International Co-operative
Fisheries Organization (ICFO)
A Sector of the International
Co-operative Alliance

# World Fisheries At A Glance.....

## 4th WORLD FISHERIES CO-OPERATIVE DAY CELEBRATION

16th June 2014, New Delhi

FISHCOPFED

NATIONAL FEDERATION OF FISHERS CO-OPERATIVES LTD.
(Administrative Control of Ministry of Agriculture , Govt. of India)
7, Sarita Vihar Institutional Area
NEW DELHI-110076

1026

International Co-operative
Fisheries Organization (ICFO)
A Sector of the International
Co-operative Alliance

# World Fisheries At A Glance.....



## 4th WORLD FISHERIES CO-OPERATIVE DAY CELEBRATION

16th June 2014, New Delhi



FISHCOPFED

**NATIONAL FEDERATION OF FISHERS CO-OPERATIVES LTD.**
**(Administrative Control of Ministry of Agriculture , Govt. of India)**
**7, Sarita Vihar Institutional Area**
**NEW DELHI-110076**

## INTERNATIONAL CO-OPERATIVE FISHERIES ORGANIZATION (ICFO)

ICFO is a sectoral organization of the International Co-operative Alliance (ICA). It was established to promote the development of fisheries co-operatives around the world, to promote trade, to share co-operative training and education materials as well as information on fishery matters. ICFO was previously known as the ICA Fisheries Committee.

### AIMS

ICFO objectives include :

the creation of new co-operative fisheries organizations;
the promotion of co-operative training and education, including the production of educational material;
the exchange of technical information movements on a global basis;
the provision of materials that help development of under-developed countries' fisheries
the promotion of trade.

### STRUCTURE

ICFO is governed by its members according to its Rules. It holds an annual Executive and Plenary meetings. Members elect a Chairman, Vice-Chairs and other Board members at a Plenary meeting.

# ICFO Members

**International Cooperative Fisheries Organisation**

- 17 Cooperative Organizations from 15 Countries

---

**AFRICA**

| | |
|---|---|
| **Tanzania** | **Tanzania Federation of Co-operatives Ltd. (TFC)** |

| | |
|---|---|
| | Address: Co-operative Building, 9th floor Lumumba Street, P.O. Box 2567 Dar-es-Salaam, Tanzania<br>Phone No.: + 225 22 2184 081<br>Fax No.: + 225 22 2184 081 |
| **AMERICA** | |
| Canada | Newfoundland-Labrador Federation of Co-operatives (NLFC)<br><br>Address: 19 Crosbie Place, Suite 203 (Co-operators Bldg), P.O. Box 13369, Station A, St. John's, NL A1B 4B7<br>Phone No.: 1-709-726-9431<br>Fax No.: 1-709-726-9433 |
| **ASIA-PACIFIC** | |
| Bangladesh | Bangladesh Jatiya Samabaya Union (BJSU)<br>(National Cooperative Union of Bangladesh)<br><br>Address: 9/D , Motijheel Commercial Area, Dhaka - 1000, Bangladesh<br>Phone No.: 880-2-882-4882<br>Fax No.: 880-2-883-4883 |
| India | National Federation of Fishermen's Co-operatives Ltd. (Fishcopfed) |

| | |
|---|---|
| | Address: 7A, Sarita Vihar Institutional Area, New Delhi 110044, India<br>Phone No.: 91-11-2695-6692<br>Fax No.: 91-11-2695-6993 |
| Indonesia | Induk Koperasi Perikanan Indonesia (IKPI)<br>(National Federation of Indonesian Fishermen's Cooperative Societies)<br><br>Address: Jalan Ir. H. Juanda No. 2, Jakarta 10120, Indonesia<br>Phone No.: 62-21-345-1118<br>Fax No.: 62-21-380-6177 |
| Japan | National Federation of Fisheries Cooperative Associations (JF Zengyoren)<br><br>Address: 7th Floor, Co-op. Bldg., 1-1-12 Uchikanda, Chiyoda-Ku, Tokyo, Japan 101-8503<br>Phone No.: 81-3-3294-9617<br>Fax No.: 81-3-3294-3347 |
| Korea | National Federation of Fisheries Cooperatives (NFFC)<br><br>Address: 62, Ogeumro, Songpa-Ku, Seoul 138-730, Republic of Korea<br>Phone No.: 82-2-2240-0409<br>Fax No.: 82 2 2240 0420 |

| | |
|---|---|
| Myanmar | **Central Cooperative Society Limited (CCS)**<br><br>**Junction of Sayasan Road and New University Avenue Road, Bahan Township, Yangon, Myanmar**<br>**Phone No.: 951-557 640, 554 687**<br>**Fax No.: 951-553 894** |
| Thailand | **The Co-operative League of Thailand (CLT)**<br><br>**Address: 4 Pichai Road, Dusit, Bangkok 10300, Thailand**<br>**Phone No.: +66-2-669-3254**<br>**Mobile No.: 66-1-172-8190 (Mr.Phanuwat)**<br>**Fax No.: 66-2-241-1228** |
| Vietnam | **Vietnam Co-operatives Alliance (VCA)**<br><br>**Address: 77 Nguyen Thai Hoc Street, Hanoi, Vietnam**<br>**Phone No.: 84-4-843-1768**<br>**Fax No.: 84-4-843-1768** |
| Fiji | **Fiji Co-operative Union Ltd. (FCUL)**<br><br>**Address: 5th Floor, Vanua House, Victoria Parade, Government Bldgs, Suva, Fiji (P.O. Box 2356)**<br>**Phone No.: 679-3314-679**<br>**Fax No.: 679-310-0048** |

| | |
|---|---|
| Sri Lanka | National Fisheries Federation(NFF)<br><br>Address: Ministry of Fisheries & Aquatic Resources Development, Maligawatta Colombo-10,<br>Sri-Lanka<br>Phone No.: +94-11-2395477<br>Fax No.: +94-11-2334168 |

---

**EUROPE**

| | |
|---|---|
| France | Caisse Centrale de Credit Cooperatif (CCCC)<br><br>Address: BP 211-92002 Nanterre Cedex, France<br>Phone No.: 33-1-47 24 89 55, or 47 24 86 90<br>Fax No.: 33-1-47 24 88 3 |
| | Confederation de la Cooperation de la Mutualite et du Credit Maririmes (CCMCM)<br><br>Address: 24, Rue du Rocher, 75008 Paris, France<br>Phone No.: 33-1-53 42 47 90<br>Fax No.: 33-1-42 93 86 19 |
| Hungary | Hungarian Fish Farmers Association (Haltermelok Orsazagos Szovetsege)<br><br>Address: 1126 Budapest, Vorosko u. 4/B, |

**Hungary**
**Phone No.: 36-1-355-7019**
**Mobile No.: 36-30-9952187 (Mr. Gabor Csoma)/td>**
**Fax No.: 36-1-214-2643**

**National Association of Fisheries Co-operatives (Lega Pesca)**

**Address: c/o LEGA Nazionale Delle Cooperative e Mutue Via A Guattani 9, 00161 Roma, Italy**
**Phone No.: 39-6-844391**
**Fax No.: 39-6-84439216**

**Italy**

**Fedcoopesca (Federazione Nazionale Cooperative delle Pesca)**

**Address: Via Torino, 146, 00184 Rome, Italy**
**Phone No.: 39 06 488-2219/4890-5284**
**Fax No.: 39 06 4891-3917**

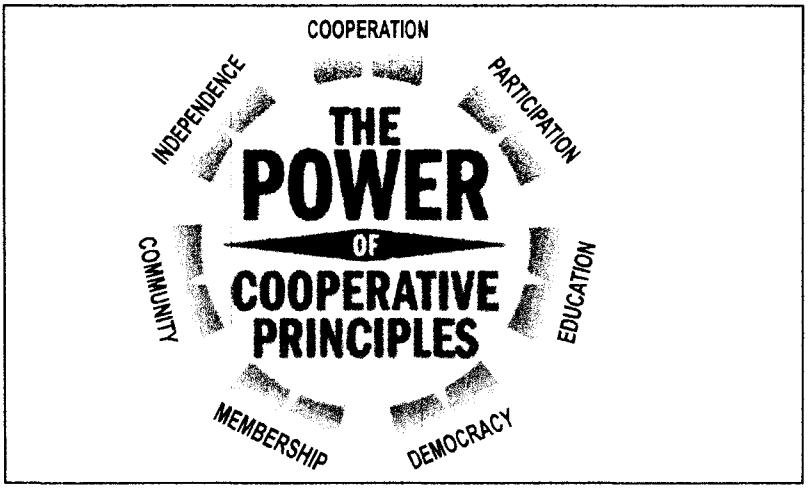
## 4th World Fisheries Co-operative Day

In 2010 the ICFO general assembly held in Beijing on 2nd September, 2010 unanimously adopted June 16th as the World Fisheries Co-operative Day. This was established to set up for sustainable development of fisheries based on co-operatives. It was to serve as precious opportunities to remind values of fisheries as a food industry among the member co-operatives of ICFO by sharing experts and experience for the future fisheries at this critical point of rapid change in fisheries.

The ICFO held three ceremonies in Korea, Vietnam and Indonesia since 2011. The World Fisheries Co-operative Day became an icon to show the will of fisheries co-operators for the development of fishing industry around the world.

According to the agreement in the ICFO general assembly in Cape Town, 2013, the 4th World Fisheries Co-operative Day shall be celebrated in a small way in each member contry to promote the role of fisheries co-operative day. FISHCOPFED is celebrated the 4th World Fisheries Co-operative Day in New Delhi,India

### Cooperative Principles



# World Fisheries at a glance

## 1. INDIA

Fisheries is an important sector in India--it provides employment to millions of people and contributes to food security of the country. With a coastline of over 8,000 km, an Exclusive Economic Zone (EEZ) of over 2 million sq km, and with extensive freshwater resources, fisheries play a vital role. Presently, fisheries and aquaculture contribute 1.07 per cent to the national GDP, and 5.30 per cent to agriculture and allied activities, while the average annual value of output during the Tenth Five Year Plan (2002-2007) was Rs31, 682. 50 crores.

India is the second largest source of aquaculture production in the world after China. Inland fisheries, reservoirs and freshwater aquaculture are the pillars of growth. Besides floodplain lakes and wetlands, irrigation canals, saline and waterlogged areas too contribute towards output.

Fish production in India during 2013 was around 8.67 Million Tonnes (inland fish production 5.3 Million Tonnes and marine fish production 3.37 Million Tonnes). India's share in fisheries production globally is about 5.43 per cent and marine inland fishery exports account for just around 2.4 per cent of the global trade in the sector. Fish production in India is set to cross 13 million tonnes (MT) mark by 2016 from the current level of over 8.67 million tonnes.

Export accounts for 8 per cent of the total fish production in India. Fishery product exported from India was 0813091 Tonnes worth Rs. 12901.47 crore during 2011-12 for the first time export earning have crossed USD 3.5 billion. Fisheries' export currently stood at about USD 3.6 billion and it is expected to reach about USD 4.7 billion by 2014. The global fish trade is estimated at USD 138 billion with China, Norway and Thailand occupying the top three slots, according to the survey report.

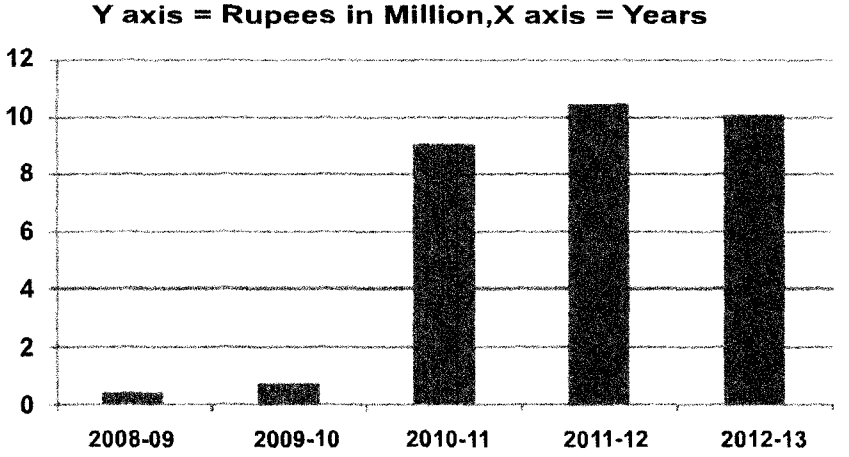
Indian marine waters are home to over 1,700 fish species, including 200 commercially significant species, while the sector employs over 15 million people. Fish eaters account for over half of India's total population.

The National Federation of Fishers Cooperatives Ltd. (FISHCOPFED) is a national level federation of fisheries cooperatives and the apex institution of Indian Fisheries Cooperative Movement. Its motto is to promote and develop the fishery cooperative movement in India, to educate, guide and assist fishers in their efforts to build up and expand the fishery cooperative sector and serve as an exponent of cooperative opinion in accordance with cooperative principles. It was established in 1980 as All India Federation of Fishermen Cooperatives and was rechristened as National Federation of Fishers Cooperatives Ltd. in 1982.

FISHCOPFED is well promoted through schemes and funds of the Deptt. of Animal Husbandary Dairying, Fisheries and Deptt. of Agriculture & Cooperation of the Ministry of Agriculture, Govt. of India, National Cooperative Development Cooperation and National Fisheries Development Board.

**Progress of FISHCOPFED since last five years:**

Since last five years FISHCOPFED was turned around and the profit is on the rise thereafter losses in the proceeding six years. Before the year 2007-08 FISHCOPFED was running in downwards. Now all the liabilities of the federation, which was more than Rs. 50.00 lakh have been settled in a record time by the management through good governance. A graphic view of profit of FISHCOPFED is as under:

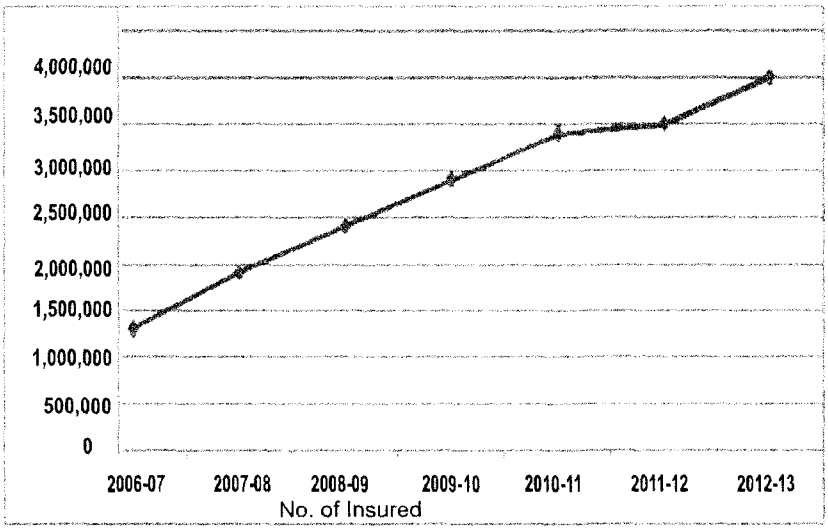



Besides that FISHCOPFED organizes its Board meetings and Annual General Boady meetings regularly as per the provisions of the Multi State Cooperative Societies Act 2002.

**Welfare of Fishers through Insurance:**

Under the Welfare Activities, FISHCOPFED implements the most acclaimed Centrally Sponsored Group Accident Insurance Scheme for active fishermen in collaboration with the concerned state and UT fishery departments throughout the country. Around 41 lakh fishers are covered under the Scheme covering 23 States and four UTs in the current year. Around 25,000 families of the deceased have been paid claims in all over the country under the scheme.

Since last seven years the FISHCOPFED has done meticulous work to provide cover to more and more fishers progressively in the country. A graphic view of progress on Centrally Sponsored Group Accident Insurance Scheme since last seven years is as under:




(A graphic view of progress on Centrally Sponsored Group Accident Insurance Scheme since last seven years is as under)

***Retail Fish Marketing***

In order to provide fish to consumer FISHCOPFED undertakes the activities of fish retail marketing during the five years. In this process FISHCOPFED has opened one retail outlet at Bhubaneswar, and one retail outlet at Guwahati recently. Besides that, one retail outlet is running at Yusuf Sarai, New Delhi since last 30 years and one at New Moti Bagh New Delhi. In this regards the objective of FISHCOPFED is to open more fish retail outlet all over the country to provide fresh fish to consumers of fish and also to provide best price to the members of fisheries cooperatives.

**Service to Member Institutions:**

FISHCOPFED is always thinking about to help the member institutions by way of to provide computers, to implement the project of Fresh Water Aquaculture in joint venture, to help in inter-state marketing etc. Under this process computers have been provided to member institutions and this process will continue in future also subject to availability of funds.

**International Relations:**

FISHCOPFED is the member of the International Cooperative Fisheries Organization (ICFO) Korea. Shri B. K. Mishra, Managing Director, FISHCOPFED is the Vice-Chairman of ICFO. It is a rare honour to the India's Fisheries Cooperative Movement. ICFO is apex body of fisheries cooperative organizations at international level having 15 member countries including national level fisheries cooperatives from Africa, Canada, Asia-Pacific and Europe. FISHCOPFED is also a member of NEDAC (Network for the development of Agricultural Cooperatives in Asia).

**Promotion of Aquaculture:**

In order to demonstrate fish culture in inland waters, FISHCOPFED is having three water bodies in the state of Assam at i.e. Kakodonga (18 hcts.), Roop Nagar (0.5 hctrs.) and GNB (7.00 hactrs.). The motto to run the aforesaid projects as demonstration-cum production projects is to produce fish with adopting latest technology of aquaculture and market the same through the members of fisheries cooperatives. It has been observed that the outcome of theses projects is beneficial for the members of fisheries cooperatives. Besides that FISHCOPFED is also doing pisciculture in two reservoirs in the state of Odisha.

## Welfare of Fishers through Insurance

Under the Welfare Activities, FISHCOPFED implements the most acclaimed Centrally Sponsored Group Accident Insurance Scheme for active fishermen in collaboration with the concerned state and UT fishery departments throughout the country. The Centrally Sponsored Group Accident Insurance Scheme was announced by Late Smt. Indira Gandhi, the then Prime Minister of India and started since 1982. Under this scheme, 50% of the premium is subsidized by the Central Government and remaining 50% is borne by the State Government and for the North Eastern states 75% of the premium is subsidized by the Central Government. In case of UTs. 100% of the premium is subsidized by the Central Government. The Scheme provides for 24 hours accident cover amounting to ₹1,00,000/- against death/permanent disability and ₹50,000/- against permanent ( Partial) disability due to accident against an annual premium of ₹28/-. Around 41 lakh fishers are covered under the Scheme covering 23 States and 4 UTs in the current year around 25,000 families of the deceased have been paid claims in all over the country under the scheme so far.

## Training & Education

FISHCOPFED always is making its efforts to train & educate the fishers of the country. With a view to enhance fish production and generate employment among the fishers and get them better return for their produce/catch, FISHCOPFED has provided training to over 20,000 fishers on various aspects of fisheries and cooperatives with the funding support of the Ministry of Agriculture, Government of India, National Fisheries Development Board (NFDB), Hyderabad, IFFCO, New Delhi and NABARD during the last five years.

## Marketing Activities

Under the marketing activities FISHCOPFED undertakes the following though its Seven RO/Unit offices and Head Office.

Promotion of Aquaculture.

Cold Chain.

Inter-state Fish Marketing.

Retail Marketing of Fish.

Supply of Fish to Group of ITDC Hotels.

Promotion of Export of Fish and Fish Products.

## Service to Member Institutions

FISHCOPFED is always thinking about to help the member institutions by way of to provide computers, to implement the project of Fresh Water Aquaculture in joint venture, to help in inter-state marketing etc. Under this process computers have been provided to member institutions and this process will continue in future also subject to availability of funds.

## Nationwide Survey on Database of Primary Fisheries Cooperatives

Fishery in India is an important part of our economy. There are over 18 thousand primary fisheries cooperative societies who are socially, economically and educationally backward. They need skill up-gradation to enable themselves to use at least medium technology in the field of fisheries and also need education for their Managers/members of fishermen cooperatives to run their societies smoothly in a viable way. Therefore, there is an immense scope and need to help them by giving them identification in the mainstream of social strata. In many states there is no exact census of fishers. It has been observed that there are many unidentified and

unorganized fishers in the country who are deprived of the benefits of various schemes sanctioned by the Government of India as well as the State Governments. Our objective is to organize them.

The Ministry of Agriculture, Department of Animal Husbandry, Dairying & Fisheries, Government of India had assigned a task to collect the data of primary fisheries cooperatives alongwith the details of their status, membership and facilities available with these cooperatives. FISHCOPFED took the challenge and completed nationwide survey of primary fisheries cooperatives. The computerized data report has also been prepared. FISHCOPFED is also preparing to conduct survey of State/district level fisheries cooperative as well as data of ponds/reservoirs.

**Publications**

FISHCOPFED publishes bilingual quarterly journal namely "FISHCOOPS" carrying up to date information on fishery technology as well as trends. The journal is a source of knowledge about technology and the scheme of the Central as well as State Governments oriented to the development, promotion and welfare of fishers, besides several allied subjects, news on fisheries cooperatives, fish for health, fish delicacies etc. The journal has a Hindi section too for the benefit of Hindi speaking segment as effective means of publicity among its readers.

Besides that, FISHCOPFED publishes one quarterly journal namely "Minaloka" in Odia language. Both the journals are circulated to members of fisheries cooperatives free of cost.

**Other Promotional Activities**:

Organization of Congress/Conferences/Workshops on insurance, fish marketing, value addition and processing, cooperative management etc.

Research studies on fisheries cooperative marketing system and staus of fishery cooperatives in India;

Dissemination of information pertaining to export of fish, fishery products through cooperatives;

Service to member institutes in formulation of fishery projects, interstate marketing etc.

## 2. KOREA

In 2011, the number of fishery households marked at 63,251, down 2,524 or 3.8% from 65,775 in 2010 and the population also declined 11,905 (7.0%) to 159,299 from 171,204 in 2010.

The number of people engaged in fishing industry was 103,903 in 2011, down 3.0% from 2010, with 54,856 of males (52.8%) and 49,047 of female (47.2%). Members of fishery households are getting older as people over 60 accounted for 44.9%, and people in their 50s and 40s accounted for 34.0% and 15.2% respectively.

The fish catch totaled at 3,256 thousand tons, up by 4.6% year on year and total production value increased 8.7% to 8,072.9 billion tons.

In 2011, 75,629 fishing boats with the total capacity of 606,627 tons were registered, down by 1,345 boats (1.7%) and up by 6,005 tons (1.0%) year-on-year. Out of the total , 73,423 are powered vessels, taking up 97% with 604,414 tons (99.6%) of the total capacity. In terms of fishing type, fishing boats for coastal/offshore fisheries account for 65.4%, coastal aquaculture fishing boats 23.5%, inland waters fishing boats 3.8%, deep-sea fishing boats 0.5% and other 6.8%.

Average income of fishery households in 2011 increased 8.2% to 38,623 thousand year on year. Income from fishing bussiness was up 23.0% while that from non-fishing business was up 4.6%. Fishing income took up 52.9% of the fishery household income, down 6.4% from the previous year. Fishery household's income

is 128.1% of farming household income and 75.8% of urban household income.

Fishery household expenditure in 2011 increased 4.2% to 29.6 million won from the previous year. Consumption expenditure increased 7.0% to 23.5 million as non-living expenditure went down 5.0% to 6.3 million won. As of the end of 2011, average asset value of fishery household stands at 287.650 million won, up by 11.1% year on year. Fixed asset value decreased 9.5% and current asset increased 14.8%.

Debt for fishery household in 2011 increased 6.2% to 37.862 million won, year on year. Fishery business debt increased 1.9% and non fishery business debt increased 10.8% from previous year. Debt/quick asset, a barometer of debt repayment capability in short term recorded 45.1%, went down 3.4% from the previous year.

In 2011, Korean marine production totaled 3,256,000 tons, up 4.6% from the previous year. Fish catch at coastal and off shore area increased 8.9%. and the production of coastal aquaculture grew 9.1% from the previous year due to good harvest of seaweeds including laver and sea mustard. The total value of marine products went up 8.7% to 8,072.9% billion won from 7,425.7 billion won of the previous year.

In 2011, the production value increased 13.6% to 4,444.1 billion won although coastal/offshore fishing (ordinary sea-surface fishing) production increased 8.9% to 1,235,000 tons from the previous year.

When it come to production trend by category, seaweed production increased by 15.4% to 15,000 tons from the previous year.

In terms of fish species, anchovy, squid, mackerel, yellow cornvina production increased 17.3% ( 293,000 tons), 7.9% (172,000tons, 47.1% (139,000 tons) and 85.6% (59,000 tons) respectively while cuttle fish and blue crap production rose 44.1% ( 33,000tons) and 19.9% (27,000 tons) respectively.

## 3. AUSTRALIA

### 1. In 2010~11

The gross value of Australian fisheries production increased by 2% to $2.23 billion. Tasmania accounted for the largest share of gross value of production ( 27%), followed by South Australia (19%) and Western Australia (18%), Commonwealth fisheries accounted for 14% of gross value of production.

The gross value of aquaculture production (including southern bluefin tuna wild catch input to the South Australian tuna farming sector) increased by $70.5 million to $948.1 MILLION, AND ACCOUNTED FOR 43% OF THE GROSS VALUE OF Australian fisheries production. The volume of aquaculture production increased by 2% to 75,188 tons accounting for 32% of total Australian fisheries production.

The value of farmed salmonids rose by 11% to $408.8 million. Farmed salmonids continue to be the largest aquaculture species group produced and also the most valuable fisheries product in Australia. Salmonids accounted for 43% of the total value of Australian aquaculture production and 18% of the total value of fisheries production.

In volume terms, Australian fisheries production decreased by 4% (9079tons) to 234164tons.

The largest quantity of any species produced was the Australian sardine. However, Australian sardines were a relatively low value product.

The largest quantity of any species produced was the Australian sardine. However, Australian sardines were relatively low value products.

The value of production for the wild catch sector declined by 2% to $1.31 billion, while production volume decreased by 6% to 162762 tons.

## 2. From 2000~01 to 2010~11

The total annual volume of fisheries production increase by 2582 tons (1%), while the annual real gross value of production fell by $1.04 billion. The majority of the decline in value occurred from 2000-01 to 2004-05. From 2004-05 to 2010-11, the real gross value of production decreased by 10%, representing a slowing in the rate of decline. During the fall in the production value was the decline in the gross value of production of tuna, prawns, rock lobster and abalone. The combined value of these four species groups fell by 50%in real terms over this period, with their combined contribution to total Australian fisheries production falling from 62% to 46%.

## 4. CHINA

China's aquatic production in 2012 is forecast at 58 million tones, up four present from 2011, due to gains in aquaculture growth as wild catch production remains stagnant. Fishery production challenges include- showing investment, environmental concerns and coastal development limiting resources for aquaculture expansion, scarce resources restrain growth for wild catch numbers, and processing (with imported material ) for re-export facing rising production costs and loss of competivity. Rising affluence is raising domestic demand for alternative protein sources, including aquatic products, but weak overseas economic conditions challenge export growth.

Total aquatic trade value is expected to rise to an estimated $27 billion in 2012 from $25.8 billion last year and produce a $10 billion surplus. US exports to China of aquatic products increased to $945 million in the first ten months of 2012, up 1.6% over the same period in the previous year. China's aquatic exports to the United States climbed to $2.3 billion in the first ten months of 2012. Imports for domestic consumption face high import duties and value added tax. Prospects remain strong for US salmon, frozen fish and fish meal.

China's definition of aquatic products includes both cultured and wild caught products; aquatic products include fish, shrimp, prawn, crab, shellfish, algae, and others. Aquatic catch production

is the total volume of both fresh and seawater wild caught aquatic products, Aquaculture production is the total volume of both fresh and sewater cultured (farmed) aquatic products. This report will use Chinese terminology to maintain consistency between Chinese statistics and product categories. Total aquatic trade statistics in this report do not include fishmeal.

Total 2012 aquatic production is estimated to increase four % over last year to reach 58 million tons, compared to the 56 million tons in 2011 and 53.7 million on tons in 2010. Fish production accounts for 59% of the total aquatic production, followed by shellfish and crustaceans at 22.6 and 10 percent, respectively. Fish production is expected to continue its upward growth trend to reach 34.5 million tons in 2012, up from 33 million tons in 2011 and 31.3 tons in 2010.

## 5. INDONESIA

Capture fisheries production come from marine capture fisheries and inland open water fisheries. During 2001-2011 periods, the volume of capture fisheries production on that period increased with an average 3.06% per year that was by 3,966,480 tons in 2001 to 5,345,729 tonnes in 2011. The volume of inland open water capture fisheries production increased with an average 1.97% per year that was by 310,240 tons in 2001 to 368542 tons in 2011.

The highest volume of capture fisheries production reached in 2011 that was 5,714,271 tones while the lowest reached in 2001 that was 5,345,729 tons, while the lowest reached in 2001 that was 3,966,480 tons. Volume of inland openwater capture fisheries production in 2011 was the highest that reached at the same period that was 368,542 tons. The lowest volume of inland openwater capture fisheries production reached in 2006 that was 293,921.

Based on fish species at that periods, production volume of purple-spotted/big eye was the highest increasing that was 5,344 tonnes in 2001 to 38,536 tonnes in 2011 or increased annually with an average 27.28% per year. Production volume of bali, sardinella, greater lizardfish, torpedo scad, blue lines seabass and

jack trevallies also had higher increasing that increases annually per year with an average 11.37%, 9.79%9.42%, 9.41% and 9.05%, respectively. Production volume of eastern little tunas, skipjack tunas and tunas increased annually per year with an average 6.36%, 5.90% than 5.06% respectively. At the same period, production volume of dorab wolf herring was the highest decreasing, that was decreased annually with an average 4.52% per year. Production volume of thresher sharks dent indo-pacific king mackerel also decreased annually per year with an average 3.97% and 2.00%, respectively.

## 6. JAPAN

FY 2012 saw poor catches of commercially important fish species, such as chum salmon, saury, and Japanese eel. Various causes have been suggested, including a rise in the sea water temperature changes in habitat conditions. It is important to further investigate the causes and at the same time, take appropriate counter measures against them.

Japan is the world's largest producer and consumer of pacific bluefin tuna, also pacific bluefin tuna's spawning ground is presumed to exist around west and south of Japan. Therefore, Japan is not only domestically, but also internationally responsible for the conservation and management of pacific bluefin tuna resources.

In order for fisheries cooperatives to continue to respond to the various needs of fishers and to function as core organizations in the fishing industry and fishing communities, it is important to strengthen their organization and foundations, including expanding their management scale through a merger. It is also essential that fishery cooperatives reform their management and business, such as by strengthening their marketing business and increasing the soundness and efficiency of their credit business. Also an ailing fishery cooperative should implement a restructuring plan. The challenge is to take measures to train officers and employees who will manage the organization and business of fishery cooperatives and measures to ensure

compliance. Some fishery co-operative have held study sessions aimed at enhancing the skill of their marketing staff.

In order to provide safe fish and fishery products to consumers, it is vital to promote the introduction of the Hazard Analysis and Critical Control Pint (HACCP) system in the fishery processing industry, which is the largest domestic user of fish and fishery products. When exporting fish and fishery products to the US and the EU, fishery processing facilities need to have introduced hygiene control under the HACCP system and satisfy the relevant HACP requirements.

As for HACCP accreditation for facilities used for exports to the EU, efforts are being made to resolve problems hindering early accreditation, such as establishing a meeting between the fishers agency, the Ministry of Health, Labour and Welfare, local Govt. (fisheries department, food hygiene department) and related industries, and creating a manual on the facility conditions required for the accreditation.

## 7. NEW ZEALAND

New Zealand seafood industry harvests approximately 533,000 tonnes from wild fisheries and aquaculture each year. The value of this harvest ranges from NZD 1.2 TO NZD 1.5 billion per annum, of which the aquaculture industry contributes about NZD 280 MILLION PER ANNUM.

New Zealand does not subsidies the fishers sector. It operates a cost recovery scheme to fund part of the general service costs incurred for fisheries management through different types of levies.

Seafood exports were the seventh largest export earner in 2009. Domestic seafood sale are approximately NZD 150 million annually.

The key export markets are Australia (19%), Hong Kong (16.5%), the European Union (14.2%) and China (12.3%) followed closely by the Unites States and Japan. There has been significant growth in exports to Hong Kong and China since 2007.

Employment in the harvesting, aquaculture and processing sector has slightly decreased to 8090 people in 2008. Processing accounts for the major share, followed by harvesting and aquaculture.

The fleet has reduced in terms of numbers over time while its tonnage increased considerably.

The fisheries act 1996 provides the framework for fisheries management in New Zealand. Its purpose is to provide for the utilization of New Zealand's fisheries resources while ensuring their sustainable level and the avoidance, remedy or mitigation of any adverse effects on the environment.

The act and the subordinate legislation (fisheries regulations) provide for the fishing interests of all fishing groups (commercial, recreational and customary Maori). The act is administered primarily by the Ministry of Fisheries. Key decisions are made by the Minister of Fisheries and Aquaculture and the Chief Executive of the Ministry of Fisheries.

## 8. **PHILIPPINES**

In 2010, the Philippines ranked 5$^{th}$ among the top fish producing countries in the world with its total production of 5.16 million metric tons of fish crustaceans, mollusks, and aquatic plants (including weeds). The production constitutes 3.06% of the total world production of 168.4 million metric tons (FAO website)

The Philippines' 59.87 million metric tons, In terms of value, the country's aquaculture production of fish, crustaceans and mollusks has amounted to over 1.56 billion dollars (FAO website)

Similarly, the Philippines is the world's 3$^{rd}$ largest producer of aquatic plants (including seaweeds) having produced a total of 1.80 million metric tons or nearly 9.48% of the total world production of 19.01 million metric tons (FAO website)

The fishing industry's contribution to the country's GDP were 1.9% and 2.2% at current and constant 2000 prices, respectively. This translates to some P183.1 billion for current prices and

P130.77 billion for constant prices of the country□s GDP of P 9,735.52 billion(current prices) and p5,924.4 billion (constant prices)

The industry also accounted for 14.7% (P183.1billion) and 19.2% (P1245 billion and P680 billion at current and constant prices, respectively, the largest share next to agriculture crops.

The industry employed a total of 1614368 fishing operators nationwide (NSO 2002 census for fisheries) of which the municipal fisheries sector accounted for more than one million (1,371,676) operators while the commercial and aquaculture sectors added some 16,497 and 226,195 operators respectively.

Total volume of fisheries production in the Philippines from January to December 2011 reached 4,973,588 metric tons. Fisheries production fell by 18.46% from 4.41 million metric tons in CY 2006 to 4,974 million metric tons in CY 2011. Average annual production growth rate within that period was registered at 3.08%. in terms of value, the 2011 fisheries production was valued at 224.7 billion pesos as compared with the 163.37 billion Pesos in 2006, an average yearly increment of 7.62 billion pesos.

## 9. THAILAND

Thailand□s aquaculture production has been increased significantly since 1988 while capture fishery production has shown a slight downward trend since 1997. Under the Fisheries Act of 1947, Thailand adopted notifications in 2008 to prohibit provinces-Narathiwat, Pattani, Rayong. In 2009, there were notification adopted for prohibition of Trawler and Push net fishing vessel equipped with engine operation in some areas in two coastal provinces- Satun and Nakon Srithammarat.

In 2010, the Department of Fisheries (DOF) has approved a new national Good Aquaculture Practice (GAP) which is stricter than the original GAP in order to increase quality of aquaculture products. The new GAP standard covers five aspects- food safety and quality, animal welfare, environmental friendly, social responsibility and traceability.

The rehabilitation of marine ecosystem strategies developed under the Marine Fisheries Management Master Plan have specified the delimitation of marine fishing grounds and the closed season to fishing. With the provision of active participation by the community and fisher organizations, the strategies focus on regular monitoring of the rehabilitation activities that have been carried out for the ecosystem, fisheries resources and local fishing grounds. Resources rehabilitation is to be carried out at the local level.

The most important species landed in 2008, in terms of value, were pelagic (28%) followed by crustaceans (25%), shellfish and mollusks (18%) and ground fish (12%). A total of USD 4.5 million was given as government financial transfers to the fisheries sector in 2009, which is a slight decline from that of 2008 (USD4.6 million). These all took the form of direct payments. Thailand has had a positive trade balance in fisheries products, both in volume and in value. The growth of fishing exports and imports since 2005 has been remarkable. In 2008, the value of fisheries products exports was USD 6,469 million, a 45.9% increase in value compare to 2005(USD 4,435 million). Thailand fleet capacity has decreased in recent years, in terms of number of vessels and in terms of tonnage.

## 10. Turkey

Turkish fishing sector consist of an artisanal and an off-shore fishery with multi-gear and multi-species characteristics. In 2008, total production from marine capture, inland fishing and aquaculture was about 453,000 tonnes and 152,000 tonnes respectively. Over 90% of the total marine catch is made up of ten species (mainly pelagic). Turkey is one of the leading European aquaculture producers.

A regulation for the anchovy purse seine fishery was introduced in 2007 to prolong the fishing period. A fishing quota for striped venus was set at 35,000 tonnes as of 2008. The Ministry of Agriculture and Rural Affairs plans to introduce a quota system for anchovy, sprat and mackerel. In the context of Turkey's accession process to the European Union, the fisheries sector has

been subject to comprehensive review procedures in terms of harmonization with the Europeon Union acquis on fisheries. Newly developed pilot applications have been introduced to create a framework for exploitation of fisheries marine resources including the development and pilot application of a vessel monitoring system, fisheries information system, construction of offices at landing sites, regulations on market standards, preparation of preliminary fisheries management plans and a preliminary sector strategy, draft law amendments to form and strengthen the legal basis in terms of enforcement and sanctions for new applications.

The volume of landings increase by 23% to 453,113 mt compared to 2007, mainly due to pelagic landings (anchovy). Other important species of the Turkish capture fishery are Atlantic bonito, pilchard, horse mackerel, sprat, whiting, grey mullet and hake. Domestic consumer has a preference for fresh fish, in particular anchovy; annual per capita consumption is stable at around 7 kg.

Many of the general service transfers serve to align Turkish management system with the European Common Fisheries Policy. For example, monitoring system has been improved and the landing registration infrastructure has been expanded. Over the last decade, fish trade increased considerably in Turkey, imports were dominated by processed and frozen fish products. Given the increase in aquaculture production, fish meal is an important import commodity. European countries are the main suppliers of seafood to the Turkish market, as well as the main export destinations. In 2008, Turkey's fishery trade surplus was about USD176 million. In 2008, there were 17,161 registered vessels with a total tonnage of 187,101 GT. Although the fishing fleet decreased from 2004 to 2008 by approximately 3%, the tonnage remained unchanged. With regards to employment, female participations is particularly high in the processing sector.

## 11. ARGENTINA

The Ministry of Agriculture, Livestock and Fisheries was created in 2008, and the Under Secretariat of Fisheries and Aquaculture is

under the auspice of the Ministry. An individual transferable quotas system entered into force for hake, southern blue whiting, long tail hake and Patagonian toothfish. Argentina has the following National Plans of Action: National Plan of Action to Prevent Deter and Eliminate Illegal, Unreported and Unregulated fishing, National Plan of Action for the Management and Conservation of Sharks, National Plan of action for Reducing the Interaction of Seabirds with Fisheries in the Republic of Argentina.

A capture surveillance system along the entire value chain has been established (both for export and domestic market) to prevent illegal fishing.

The years 2008 and 2009 have been marked by low profit ability in the fisheries sector. The international crisis negatively affected exports, especially during the first semester of 2009. In addition, in 2009 there was a drop in squid catches, which usually generate important export income.

The ministry of Agriculture, Livestock and Fisheries is working on a Strategic Federal and Joint Plan of Agrifood and Agro industry. The main objectives for the fishing sector are as follows:

To achieve a sustainable exploitation of fishing resources through an ecosystem approach to fisheries management and stock recovery, trying to achieve a biological and economical equilibrium and focusing on the commercial species that have not yet been fully exploited while avoiding fisheries and processing overcapacity.

## 12. CANADA

Canada continued in 2008 and 2009 to renew its commercial fisheries policies. A key component of this renewal is the sustainable fisheries framework. Which provides the basis for ensuring Canadian fisheries are conducted in a manner that supports conservation and sustainable use. The SFF incorporates existing fisheries management polices with new and evolving policies, and includes tools to monitor and assess initiatives and identifies areas that may need improvement.

In December 2006 and November 2007, the Canadian government tabled bills in parliament to reform the Fisheries Act, originally enacted in 1868. However, both efforts ended when parliament was suspended before the bills were signed into law. The government indicated in 2010 that it would again seek such a reform. The capture fisheries sector faced a number of challenges during 2008 and 2009, including the global economic crisis that reduced demand for Canadian fish products, and the increasing value of the Canadian dollar that made export relatively more expensive in major markets. The national Aquaculture Strategic Action Plan Initiative (NASAPI) was launched as collaborative exercise to enhance and advance economically, environmentally and socially sustainable aquaculture development. NASAPI has generated action plans that will facilitate responsible growth through a more strategic approach to sector development. Economically prosperous maritime sectors and fisheries is now included as one of fisheries and oceans Canada's strategic outcomes, along with sustainable aquatic ecosystems and safe and secure waters.

The total value of the Canadian fisheries production slightly dropped from CAD 1.959 billion in 2007 to CAD 1.893 billion in 2008. The most important species landed in 2008 in terms of value were crustaceans followed by shellfish and mollusks, groundfish and flatfish.

The total expenditure of the government in relation to the fisheries sector reached CAD 697.5 million in 2008, which is a 25% increase compared to the expenditure in 2003. The majority of these expenditure are accounted for by general services.

Canada has been a net exporter in the world fish market over the decades and the value of both imported and exported products have increased. However, the global economic crisis during 2008 and 2009 reduced demand for Canadian fisheries products, and the increasing value of the Canadian dollar made Canadian exports relatively expensive in major markets.

The total number of vessels was 21,797 in 2008, which is a decrease (8.5%) compared to of the number in 2000 (23,809).

## 13. UNITES STATES

Commercial landings (edible and industrial ) by U.S. fishermen at ports in the 50 states were 9.6 billion pounds or 4.4 million metric tons valued at $5.1 billion in 2012-a decrease of 224 million pounds (down 2.2 percent) and of $186 million (down 3.5%) compared with 2011. Finfish accounted for 86% of the total landings, but only 47 percent of the value. The 2012 average exvessel price paid to fishermen was 53 cents per pound compared to 54 cents per pound in 2011.

Catches of Alska Pollock, Pacific whiting and other pacific groundfish that are processed at sea aboard US vessel in the northeastern pacific are credited as landings to the state nearest to the area of capture. Information on landing port or percentage of catch transferred to transport ships for delivery to foreign ports is unavailable. These at sea processed fishery products, on a round weight basis, exceeded 4.4 million metric tons in 2012 and comprised 44 percent of the total domestic landing in the 50 states. Historically, only fish caught off of Alaska were included in this number. The apparent increase from prior year is due to the inclusion of fish caught off of Washington and Oregon for 2012.

Commercial landing by U.S. fishermen at ports outside the 50 states along with internal water processing agreements provide an additional 562 million pound in quantity and in increase of $204 million in value compared with 2011. Most of these landings consisted of tuna landed in American Samoa and other foreign ports. Note that improved foreign port and IWP reporting in 2012 resulted in a more complete dataset, and thus higher number, than are usually available at the time of publication. Use caution when comparing 2012 data to data from prior years.

Edible fish and shellfish landings in the 50 states were 7.5 billion pounds (3.4 million metric tons) in 2012-a decrease of 432 million pounds compared with 2011.

Landings for reduction and other industrial purposes were 2.2 billion pounds (978000 metric tons) in 2012-an increase of 6% compared with 2011.

The 2012 U.S. marine recreation finfish catch (including fish kept and fish released on the Atlantic, Gulf, and Pacific coasts) was an estimated 380 million fish taken on an estimated 70 million fishing trips. The harvest was estimated at 140 million fish weighing over 203 million pounds.

## 14. ITALY

In 2009, the Ministry for Food, Agriculture and Forestry implemented some 20 adjustment plans of fishing efforts in order to achieve a sustainable balance between capacity and resources. The plans were implemented within the framework of the fisheries operation programme and have been defined by fleet segment and geographical sub-area. The final objective is to reduce the fleet by about 25,000 gross registered tones (GRT). For trawlers, an average decommissioning rate of 12.5% in GRT is planned, for demersal fisheries 5%, and 2.1% for pelagic trawling and seine fishing. The Blufin tuna purse seine fishery will be reduced by 75% in terms of GRT by 2011.

Since June, 2010, the Council Regulation (EC) No. 1967/2006, concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean, has fully entered into force. The measures will phase-out mesh size smaller than 40mm for trawl coded and impose the substitution with squared mesh size of 40mm of, following a motivated request from the fishing vessel owner, with 50mm diamond mesh for a more selective catch.

In 2010, a Ministerial Decree established an extraordinary temporary withdrawal of fishing activities for trawlers and mid-water pelagic nets for 30 consecutive days of the Adriatic and Tyrrhenian fleets in response to the fuel crisis. Further restriction was imposed and limited financial compensation mechanism was established.

European anchovy is the single most important fish species in terms of volume. Cuttlefish, deep water rose shrimp and high value Norway lobster are the main species in the crustaceans and shellfish categories. The latter two are considered fully exploited, while the anchovy stock are sustainable exploited.

Government financial transfers for marine capture fisheries are provided mainly for management and research services. Direct payments are used for decommissioning schemes as well as for fleet renewal and modernization costs.

The Italian trade deficit in fishery products declined slightly, reaching EUR 3.12 billion in 2008 and EUR 3.07 billion in 2009. The decline in exports reflects a decrease in domestic production. Fish imports in 2008 represented 11% of overall Italian food imports and only 2% of total food exports.

The Italian fleet continues to decrease. The largest segment in terms of number of vessels, employment and landings is small-scale fisheries with vessels manned on average by two people.

Aquaculture employment data is not collected systematically. Estimates for 2006 count 1,000 fish farms, mainly in northern Italy, employing about 150,000 people, including those in processing activities.

## 15. NORWAY

Fishing has always been the basis for settlement and employment along the Norwegian cost. The fisherman of today is far more efficient than a few decades ago. Technological facilities and improved fishing methods and vessels mean that today's fishermen catch much large quantities per man. Strict regulation with set quotas and control mechanisms is therefore necessary for sustainable development that will ensure that future generation can also harvest the wealth of the sea.

Development has moved in the direction of fewer and more efficient fishing boats. At then same time, Norway has a composite fishing fleet with respect to the size and type of fishing equipment - ocean fishing vessels and a large number of large and smaller coastal vessels. The quality of the products and the markets where these are sold are emphasized concerns throughout the entire chain, from the moment the fish is caught at sea to when it reaches consumers all over the world.

Sustainable resources management is fundamental to the Norwegian fishing policy. Simultaneously, fisheries and fishing will help to safeguard settlement and create new activity along the coast.

The Norwegian fishing and aquaculture industry currently supplies seafood to consumer sin more than 130 countries worldwide. This is healthy food, produced in a cold ocean environment. The fishing and aquaculture industry is one of Norway's foremost export industries and is vital for settlement and activities along the Norwegian cost. It provides employment in fishing, aquaculture and the fishing industry, and has widespread effects on trade and industry as well as on research and development.

Norway controls some the world's most productive marine environment, with excellent conditions for conducting environmentally friendly aquaculture. Norway places great emphasis on gaining knowledge of fish recourses, the ocean environment and how the interplay between species functions. Simultaneously there is comprehensive regulation of fishing resources to ensure a sustainable management.

Consumers must have confidence in Norwegian seafood. Food safety throughout the entire production chain is a primary focus and the level of foreign substances is documented. The consumer must be able to know with certainty that Norwegian seafood is safe and healthy.

## 16. SPAIN

In April 2008, the Ministry of Agriculture, Fisheries, and Food and the Ministry of the Environment was restructured into a new Ministry of the Environment, and the Rural and Marine Affairs. The General Secretariat for the Sea, which reports the new Ministry, is the central government administration in charge of marine fisheries.

A new Royal Decree No. 747/2008, of 9 May 2008, laying down

regulations for the system of sanctions applying to sea fishing on the high seas established a coherent framework adapted to the salient features of the marine fishing, while at the same time improving administrative procedures.

All Spanish fishing vessels over 15 meters in overall length, together with all those operating in international waters or in the waters of third countries, must carry on-board satellite monitoring systems.

Since 31 December, 2007, the number of vessels has fallen by 1,890 units, or 29,043 GT. In 2008 and 2009, support for the permanent withdrawal of fishing vessels benefited 164 vessels.

Marine Natura Network is being implemented by the Ministry. It started with the approval of measures aimed at protecting the marine area EL Cachucho in 2008 as a firs step in the process to declare it a Marine Protected Area (MPA).

The most important species landed in 2008 in terms of value were tuna (30%), followed by groundfish (27%) and pelagic (10%).

In 2009, the government financial transfer to the marine capture fisheries sector was USD 79 million, which is a substantial decline compared to USD 353 million in 2003. It consists of direct payments and general services. In terms of founding sources, EU funds account for more than national funds.

Both imports and exports of fish products in Span have been increasing continuously. Imports in 2008 reached USD 7,259 million, which is a 111.4% increase since 2000 and makes Spain the third largest fish-importing country among OECD countries.

The number of fishers and fish farmers has been decreasing over the years. The number of vessels and tonnage of the fleet shows a similar trend.

## 17. UNITED KINGDOM

In 2012 the UK had 6,404 registered fishing vessels, 15 percentage fewer than in 2002. Over the same period, the number

of fishermen on UK registered vessels has fallen by almost 1,800 to 12,445. The number of day spend at sea by vessels over 10 meters in length has fallen by 36 percentage.

In 2012, import of fish and fish preparations rose to 754 thousand tones, a 5% increase from 2011.over the same period, exports increased by 7% to 466 thousand tones.

In 2012, import was highest for cod, tuna, shrimps and prawns and salmon. The UK's main exports were salmon, mackerel and herring.

In 2012, import into the UK ere highest from Norway (87 thousand tones), Iceland (66 thousand tones), china (60 thousand tones) and Denmark (59 thousand tones). Of the UK exports, the largest amount went to the Netherlands ( 76 thousand tones), France (75 thousand tones), Germany (41 thousand tones), and Ireland (38 thousand tones).

There were around 12,450 fishermen in 2012, down 12 percent since 2002. Of these 5,900 were based in England (down 9 percent since 2002), 1,000 in Wales (down 25 percent), 4,700 in Scotland (down 18 percent) and 800 in Northern Ireland (up 32 percent). Part time fishermen accounted for 17 percent of the total, down 2 percentage points over the last ten years.