Construction of Groyne (125 m)
- ✚ Quay wall construction (350 m)
- ✚ Shore facilities

Construction of Fish Auction Hall, Net mending hall, Restaurants, Sanitary Facilities, Auction Hall, Shops, Staff Hostel, Fisheries Inspectorate and Coast Guard Offices, Accommodation and Water Tanks are in the scope of this project and the financial progress is 68%. The project is scheduled for completion in March 2021



9.1.1.3 Construction of Myliddy Fishing Harbor

This project is implemented in 2 phases. The total cost for the 02 phases of the project is Rs. 395.

Phase I - Deepening of the basin, extension of the quay wall from 30 m to 80 m, provision of fuel for vessels, construction of a net Mending hall, community hall Sanitary Facilities, Radio Room, and water facilities (Sump & Overhead Water Tank) were declared open to the public on 15.08.2019.



Phase II Fish Auction Hall, Rehabilitation of existing breakwater, deepening of the rest of the harbor basin, Administration Building, Managers' Quarters, Staff Quarters, Room for

Boat Engine, Weighing Control Room, Interior Landscaping, Solar Power are Scheduled to be constructed. Procurement is currently underway to select a contractor.

9.1.1.4 Development of Negombo Lagoon

The project will be implemented in three phases. There are 7 functional packages under Phase I. The total cost for the 7 packages of under Phase I of the project is Rs. 1000Mn .

That is

1. Package I – Dredging at Lellama site I

There, excavation of the Basin under Package I at the Lellama site was commenced on 14.05.2016 and the project was completed on 14.02.2017.

2. Package II – Dredging at near the court complex

Dredging of the lagoon near the court complex under Package II commenced on 01.08.2017 and the project was completed on 14.02.2017.



3. Package III – Dredging at Regina Road

Dredging of the lagoon near Regina Road under Package III commenced on 20.07.2018 and at present the physical progress of the lagoon is 100%.

4. Package IV – Dredging at Lellama Site II

Excavation of the Basin under Package IV at the Lellama work site commenced on 26.03.2019 and at present the physical progress of the lagoon is 30%. The project is scheduled for completion in September 2020



5. Package V – Jetty Facility at Lellama Site I

The 8 m wide and 260 m long jetty will be constructed under Package V. Procurement is currently underway to select a contractor.



6. Package V – Jetty Facility at Near Court Complex

The 6 m wide and 145m long jetty will be constructed under 1 Package VI. designs have already been finalized and the bidding document is under preparation for bidding.



9.1.1.5 Construction of Galle Fisheries Harbor Jetty

Under this project, a 10-meter-wide and 58-meter-long jetty will be constructed at the fishing harbor. Construction commenced on 13.11.2016 and at present the physical progress of this project is 100%. The initial value of this project is Rs. 97.56.



9.1.1.6 Construction of Mirissa Fisheries Harbor

The development of this fishing harbor is implemented in two phases of the project. The total cost for the 02 phases of the project is Rs. 350.

Two sub-projects are implemented under Phase 01 of this project.

Construction of Mirissa Fisheries Harbor Jetty

Commencement of the project - 26.10.2016

Completion of the project - 05.11.2017

A 10-meter-wide and 82 meter long jetty was constructed under this project Work on the project has been completed.

Construction of a net mending hall and quay wall at the Mirissa Fisheries Harbor

Commencement of the project - 09.01.2017

Completion of the project - 08.10.2017

The project includes the construction of a 50 meter long Quay wall and a net mending hall. The physical progress is 100%.

Mirissa fishing harbor

Commencement of the project - .08.10.2019

Completion of the project - 07.02.2020

This project has developed the internal road within the fishery harbour. Works under the project was completed on 07.02.2020..



9.2 Details of completed projects from the year 2013 up to now (15.08.2020)

S.N	Project Name	Output	Date of Commencement	Date of Completion	TCE (LKR mn)
01	Maradana Anchorage – Beruwala	New Anchorage Facilities	18/02/2014	7/7/2018	213.0
02	Jetty facility at Kapparithota Anchorage Package I, II and IV	New Jetty Facilities	27/07/2015	31/12/2016	535.0
03	Re-Development of Hambantota Fishery Harour Stage (I) Dredging Work	Habour Basin dredging	23/12/2015	22/02/2016	50.0
04	Offshore Breakwater at Palanguthure	Breakwater	13/12/2015	30/12/2016	20.0
05	Offshore Breakwater at Porutota	Breakwater	31/12/2015	30/12/2016	21.0
06	Suduwella Fishery Harbour - Stage I and II	Basin dredging and rehabilitation of breakwater	11/3/2016	10/12/2017	168.0
07	Puranawella Fishery Harbour	Habour Basin Dredging	14/05/2016	10/5/2017	103.1
08	Negombo Lagoon Development - Stage I, Package I and II Dredging	Lagoon Cleaning	14/05/2016 18/07/2018	31/03/2017 27/04/2019	119.3
09	Dikkowita Fishery Harbour	Access Road	23/08/2016	31/01/2018	314.4
10	Boatyard Facilities at Karainagar Package I, II, III and IV	New boat yard Facility	18/10/2016	19/01/2019	245

11	Peraliya Anchorage & Landing Site	New Anchorage Facilities	24/10/2016	31/07/2018	314.2
12	Jetty facility at Kudawella Fishery Harbour	100 m Long Jetty	26/10/2016	29/03/2018	120.8
13	Jetty, Quay wall and Netmending hall Facility at Mirissa Fishery Harbour	Upgrading Harbour facilities	26/10/2016 01/09/2017 08/10/2019	07/12/2018 30/04/2018 07/02/2020	213.0
14	Fish Auction Hall & Security Building package I and II at Chilaw Fishery Harbour	Upgrading the Harbour premises	10/04/2017 13/05/2019	10/11/2018 02/10/2019	87.0
15	New Quay Wall Facility At Kirinda FH	50 m Long Quay Wall	9/09/2017	31/01/2018	17.1
16	Reconstruction of Myliddy Fishery Harbour - Stage I	Upgrading the Harbour premises	25/06/2018	13.05.2019	119.6
Total					2,660.13

9.3 Procurement Final Projects (to be implemented in the future)

S.N	Project	TCE LKR mn	Project Duration		Progress (Upto 15.08.2020)
			Commencement	Completion	
01.	Construction of Balapitiya Fishery Harbour	1,200	2021	2022	EIA is being done (Wildlife dept concurrence has not granted yet)
02.	Construction of Rekawa Anchorage	317	2020	2021	Cabinet of Ministers have granted the approval for the contract awarding. But projects have not been started due to the unavailability of funds
03.	Construction of Mawella Anchorage	386	2020	2021	
04.	Construction of Gandara Fishery Harbour	9,360	2021	2023	Awaiting Appeal board Decision
Total		11,263			

9.4 Projects in the Procurement Phase (Approved by the Cabinet)

S.N	Project	TEC (LKRmn)	Project Duration		Remarks
			Commencement	Completion	
01.	Development of <i>Myliddy</i> Fishery Harbour- Stage II	245	2020	2021	
02.	Re Development of <i>Hambantota</i> Fishery Harbour- StageII	396	2021	2022	
03.	Upgrading of <i>Suduwella</i> Fishery Harbour- StageIII	318	2021	2022	
04.	<i>Negombo Lagoon</i> Development Project – Package v, Construction of Jetty Facility at Lellama	256	2021	2022	
Total		1,215			

9.5 Projects in the planning stage (with the approval of the Cabinet of

S.N	Project	TEC (LKR Mn)	Project Duration	
			Commencement	Completion
01.	Re Development of <i>Dodanduwa</i> Fishery Harbour	709	2020	2022
02	Re Development of <i>Welipatanvila</i> Anchorage	198	2020	2022
Total		907		

9.6 Projects to be implemented in the coming year

S.N	Project	TCE (LKR mn)	Project Duration		Remarks
			Commencement	Completion	
01.	Re Development of <i>Ambalangoda</i> Fishery Harbour	400	2020	2022	Selection of Consultancy Procurement is Completed
02.	Re Development of <i>Hikkaduwa</i> Fishery Harbour	500	2020	2022	Selection of Consultancy Procurement is Completed
03.	The improvement required for existing all fishery harbours to enhance the existing services and increase direct financial income	2,000	2022	2023	Selection of Consultancy Procurement is in Progress
04.	Construction of Whalewatching Harbour at <i>Mirissa</i>	1,280	2022	2023	Development of Project concept is in progress
05.	Redevelopment of <i>Nilwella</i> Fishery Harbour	500	2021	2023	Development of Project concept is in progress
06.	Re Development of <i>Kirinda</i> Fishery Harbour	400	2022	2023	NPD approval has been received.
07.	Construction of <i>Palachchanai</i> Fishery Harbour, Batticaloa	3,005	2023	2024	Waiting for NPD Approval
08.	Construction of <i>Pudduwakaddu</i> Fishery Harbour, Trincomalee	3,500	2023	2024	Waiting for NPD Approval
09.	Redevelopment of <i>Valachchanai</i> Fishery Harbour, Batticaloa	350	2023	2024	Selection of Consultancy service Procurement is Completed
Total		11,938			



10.
Nothern
Province
Sustainable
Development
Project

Notthern Province Sustainable Development Project

The estimated cost for the development of fisheries in the Northern Province with the assistance of the Asian Development Bank is Rs. 32,000.00 Mn.

10.1. Construction of fishing harbors, anchorages and ferries

10.1.1. Jaffna District

Accordingly, development activities are being carried out in the Jaffna District as follows.

Point Pedro Fishery harbour

This fishing harbor is the only fishing harbor ever built in Sri Lanka. The total investment of the proposed fishing harbor is Rs. 12,600 Mn. This fishing harbor is equipped with modern fishing facilities.



- Harbour basin - 18.6 hectares
- Port shipment limit - 6.1 hectares
- consist of 2 jetties
 1. First harbour jetty 201m
 2. Second harbour jetty 473m
- Construction of net mending factory
- Construction of fish auction hall
- Provision of ice plant facility
- Establishment of communication centre
- Provision of sanitary facilities
- Provision of electricity/ water facility
- Construction of canteen building
- Establishment of waste refinery centre
- Provision of fuel
- Provision of generators
- Provision of accommodation
 1. First Service jettey 200m

2. Second Jetty 105m

✚ Mandathiv Anchorage

✚ Safe Thotupola

1. Munai
2. Thalathurai
3. Arthokoviladi

✚ Fishery thotupola

1. Sampoladi
2. Chllipuram West
3. Aralithurai
4. Thuraiur
5. Punkudathiv



10.1.2 Mannar District

06 fishing harbors are developed in the Mannar District.

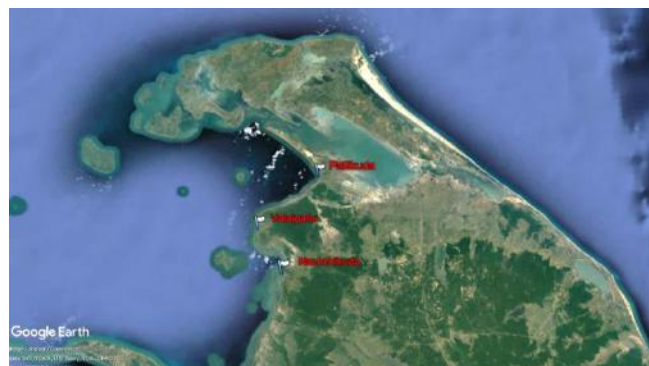
1. Thalaimannar
2. Sirithoppu
3. Minarappadu
4. Wankalai
5. Arippu
6. Kondachchikuda



10.1.3 Mulative District

06 fishing harbors are developed in the Mulative District.

1. Iranapalai
2. Kallappadu North
3. Kallappadu South
4. Theethkarai
5. Silawathei
6. Kokilai



10.1.4 Kilinochchi District

03 fishing harbors are developed
District

1. Pallikuda
2. Waleipadu
3. Nachchikuda



10.2 Development of Aquaculture

Proposed project funded by Asian Development Bank for the aquaculture development

Jaffna District

Chulliparam - Tissue culture laboratory for sea weeds

Mannar District

Southbar - Training centre for aquaculture development

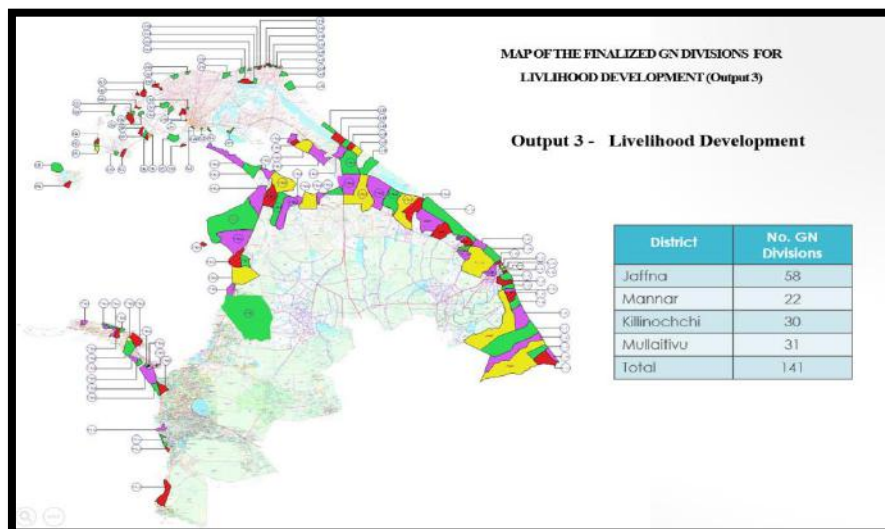
Kondachchikuda - Mud crabs breeding centre

Mulathiv District

Walayanmadam – Sea cucumber breeding centre

10.3 Livelihood Development

Also, livelihood development projects are to be implemented in 141 Grama Niladhari Divisions in Northern Province





11. Lagoon Development Project

The Project Implemented by Lagoon Development Project - 2020

Increasing of Aquaculture Production through Conservation and Development of Aquatic environments related to Lagoons and inland resource in Sri Lanka

This project commenced under 2018 Budget Proposal with a view to increase fish and aquaculture production with the principal strategy of increasing aquaculture production through conservation and development of aquatic environments related to lagoons and inland resources in Sri Lanka.

The Cabinet of Ministers granted its approval on 25th of April 2018 under its decision on 10.04.2018 with a financial plan to allocate Rs. 1000 million, Rs. 1100 million and Rs. 1100 million respectively for the year 2018, 2019 and 2020 which includes to establish project management unit in this regard.

However, this project management unit has been established in the mid-2019 and the project activities commenced accordingly. Even though, it was due to receive Rs. 1100 million for the year 2020 only 500 million was received. 10% of the money received was written off and the invest possibility for the activities in the year 2019 was limited Rs.450 million.

A financial provision of 148 million has been received up to august 2020.

The tasks fulfilled from 2018 to 2020 has been given below.

Serial No.	Project	Expenditure 2018-2019	Expenditure 2020	Total Value
01	Preparation of principal plans for 10 lagoons <ul style="list-style-type: none">Principal plan have been submitted for Puttalam, Chilaw, Mundalama, Jaffna, Thondamanaru, Uppuaru, Rekawa, Koggala, Panama and Arugambay laggons	28	8.53	36.53
02	Conductions of Bathymetric Survey for 03 selected lagoons <ul style="list-style-type: none">Bathymetric Survey has been conducted for Jaffna, Arugambay and Chilaw lagoons.	5.3	0.69	5.99
03	Preparation of environmental profile in selected 05 lagoons <ul style="list-style-type: none">Environmental profile is being prepared	-	4	4

	in 05 lagoons.			
04	Evection of ornamental fish breeding center within NARA <ul style="list-style-type: none"> • Construction works have been completed. 	28.54	0.17	28.67
05	Marking of boundaries in lagoons and establishing of boundary posts <ul style="list-style-type: none"> • Chilaw lagoon - 41 • Mundalama lagoon- 1300 • Rekawa lagoon - 534 • Arugambay - 430 • Lankapatuna - 992 	17.37	2.68	20.5
06	Deepening and Cleaning of Lagoons <ul style="list-style-type: none"> • 2018 – 2019 Puttalam -19 Gampaha -08 • 2020 - Removal of Waste substances in Rekawa Lagoon/Deepening of Nandikadal Lagoon. Removal of sand barriers located at the mouth of Nayaru lagoon/ Removal of parts of the old bridge at Thondamanaru lagoon / Removal of wooden loss and sand at the Ariyalai area of the Jaffna lagoon. 	9.44	6	15.44
07	Development of approaching roads associated with lagoons <ul style="list-style-type: none"> • 56 Approaching roads have been fixed. (10km) 	79.9	39.8	119.7
11	Livelihood programs <ul style="list-style-type: none"> • Seaweed farming 99 • Seabass farming in North East 91 • Preparation of Seabass cages in Negambo, Puttalam, Batticalo • Implementation of crab farming and seaweed farming programmes in Mannar & Trincomalee Districts 	33.8	8.74	42.54
12.	<ul style="list-style-type: none"> • Construction of Milk fish breeding centre – Puttalam • Construction work has been completed <p>Releasing of Tiapia & Shrimp fingerlings in order to increase the production capacity</p> <ul style="list-style-type: none"> • Jaffna - 480000 • Nayaru- 800000 • Mawalla - 5000 • Koggala - 3500 • Rekawa - 50000 • Inama- 10000 • Negambo - 50000 • Kottulcal - 30000 • Arugambay - 41500 	14.49	30.74	45.23

12	<ul style="list-style-type: none"> • Achchankulam - 22500 • Panama - 216000 • Lankapatuna - 30000 • 4 million shrimp fingerlings have been deposited in Upppu Aru Lagoon in the Jaffna district • 150000 Saline Tilapia fish fingerlings have been deposited in Arugambay Kalmunai 	24.18	3.2	27.38
13	<p>Improvement of Hygenic facilities and provision of other infrastructure facilities in villages associated with lagoons</p> <ul style="list-style-type: none"> • Hygenic facilities <p>Ampara – 58 Galle – 228 Gampaha – 132 Puttalam – 228 Mannar – 26 Jaffna – 241 Trincomalee – 162 Matara – 75</p> <ul style="list-style-type: none"> • Erection of 655 Suncovers around lagoons Erection of common buildings Killinochchi - 01 Puttalam - 06 	110.31	-	110.31
14	<p>Provision of reconstructed 100 tanks under public,private partnership selected from the wet zone for aquaculture</p> <p>Matara-05, Gampaha-06, Kaluthar-02, Kegalle-03</p>	11.9	-	11.9
15	<p>Establishment of a net cover in order to prevent washing out of fish fingerlings from the large scale tanks when they over flow</p> <ul style="list-style-type: none"> • Puttalam - 2 • Kurunegala - 1 • Anuradhapura- 4 • Rathnapura- 2 • Matale- 4 • Mathara- 4 • Ampara -10 • Batticalo - 06 • Trincomalee - 06 • Badulla - 02 • Hambanthota - 06 • Polonnaruwa - 03 • Monaragala - 23 	23.98	-	23.98