Fisheries Industry Outlook- 2017



Socio – Economic and Marketing Research Division National Aquatic Resources Research and Development Agency (NARA)



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Abbreviations and Acronyms

CBSL Central Bank of Sri Lanka

CCFSU Ceylon Co-operative Fish Sales Union

CFC Ceylon Fisheries Corporation

CFHC Ceylon Fishery Harbours Corporation

DFAR Department of Fisheries and Aquatic Resources

EDB Export Development Board

EEZ Exclusive Economic Zone

EU European Union

FAO Food and Agriculture Organization of the United Nations

FRP Fibreglass Reinforced Plastic

GDP Gross Domestic Product

MFARD Ministry of Fisheries and Aquatic Resources Development

NAQDA National Aquaculture Development Authority

NARA National Aquatic Resources Research and Development Agency

SAARC South Asian Association for Regional Corporation

SED Socio-economic and Marketing Research Division

IMUL Inboard Multi-Day Boat

IDAY Inboard Day Boat

OFRP Outboard Fibre Reinforced Plastic Boats

MTRB Mechanized Traditional Boats

NTRB Non-Mechanized Traditional Boats

NBSB Non-Mechanized Beach Seine Boat

Acknowledgement

The 'Fisheries Industry Outlook is an annual publication of the Socio-economic and Marketing

Research Division (SED) of the National Aquatic Resources Research and Development Agency

(NARA). The 'Fisheries Industry Outlook' comprised of data and information on the status and

development of fisheries sub-sector of the economy with special emphasis on production, trade and

marketing and consumption of fish and fishery products. This is the all in one handbook of fishery

industry statistics of Sri Lanka.

In compilation of this volume, NARA heavily depends on data and information sources of various

governmental, semi-governmental and non-governmental organizations. The Planning and

Monitoring Division and Department of Fisheries and Aquatic Resources of the Ministry of Fisheries

and Aquatic Resources Development were the key data and information providers of this publication.

I place on my gratitude to all those who rendered valuable assistance by providing data and

information for this volume, including privet sector establishments.

I express my sincere gratitude to Ms. D. W. L. U. De Silva and H. P. D. A. Lakmali for their

contribution in preparation of this volume. I greatly appreciate constructive suggestions from users

and data providers for improvement of this publication in the forth-coming editions.

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Overview

The fisheries sector in Sri Lanka plays a vital role in economic and social life style development by providing direct and indirect employment opportunities for about 560,000 people and livelihoods for more than 2.7 million coastal communities. Importantly it provides more than 60% of animal protein requirement of people in the country. The fishery industry comprised of costal, offshore/deep-sea, and inland sub sectors. In 2017, the share of fisheries to the Gross Domestic Production (GDP) of the country was 1.3% (MFARD, 2018).

The total fish production of the country in 2017 was 531,310 metric tons (Mt) and of them marine fish production was 449,440 Mt while the rest (81,870 Mt) from inland and aquaculture. Of total fish production 134,220 Mt of fresh fish had utilized locally for dry fish production. Although there are totally, 15 fisheries districts of the country, Tangalle and Galle districts together had contributed 26 percent to the total marine fish production of the same year. Anuradhapura (19%), Ampara (13%) and Hambantota (11%) were dominant among inland fish producing districts of the country. In 2017, the total fish production of the country has remained more or less similar compared to 2016 due to decline in marine fish production offset by the increase in inland fish production. Increased in releasing of fingerlings in to inland reservoirs/water bodies has positively influenced in growth of inland and aquaculture fish production.

The total recurrent and capital expenditure of the Ministry of Fisheries and Aquatic Resources Development in 2017 were 1,812and 3,755 LKR Million respectively (Central Bank, 2017). With excess local demand on fish and fishery products Sri Lanka had imported 106,020 Mt of fish and fishery products in 2017 to carter the excess demand with spending 33,969 LKR Million. As per a remedy, the government of Sri Lanka with the support of private sector had initiated production of canned fish domestically. The country had also exported 24,827 Mt of fish and fishery products and earned 39,230 LKR Million in 2017.

1. Fish Production

In 2017, the total fish production of the country had remained unchanged compared to the previous year due to decline marine fish production offset by increased in inland fish production. The marine fish production of the country had reduced by 2% to 449,440 Mt compared with 456,990 Mt in 2016 while inland and aquaculture fish production had increased by 11% to 81,870 Mt compared with 73,930 Mt in previous year. The growth reflected in inland and aquaculture fish production was mainly due to increase in stocking of fingerlings into inland water bodies. Further, offshore fish production had increased by 4% to 189,720 Mt while coastal fish production had increased by 5% to reach 259,720 Mt in 2017. Table1shows fish production by sectors over the years of 2012 to 2017.

Table 1: Annual Fish Production by Sub Sectors (Mt)

| Sector | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| Marine Sector | 417,220 | 445,930 | 459,300 | 452,890 | 456,990 | 449,440 |
| Coastal | 257,540 | 267,980 | 278,850 | 269,020 | 274,160 | 259,720 |
| Offshore/Deep Sea | 159,680 | 177,950 | 180,450 | 183,870 | 182,830 | 189,720 |
| Inland and Aquaculture Sector | 68,950 | 66,910 | 75,750 | 67,300 | 73,930 | 81,870 |
| Total | 486,170 | 512,840 | 535,050 | 520,190 | 530,920 | 531,310 |

Source: Ministry of Fisheries and Aquatic Resources Development

Coastal fishery is still the major contributing sub sector that contributed around 49% to total fish production of the country. The fisheries sector contribution to the Gross Domestic Production (GDP), at constant price, in 2017 was 1.3%. The percentage contribution of fisheries sector to GDP was stable with compared to the year 2016.

1.1 Marine Fish Production

The marine fisheries, Deep-sea and Coastal, had contributed about 85% or 449,440 Mt to total fish production of the country in 2017 although had experienced a marginal declined by 2% compared with 456,990 Mt in 2016. Tuna species, Balaya (Skipjack tuna) and Kelawalla (Yellow fin tuna) were dominant species in the catch composition and had contributed 13 and 9% to the total marine fish production of the country in 2017. The production/catch of Balaya had increased by 21% compared to the previous year. Table 2 below shows marine fish catch by major commercial groups. Tangalle and Galle were dominant fisheries districts that contributed over 26% to the total marine fish production of the country in 2017. In addition, Jaffna (10%), Kalutara (9%), Putlam (8%) and Trincomalee (7%) districts had also contributed significantly to the total marine fish production of the country in sequence. The Figure 1 shows fish production by fisheries districts in 2017.

Table 2: Marine fish Catch by Major Commercial Groups (Mt)

| Commerc | cial Groups | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------|-------------------------|---------|---------|---------|---------|---------|
| Thora | Seer | 25,650 | 30,000 | 8,940 | 7,440 | 7,790 |
| Paraw | Carangids | 25,160 | 29,270 | 34,050 | 32,620 | 23,690 |
| Balaya | Skipjack tuna | 73,350 | 61,750 | 54,040 | 47,730 | 57,960 |
| Kelawalla | Yellowfin tuna | 45,760 | 45,200 | 46,430 | 39,600 | 38,960 |
| Other Blood Fish | Other tuna like species | 50,200 | 59,190 | 46,930 | 38,750 | 44,520 |
| Thalapath | (Other bill fish) | *** | *** | 26,040 | 32,530 | 33,180 |
| Others | | 225,810 | 233,890 | 236,460 | 258,320 | 243,340 |
| Total | | 445,930 | 459,300 | 452,890 | 456,990 | 449,440 |

Source: Ministry of Fisheries and Aquatic Resources Development

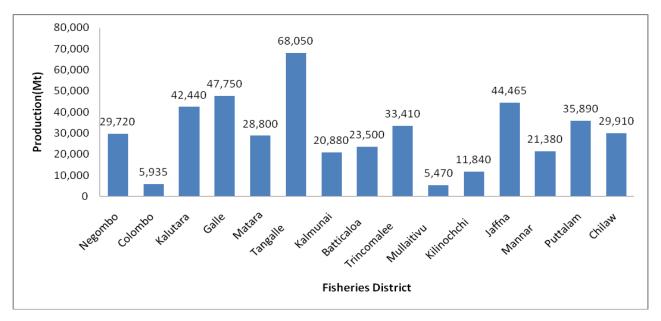


Figure 1: Marine Fish Production by Districts /Mt- 2017

Source: Ministry of Fisheries and Aquatic Resources Development

1.2 Inland and Aquaculture Fish Production

The total inland and aquaculture fish production, in 2017, was 81,870 Mt that contributed 15% to the total fish production of the country (MFARD 2018). Anuradhapura (19%), Ampara (13%) and Hambantota (11%) were dominant among inland fish producing districts of the country. Table 3 shows catch composition of inland fish catch (Mt) by major species in 2017.

Table 3: Inland Fish Catch by Major Species (Mt)

| Species | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Tilapia | 39,590 | 39,070 | 46,610 | 40,504 | 43,836 | 50,065 |
| Carps/Mirigal | 3,570 | 3,450 | 3,920 | 2,847 | 3,363 | 4,250 |
| Catla/Rohu | 12,460 | 8,980 | 11,020 | 9,117 | 7,772 | 8,435 |
| Hiri Kanaya | 670 | 590 | 580 | 358 | 230 | 330 |
| Lula | 1,770 | 2,040 | 2,230 | 1,582 | 1,849 | 2,765 |
| Cultured Shrimps | 3,310 | 4,430 | 5,040 | 6,836 | 6,028 | 4,630 |
| Freshwater prawns | 290 | 540 | 460 | 374 | 705 | 890 |
| Cultured Milk fish & | 130 | 90 | 70 | 78 | 174 | 290 |
| Seabass | 130 | 90 | 70 | 70 | 1/4 | 290 |
| Other wild fish | 7,160 | 7,720 | 5,820 | 5,604 | 9,973 | 10,215 |
| Total | 68,950 | 66,910 | 75,750 | 67,300 | 73,930 | 81,870 |

Source: Ministry of Fisheries and Aquatic Resources Development

Tilapia species were dominant in inland and aquaculture fish production and had contributed nearly 62 percent in 2017. Among others cultured shrimp, focused mainly export markets, had contributed nearly 9 percent to the total. Stocking and releasing of fingerlings into inland water bodies had contributed significantly for increased of inland fisheries and production. Fingerlings stocking in inland water bodies shows in Table 4.

Table 4: Fingerlings Stocked in Water Bodies (Mn) in 2017

| Stocking of fingerlings and freshwater prawn post larvae – 2017 | | | | | | |
|---|-------------------------|--------------------------|-------------------------|--------------------------------------|--|--|
| Type of Water body | No. of Tanks / Units | Fish Fingerlings (Mn) | No. of Tanks / Units | Freshwater Prawn Post larvae (Mn) | | |
| Major Reservoirs | 38 | 17.4 | 27 | 16.6 | | |
| Medium Reservoirs | 71 | 20.3 | 35 | 9.0 | | |
| Minor Reservoirs | 260 | 18.7 | 84 | 10.1 | | |
| Seasonal Tanks | 303 | 5.5 | 16 | 0.4 | | |
| Ponds and Other | 545 | 1.6 | 59 | 0.4 | | |
| Total | 1217 | 63.5 | 221 | 36.5 | | |

Source: National Aquaculture Development Authority

The National Aquaculture Development Authority (NAQDA) was releasing nearly 63.5 Mn of fingerlings in to different type of water bodies: major, medium and minor reservoirs and seasonal tanks in 2017 and of them medium reservoirs were major about 45.4% of fingerlings had released into them. However, cultured shrimp production had decreased by 23% but freshwater prawns and cultured milk fish and sea bass production had increased by 26% and 66% respectively.

2. Trade and Marketing

Fish and fishery products are being trade through local and export market channels. Local channels are comprised of assembler, commission agent and retailer while export channel from agent, processor and exporter. The major export destinations of Sri Lankan fish and fishery products were Europe and America. Sri Lanka imports a considerable amount of fresh fish and fishery products specially dried fish to carter the excess local demand in the country from China, Maldives, India and Pakistan.

2.1 Exports of Fish and Fishery Products

Sri Lanka has been exporting fish and fishery products to Europe, America and Asia markets over the years. All fish and fishery products exported categorized under the (HS) code 03. Accordingly products has been categorized in to prawns, fish fresh or chilled, aquarium fish, frozen fish, lobsters, crabs and other edible fish. In 2017, country had exported 24,827 Mt of fish and fishery products and had increased 41% while export earnings were 39,230LKR Mn and had increased 46% compared to 2016. Export quantities and values of fish and fishery products from 2012 to 2017 shows in table 5. Figure 03 and Figure 04 shows the percentage values of export quantity and value by each export item in 2017.

Table 5: Export of Fish and Fishery Products (Quantity and Value)

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---------------------|--------|--------|--------|--------|--------|--------|
| Quantity (Mt) | 18,633 | 23,911 | 26,320 | 17,461 | 17,593 | 24,827 |
| Value (Rs. Million) | 26,364 | 31,792 | 34,796 | 24,716 | 26,801 | 39,230 |

Source: Ministry of Fisheries and Aquatic Resources Development

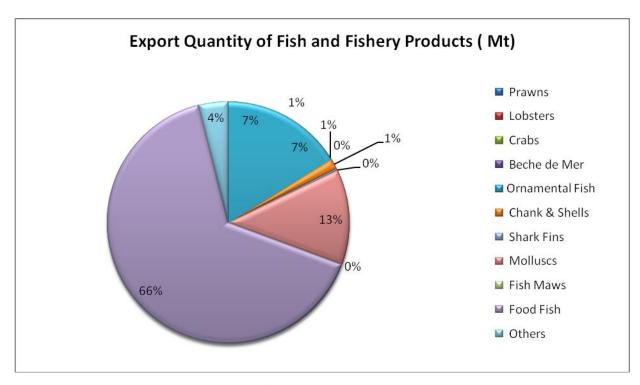


Figure 2: Percentage values of exports quantity in 2017 Source: Ministry of Fisheries and Aquatic Resources Development

Note: Ornamental fish or live fish are export in water containers. Hence their quantity cannot be estimated

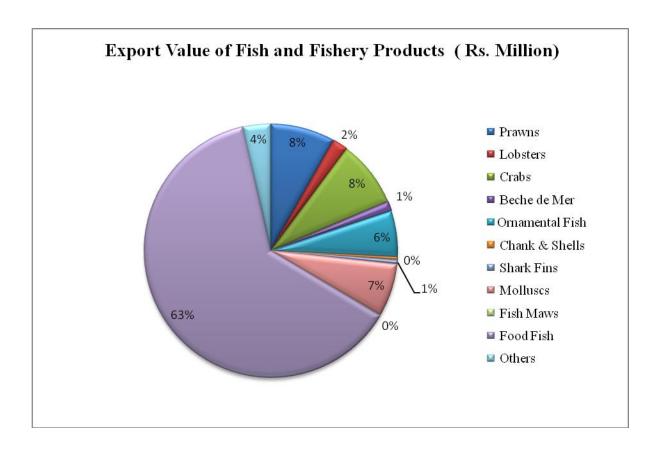


Figure 3: Percentage values of earnings in 2017

Source: Ministry of Fisheries and Aquatic Resources Development

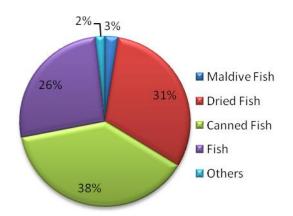
2.2 Imports of Fish and Fishery Products

Sri Lanka is one of the main fish and fishery products importing countries in South Asian region especially due to inadequate domestic production of dried fish and sprats in the country; Sri Lanka has to import a substantial amount of dried fish and sprats annually to carter the excess domestic demand. The figures 5 and 6 depicted relevant percentage values in 2017. The total import in 2017 was 106,020 Mt, while total value was LKR Millions. 33,969.

Table 6: Imports of Fish and Fishery Products (Quantity and Value) over the years

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------|--------|--------|--------|--------|---------|---------|
| Quantity (Mt) | 71,413 | 78,400 | 78,712 | 120046 | 115,693 | 106,020 |
| Value (LKR.M) | 17,400 | 21,119 | 18,861 | 30,729 | 35,173 | 33,969 |

Source: Ministry of Fisheries and Aquatic Resources Development



3%

25%

■ Maldive Fish
■ Dried Fish
■ Canned Fish
■ Fish
■ Others

Figure 4: Fish and Fishery Product Imports quantity (Mt) in 2017

Figure 5: Fish and Fishery Products Imports value (LKR) in 2017

Source: Ministry of Fisheries and Aquatic Resources Development

3. Canned Fish Production and Consumption in Sri Lanka

Canned fish is one of the major fish and fishery products imported annually and constitute about 38% of quantity imported and 28% of total export value in 2017. Sri Lanka had imported 40,614 Mt of canned fish by spending 9,606 LKR million in the same year. As a counter action, Ministry of fisheries persuaded the privet sector to enter fish canning industry locally in the recent past. Because of that, the first canning factory was established and started operation in 2012 in Galle having with daily production capacity of 10,000 units. In the same year, tropic engineering supplies and service, (TESS) group established another factory and started operation in Paliyagoda with a capital investment of 170 LKR Million and capacity of 24,000 cans per day.

At present 06 fish canning companies are functioning and the total number of cans produced by them was 4.8 million.

4. Price of Fish

Price of fish is mainly governed by quantity supplied and quantity demanded at the market. In addition to that, consumers' perception and purchasing power are critical in price formation of fish at the market. Generally, Salaya and Hurulla are low value species while seer, sailfish, Travelly and yellow fin tuna are high value species among marine fish while Thilapia species among fresh water fisheries are high value species.

The highest wholesale and retail price recorded for seer (thora) and the difference between retail and wholesale price (margin) was Rs.249 in 2017. Tuna species, Balaya and Kelawalla are popular among coastal communities and had fetched a reasonable higher price at the market. The difference between the retail and wholesale price of them was Rs.246 and 354 respectively in 2017. Figure 7 shows the difference in retail and wholesale price of selected fish species in 2017.

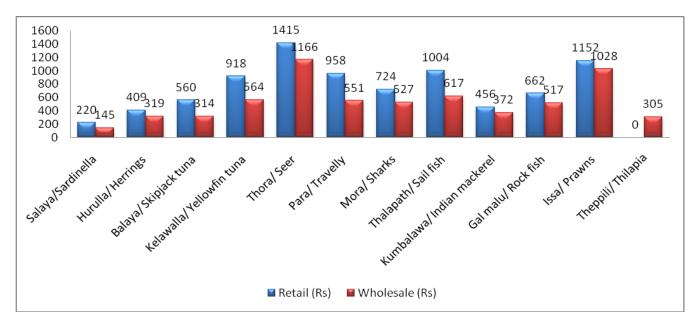


Figure 6: Retail and Wholesale Price of Selected Fish Species in 2017 Source: Ministry of Fisheries and Aquatic Resources Development

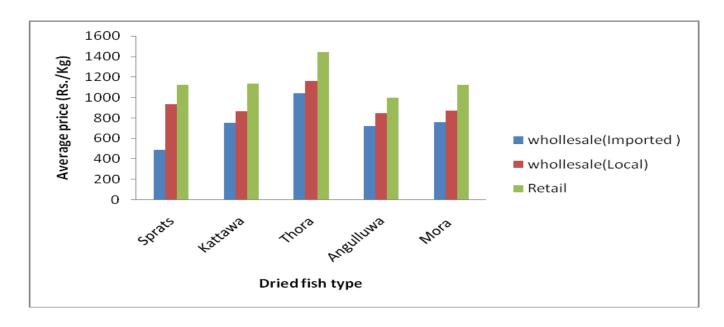


Figure 7: Average retail and wholesale price of imported and local dried fish species in 2017

Source: Ministry of Fisheries and Aquatic Resources Development

The average wholesale price of local dried fish was higher than that of imported dried fish and shows in Figure 08. Local dried seer (Thora) recorded the highest wholesale price and the difference between retail and wholesale price (margin) was Rs.278. In imported verities, sprats recorded the highest price and difference between retail and wholesale price was of 631 Rs.

5. Consumption of Fish and fishery products

A unique combination of high quality protein content and comparatively affordable price fish is the most important animal protein source for the people in many developing countries including Sri Lanka (Food and Agriculture Organisation, 2015). Fish, fresh, dried and canned, are popular seafood among consumers that contributed nearly 56.1 % of animal protein consumed in Sri Lanka (FAO, 2011). The per capita fresh, dried and canned fish consumptions were 11.8, 3.6, 1.4 Kg/year respectively. During the past decade, per capita fresh fish consumption of people in

the country has increased by 30%. During the same period, although dried fish consumption had shown a 9% declined the canned fish consumption had doubled and shows in Table 7.

Table 7: Per Capita Consumption of Fresh, Dried and Canned Fish (kg/year)

| Item | 2006/2007 | 2009/2010 | 2012/2013 | 2016 |
|-------------|-----------|-----------|-----------|------|
| Fresh Fish | 9.1 | 10.8 | 10.9 | 11.8 |
| Dried Fish | 3.9 | 3.8 | 3.6 | 3.6 |
| Canned Fish | 0.7 | 0.7 | 0.6 | 1.4 |

6. Affiliated Industries

The role of fisheries affiliated industries, upstream and downstream, is crucial and has direct impacts on sustainable development of the fisheries industry in the country by producing inputs: production related and infrastructure related inputs. Fishing crafts/boats, fishing gear and ice are major production related while harbors, anchorages and landing centres are infrastructure related inputs.

6.1 Fishing Crafts/Boats

Different types of fishing crafts/boats are operating in fisheries and are classified in to 6 groups for the administrative purposes by the Ministry of Fisheries and Aquatic Resources Development as Inboard Multi-day Boats (IMUL), Inboard single-day Boat (IDAY), Out-boat engine Fiberglass Reinforced Plastic Boats (OFRP), Motorized Traditional Boats (MTRB), Non-Motorized Traditional Boats (NTRB) and Inland fishing crafts. Total number of operating fishing crafts/boats in year 2017 was 56,635 and of them 46,890 was in marine fisheries while 9,745 were in inland fisheries. Majority of marine fishing crafts/boats were OFRP (22,394) and NTRB (16,035). OFRP and NTRB are operated in costal fisheries while IMUL in deep-sea

fisheries. Table 8 shows the composition of fishing crafts/ boats operating in marine fisheries over the years and figure 9 percentage of composition in 2017.

Table 8: Operating fishing crafts/boats 2012 – 2017

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|--------|--------|--------|
| Marine Fishing Fleets | 52,374 | 51,427 | 52,609 | 50,338 | 50,669 | 46,890 |
| Inland Fishing Crafts | 8,360 | 7,988 | 8,536 | 8,778 | 9,661 | 9,745 |
| Total Fishing fleets | 60,734 | 59,415 | 61,145 | 59,116 | 60,330 | 56,635 |

Source: Ministry of Fisheries and Aquatic Resources Development

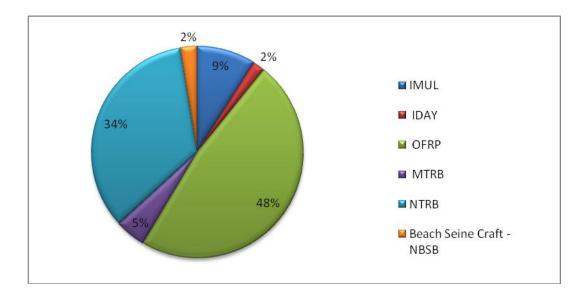


Figure 8: Composition of Fishing Crafts/Boats in 2017

Source: Ministry of Fisheries and Aquatic Resources Development

6.2 Ice Production

Icing is the main preservation technique that used by the fishers and intermediaries for the maintaining of quality of fish in general. Two types: block and flack ice commonly used and of them block ice; 50 kg, is major but the number of blocks/quantity used, at a time, varies according to the types of the boat/craft, distance to fishing grounds and number of fishing days at sea. MTRB and NTRB crafts rarely used ice at the time of fishing operation due to intrinsic nature of operation.

There were 94 ice plants in operation in 2017 in the country having production capacity of 3,310 Mt per day (MFARD 2018). The quality of ice mainly depends on quality of water used and mainly concerned by the users because it effects on quality of fish stored. Figure 10 shows the production capacity of ice plants per day by districts.

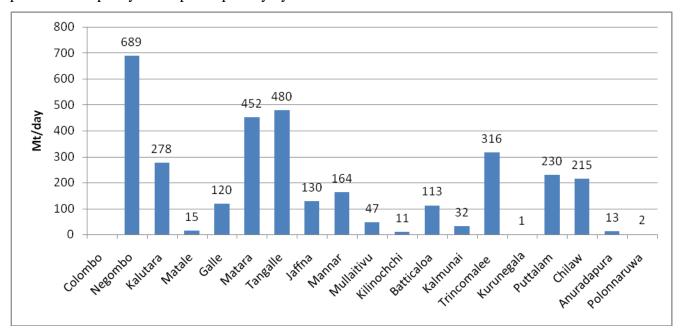


Figure 9: Production capacity of Ice plants per day by districts in 2017

Source: Ministry of Fisheries and Aquatic Resources Development

Ice plants with the highest daily capacity (21%) were located in and operation in Negombo fisheries district.

6.3 Net Production

Drift Gill nets, major fishing gear, which used by fishers in harvesting resources shown an increasing trend of demand year by year. In year 2017, totally 247,240 Kg worth of 202.8 LKR Mn had produced by Lunuwila, Weerawila and Gurunagar net factories. Total annual estimated demand of fishing nets is nearly 4,426 metric tons which unable to fulfil only through locally production. To fulfil local demand fishing nets are been imported mainly from china. Table 9 shows the production quantities and values of nets by registered net producers under MFARD over the years 2012 to 2017.

Table 9: Production quantity and Value of nets in 2012-2017

| Year | Total | | |
|------|---------------|---------------|--|
| | Quantity (Kg) | Value (Rs.Mn) | |
| 2012 | 134,810 | 167.4 | |
| 2013 | 147,260 | 144.9 | |
| 2014 | 280,320 | 300.1 | |
| 2015 | 193,829 | 162.9 | |
| 2016 | 156,700 | 185.1 | |
| 2017 | 247,240 | 202.8 | |

Source: CEYNOR Foundation Ltd, North Sea Limited

7. Fishery Harbours and Anchorages

Well-equipped fishery harbours and anchorages are essential for the development of fishery industry as well as safety of fishers and crafts/boats. Fishery harbours and anchorages of the country totally developed and managed by Ceylon Fisheries Harbour Cooperation (CFHC). There are 21 functioning fishery harbours and 58 anchorages through the coastal belt of the country. At the aim of strengthening of facilities at fisheries harbours, upgrading of 6 harbours are in progress and 8 new harbours are proposed to establish.

8. Socio- economics

Although fisheries industry contributes by 1.3 percent to the total Gross Domestic Production (GDP) of the country in 2017 it plays a major role in providing livelihoods, over 2 million people either directly or indirectly at present. Industry provides 281,465 direct employments as active fishers in 2017 (MFARD, 2018). There were 183, 650 marine fishing households and 54,170 inland fishing households by 2017.

Table 10: Social Indicators related to Fisheries Industry in 2015–2017

| | | 2015 | 2016 | 2017 |
|---|---------|---------|---------|---------|
| 1. Fisheries Inspector Divisions (Marine) | Numbers | 148 | 148 | 149 |
| 2. Marine Fishing Households | Jumbers | 190,960 | 188,685 | 183,650 |
| 3. Marine Fishers (Men & women) | Numbers | 221,560 | 218,830 | 220,870 |
| 4. Marine Fishing Household Population | Numbers | 830,560 | 827,480 | 802,340 |
| 5. Fisher Organizations (FO) - Marine | Numbers | 927 | 802 | 808 |
| 6. Fisher Organizations (FO) - Inland | Numbers | 337 | 287 | 319 |
| 7. No. of Memberships in FO - Marine | Numbers | 86,410 | 85,208 | 86,347 |
| 8. No. of Memberships in FO - Inland | Numbers | 19,306 | 12,155 | 12,401 |

Source: Ministry of Fisheries and Aquatic Resources Development

9. Welfare of Fishermen

Establishment of fishers' community organizations started in 2010 aiming providing of assistance for fishers community. At present over 1,000 fishers community organizations were established and engaged actively in activities. There were 98,748 members by the end of 2017 (MFARD 2017).

The Diyawara Diriya loan scheme, introduced in 2010, is in progress with the support of Bank of Ceylon under a lower interest rate, dual: 5.5% and 8.0% had contributed immensely for the development of socio-economic status of fishers. The Ministry of fisheries compensates 4% of the interest to the bank in both schemes.

The Ministry of fisheries had introduced an insurance scheme with two streams: 1 (Annually Rs: 750) and 2 (Annually Rs: 1500) for the welfare of fishers. Bank of Ceylon had released loans worth Rs 1 billion under this scheme to over 900 recipients. The scheme had opened for both marine and inland fisheries sectors. Under this scheme fishers eligible to purchase boats, engines and fishing gears. This loan scheme operates based on lower collative securities and interest rates. Bank further expects to increase granting loans worth Rs.2 billion through the second phase of "Diyawara Diriya".

National Aquatic Resources Research and Development Agency (NARA) had launched the fisheries information centre for dissemination information through a Hotline: **0710101010** in 2013, which is progressing successfully by resolving over 1000 quarries by 2018. This service is much popular among fisher community.

IWawak Samaga Gamak/Kalapuwak Samaga Gamak" program launched in 2017 aiming development of fisheries sector and socio-economic status of fishers is in progress successfully. Under this program, NARA was completed preparation of environmental profiles of 5 lagoons. Aiming of enhancing skills of fishers, a skipper-training program, for multiday boat skippers launched in 2016, still in progress, with assistant of the Ocean University of Sri Lanka and had trained over 150 skippers. Presently a training program, conducted by NARA with a help of an outside instructor, on mechanical training for OBM operators is in progress and had trained over 40 fishers by end of May 2019.

10. World Fisheries

| Category | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|
| Production | | | | | | |
| Capture | | | | | | |
| Inland | 10.7 | 11.2 | 11.2 | 11.3 | 11.4 | 11.6 |
| Marine | 81.5 | 78.4 | 79.4 | 79.9 | 81.2 | 79.3 |
| Total capture | 92.2 | 89.5 | 90.6 | 91.2 | 92.7 | 90.9 |
| Aquaculture | | | | | | |
| Inland | 38.6 | 42.0 | 44.8 | 46.9 | 48.6 | 51.4 |
| Marine | 23.2 | 24.4 | 25.4 | 26.8 | 27.5 | 28.7 |
| Total aquaculture | 61.8 | 66.4 | 70.2 | 73.7 | 76.1 | 80.0 |
| Total world fisheries and aquaculture | 154.0 | 156.0 | 160.7 | 164.9 | 168.7 | 170.9 |

Figure 10: Global Fish Production in million Mt

Source: FAO, 2018

Global fish production has been increasing over the years and had reported 170.9 million tonnes by end of 2016. Capture fish production had contributed 53% to the total global fish production of the same year. China, USA, Russia and Peru were the top marine capture fish producing countries where as China, India, Myanmar and Bangladesh included as top inland water capture fisheries producing countries in 2016.

11.Reference

- Central Bank (2017). Annual Report of Central Bank of Sri Lanka.
- FAO. 2018. The State of World Fisheries and Aquaculture 2018 Meeting the sustainable development goals. Rome.
- Ministry of Fisheries and Aquatic Resources Development. (2018) Fisheries Statistics, 2017.

Annexure 1: Annual Fish Production by Fishing Sub-sectors (Mt)

| Indicator | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------------------|---------|---------|---------|---------|---------|---------|
| Marine | 417,220 | 445,930 | 459,300 | 452,890 | 456,990 | 449,440 |
| Coastal | 257,540 | 267,980 | 278,850 | 269,020 | 274,160 | 259,720 |
| Off-shore/ High sea | 159,680 | 177,950 | 180,450 | 183,870 | 182,830 | 189,720 |
| Inland and Aquaculture | 68,950 | 66,910 | 75,750 | 67,300 | 73,930 | 81,870 |
| Capture (perennial water bodies) | 58,680 | 55,020 | 68,820 | 57,060 | 58,410 | |
| Culture (seasonal water bodies) | 6,960 | 7,460 | 1,780 | 3,150 | 9,490 | |
| Coastal aquaculture (Shrimp) | 3,310 | 4,430 | 5,150 | 7,090 | 6,030 | |
| Total | 486,170 | 512,840 | 535,050 | 520,190 | 530,920 | |

Annexure 2: Marine Fish Production by Fisheries Districts (Mt) Marine Fish Production by Fisheries Districts (Mt)

| | Fisheries District | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----|---------------------------|---------|---------|---------|---------|---------|---------|
| 1 | Negombo | 35,990 | 41,080 | 38,030 | 36,260 | 31,150 | 29,720 |
| 2 | Colombo | 2,970 | 4,780 | 7,110 | 6,770 | 6,310 | 5,935 |
| 3 | Kalutara | 52,610 | 48,170 | 40,180 | 32,350 | 46,090 | 42,440 |
| 4 | Galle | 27,410 | 49,230 | 51,550 | 55,240 | 56,890 | 47,750 |
| 5 | Matara | 48,380 | 48,850 | 42,370 | 35,190 | 30,550 | 28,800 |
| 6 | Tangalle | 27,320 | 42,540 | 58,870 | 66,100 | 62,510 | 68,050 |
| 7 | Kalmunai | 23,410 | 23,070 | 21,660 | 18,240 | 20,180 | 20,880 |
| 8 | Batticaloa | 35,690 | 37,130 | 31,720 | 27,790 | 28,500 | 23,500 |
| 9 | Trincomalee | 36,410 | 24,370 | 22,340 | 24,770 | 23,780 | 33,410 |
| 10 | Mullaitivu | 6,790 | 8,480 | 8,930 | 10,080 | 11,140 | 5,470 |
| 11 | Kilinochchi | 6,700 | 14,670 | 15,780 | 13,800 | 14,560 | 11,840 |
| 12 | Jaffna | 32,400 | 21,380 | 25,890 | 29,290 | 32,260 | 44,465 |
| 13 | Mannar | 13,450 | 11,110 | 22,130 | 19,390 | 17,510 | 21,380 |
| 14 | Puttalam | 31,540 | 34,530 | 38,280 | 43,790 | 41,890 | 35,890 |
| 15 | Chilaw | 36,150 | 36,540 | 34,460 | 33,830 | 33,670 | 29,910 |
| | Total | 417,220 | 445,930 | 459,300 | 452,890 | 456,990 | 449,440 |

Annexure 3: Marine Sector Fish Catch by Major Commercial Groups (Mt) Marine Sector Fish Catch by Major Commercial Groups (Mt)

| Commerc | Commercial Groups | | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------|--------------------|---------|---------|---------|---------|---------|---------|
| Thora | Seer | 14,390 | 25,650 | 30,000 | 8,940 | 7,440 | 7,790 |
| Paraw | Carangids | 24,580 | 25,160 | 29,270 | 34,050 | 32,620 | 23,690 |
| Balaya | Skipjack tuna | 53,410 | 73,350 | 61,750 | 54,040 | 47,730 | 57,960 |
| Kelawalla | Yellowfin tuna | 42,780 | 45,760 | 45,200 | 46,430 | 39,600 | 38,960 |
| Other Blood Fish | Other tuna like sp | 40,640 | 50,200 | 59,190 | 46,930 | 38,750 | 44,520 |
| Thalapath | Other bill fish | ** | ** | ** | 26,040 | 32,530 | 33,180 |
| Shark/Skate | Shark/Skate | 9,230 | 8,030 | 7,440 | 5,860 | 8,980 | 13,620 |
| Rock Fish | Mullets | 34,680 | 35,450 | 34,890 | 34,960 | 33,920 | 31,100 |
| Shore S/ V | Small fishes | 135,460 | 118,560 | 108,420 | 136,790 | 153,180 | 143,250 |
| Issa | Prawns | 26,730 | 29,230 | 23,940 | 20,090 | 19,720 | 17,620 |
| Pokirissa | Lobsters | 1,960 | 1,890 | 1,480 | 630 | 960 | 540 |
| Kakuluwa | Crabs | 10,620 | 9,370 | 6,450 | 9,670 | 11,920 | 11,510 |
| Others | Other marine | 22,740 | 23,280 | 51,270 | 28,460 | 29,640 | 25,700 |
| To | otal | 417,220 | 445,930 | 459,300 | 452,890 | 456,990 | 449,440 |

^{**} Include in Other Blood fishes

Annexure 4: Export Value of Fish and Fishery Products (Rs. Million)

| Exported Item | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Prawns | 1,662 | 2,521 | 3,375 | 1,971 | 2,464 | 3,213 |
| Lobsters | 350 | 1,107 | 1,148 | 777 | 657 | 782 |
| Crabs | 1,691 | 2,087 | 2,617 | 2,050 | 2,623 | 3,336 |
| Beche de Mer | 682 | 1,351 | 521 | 482 | 383 | 494 |
| Ornamental Fish | 960 | 1,383 | 1,636 | 2,392 | 1,847 | 2,288 |
| Chank & Shells | 175 | 115 | 124 | 109 | 113 | 147 |
| Shark Fins | 152 | 128 | 151 | 171 | 133 | 214 |
| Molluscs | 1,222 | 1,217 | 1,139 | 739 | 1,038 | 2,648 |
| Fish Maws | 13 | 16 | 20 | 6 | 16 | 36 |
| Food Fish | 19,050 | 21,399 | 23,583 | 15,528 | 16,877 | 24,690 |

| Others | 407 | 468 | 482 | 491 | 650 | 1,382 |
|---------------------|--------|--------|--------|--------|--------|--------|
| Export Value | 26,364 | 31,792 | 34,796 | 24,716 | 26,801 | 39,230 |

Annexure 5: Export Quantity of Fish and Fishery Products (Mt)

| Exported Item | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------|--------|--------|--------|--------|--------|--------|
| Prawns | 1,078 | 1,625 | 2,001 | 1,341 | 1,667 | 1,845 |
| Lobsters | 119 | 340 | 301 | 204 | 175 | 224 |
| Crabs | 1,557 | 1,861 | 1,872 | 1,710 | 2,117 | 1,819 |
| Beche de Mer | 255 | 260 | 165 | 169 | 136 | 150 |
| Ornamental Fish | na | na | na | na | na | Na |
| Chank & Shells | 325 | 286 | 343 | 289 | 297 | 355 |
| Shark Fins | 56 | 34 | 32 | 39 | 36 | 53 |
| Molluscs | 1,642 | 2,064 | 2,431 | 1,371 | 1,568 | 3,153 |
| Fish Maws | 2 | 3 | 2 | 2 | 1 | 7 |
| Fish | 13,229 | 16,919 | 18,658 | 11,807 | 11,101 | 16,250 |
| Others | 370 | 519 | 515 | 529 | 495 | 971 |
| Export Quantity | 18,633 | 23,911 | 26,320 | 17461 | 17,593 | 24,827 |

Annexure 6: Imported Quantity of Fish and Fishery Products (Mt)

| Imported Item | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---------------|--------|--------|--------|---------|---------|---------|
| Maldive Fish | 1,383 | 1,447 | 1,256 | 2,216 | 2,732 | 2,674 |
| Dried Fish | 39,433 | 37,609 | 35,280 | 33,053 | 34,978 | 33,012 |
| Canned Fish | 18,859 | 21,835 | 19,591 | 49,016 | 37,089 | 40,614 |
| Food Fish | 9,699 | 15,844 | 21,095 | 33,867 | 39,074 | 27,782 |
| Others | 2,039 | 1,665 | 1,490 | 1,894 | 1,820 | 1,938 |
| Total | 71,413 | 78,400 | 78,712 | 120,046 | 115,693 | 106,020 |

Annexure 7: Value of Imported Fish and Fishery Products (Rs. Million.)

| Total | 17,400 | 21,119 | 18,861 | 30,729 | 35,173 | 33,969 |
|---------------|--------|--------|--------|--------|--------|--------|
| Others | 535 | 418 | 460 | 878 | 977 | 958 |
| Food Fish | 2,589 | 3,490 | 4,357 | 6,764 | 10,111 | 8,605 |
| Canned Fish | 5,338 | 5,953 | 5,092 | 11,919 | 9,638 | 9,606 |
| Dried Fish | 7,983 | 10,401 | 8,305 | 9,510 | 12,453 | 13,176 |
| Maldive Fish | 955 | 857 | 647 | 1,658 | 1,994 | 1,624 |
| Imported Item | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |

Annexure 8 : Operating Fishing Boats by District – 2016

| | District | IMUL | IDAY | OFRP | MTRB | NTRB | NBSB | Total Boats |
|----|-------------|------|------|-------|------|-------|------|----------------|
| 1 | Negombo | 730 | 24 | 1565 | 6 | 1160 | 39 | 3524 |
| 2 | Colombo | 36 | 26 | 394 | 1 | 318 | 24 | 799 |
| 3 | Kalutara | 400 | 3 | 369 | - | 244 | 32 | 1048 |
| 4 | Galle | 628 | 20 | 412 | 198 | 232 | 38 | 1528 |
| 5 | Matara | 956 | 84 | 806 | 273 | 636 | 7 | 2762 |
| 6 | Tangalle | 514 | 24 | 840 | 129 | 687 | 101 | 2295 |
| 7 | Kalmunai | 116 | 84 | 678 | 179 | 877 | 197 | 2131 |
| 8 | Batticaloa | 327 | 28 | 1209 | 8 | 4095 | 171 | 5838 |
| 9 | Trincomalee | 174 | 16 | 2865 | 20 | 1575 | 117 | 4767 |
| 10 | Mullaitivu | - | - | 873 | - | 613 | 76 | 1562 |
| 11 | Kilinochchi | 2 | - | 689 | 91 | 254 | - | 1036 |
| 12 | Jaffna | 90 | 351 | 3830 | 621 | 1823 | 111 | 6826 |
| 13 | Mannar | 34 | 208 | 2767 | 443 | 839 | 14 | 4305 |
| 14 | Puttalam | 73 | - | 2961 | 209 | 1342 | 203 | 4788 |
| 15 | Chilaw | 116 | - | 2136 | 7 | 1340 | 82 | 3681 |
| | Total | 4196 | 868 | 22394 | 2185 | 16035 | 1212 | 46890 |

Annexure 9: Active Ice Plants and Production Capacity by Districts – 2017

| District | Ice plants | Capacity(Mt/day) |
|-------------|------------|------------------|
| Colombo | - | - |
| Negombo | 12 | 689 |
| Kalutara | 6 | 278 |
| Matale | 1 | 15 |
| Galle | 5 | 120 |
| Matara | 11 | 452 |
| Tangalle | 14 | 480 |
| Jaffna | 6 | 130 |
| Mannar | 4 | 164 |
| Mullaitivu | 2 | 47 |
| Kilinochchi | 2 | 11 |
| Batticaloa | 4 | 113 |
| Kalmunai | 3 | 32 |
| Trincomalee | 6 | 316 |
| Kurunegala | 1 | 1 |
| Puttalam | 8 | 230 |
| Chilaw | 5 | 215 |
| Anuradapura | 2 | 13 |
| Polonnaruwa | 1 | 2 |
| Monaragala | 1 | 2 |
| Total | 94 | 3310 |