



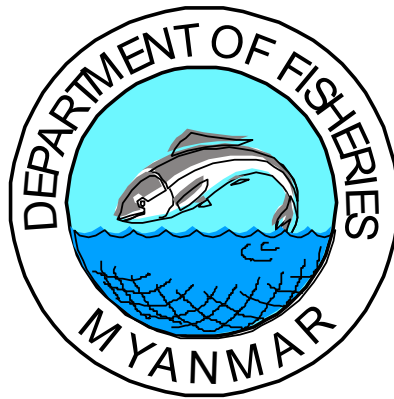
THE REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF LIVESTOCK AND FISHERIES
DEPARTMENT OF FISHERIES



FISHERY STATISTICS
2012

THE REPUBLIC OF THE UNION OF MYANMAR

MINISTRY OF LIVESTOCK AND FISHERIES



FISHERY STATISTICS

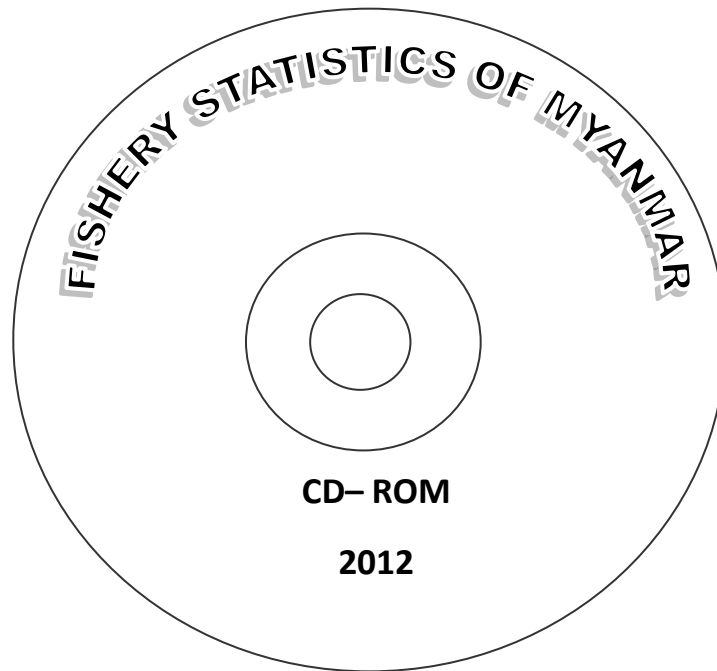
2012

Department of Fisheries

Myanmar

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**MYANMAR FISHERY STATISTICS
2012**



The CDs are currently available in English only. Hence, for further information please contact the Department of Fisheries, The Republic of the Union of Myanmar, as address given below.

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FOREWORD

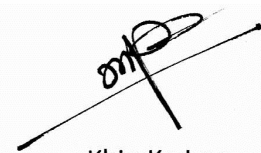
Fishery Statistics of Myanmar for 2011-2012 fiscal year is published by the Department of Fisheries of the Ministry of Livestock and Fisheries. Since the fiscal year 2001-2002, the fishery statistics of Myanmar has been published with the objective of better understanding the situation and information on Myanmar fisheries. Moreover, we have added to some more facts and figures with the fishery information required from the previous 10 year up to this fiscal year, 2011-2012, for the convenience of all users. The annual reporting period used is fiscal year, from first April to the end of March next year.

Nowadays, the fishery statistics has been widely accepted as a tool in providing so as to know the current and past status of the fisheries and to draw up the short term and long term planning for fisheries including for food security and the rural development as well as for the conservation of fisheries resources.

It is clear that the reliable, accurate and timely data and information are needed for the effective fishery management and planning to meet the sustainable fisheries. Furthermore, the capture fisheries and aquaculture can provide many millions of livelihood opportunities of Myanmar people with resulting improved income generation and food-fish availability to the rural communities.

On behalf of the Department of Fisheries, I would like to express my heartfelt thanks to H.E U Ohn Myint, Union Minister for the Ministry of Livestock and Fisheries for his valuable and kind guidance. We also thank to H.E U Khin Maung Aye, Deputy Minister for the Ministry of Livestock and Fisheries for his encouragement and necessary support.

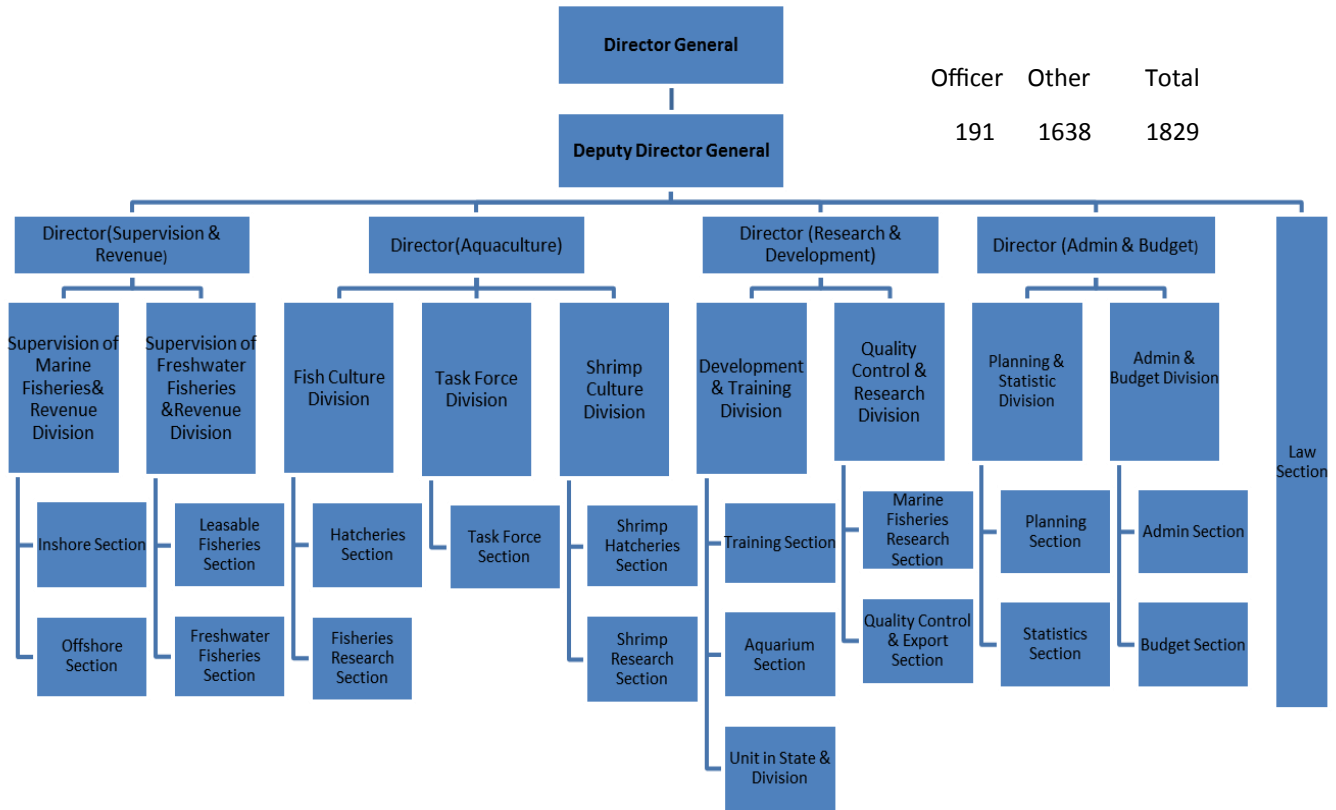
Moreover, Special thanks to Dr. Myint Than, Director General, Directorate of Livestock and Fisheries for his support as and when necessary. Last but not least, our appreciation to U Kyaw Myo Win, Deputy Director-General and all of the Directors of the Department of Fisheries as well as all my staff for their contribution and hard working as completed the success of this publication.



Khin Ko Lay
Director-General
Department of Fisheries

November 1 , 2012

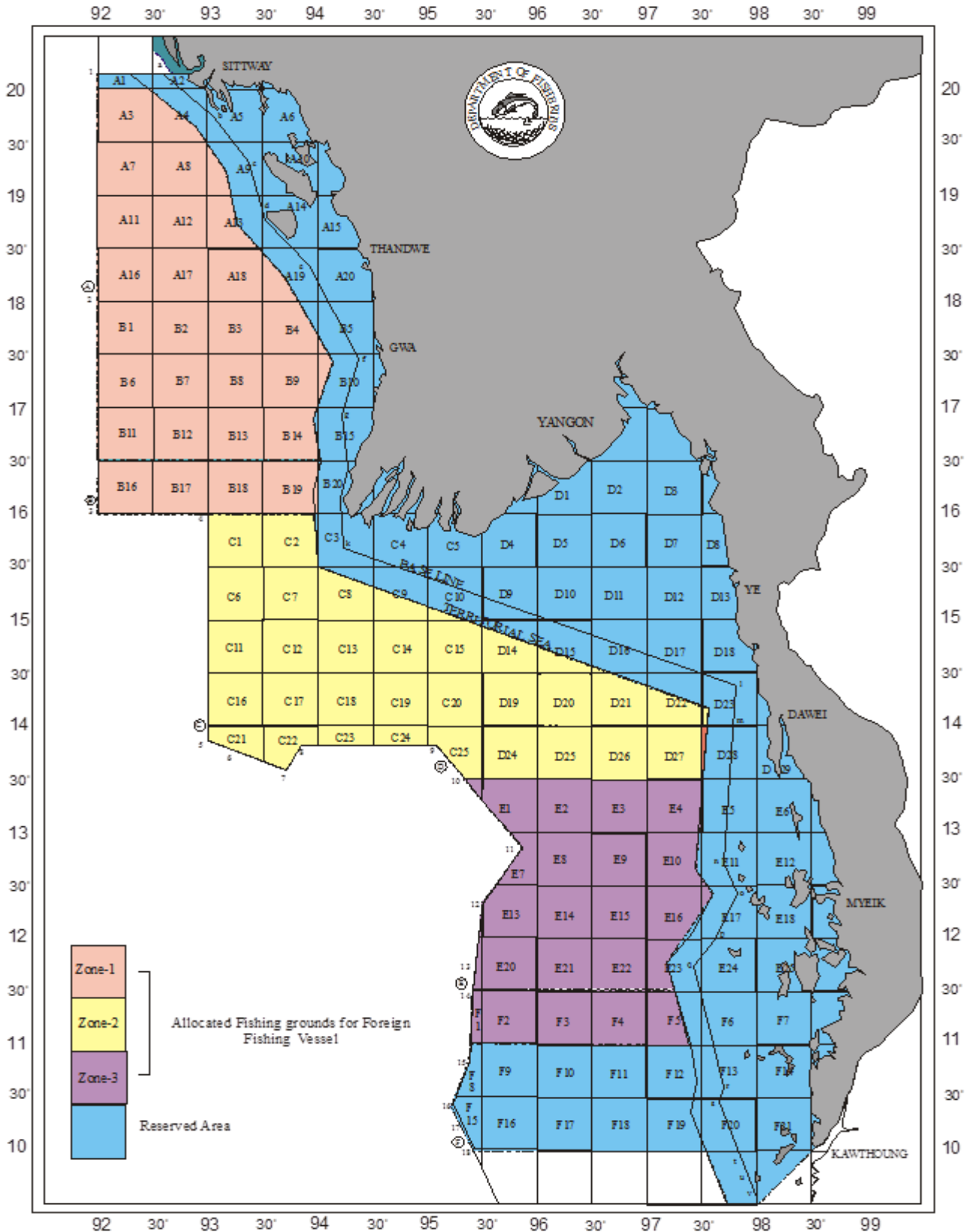
ORGANIZATIONAL STRUCTURE OF DEPARTMENT OF FISHERIES, MYANMAR



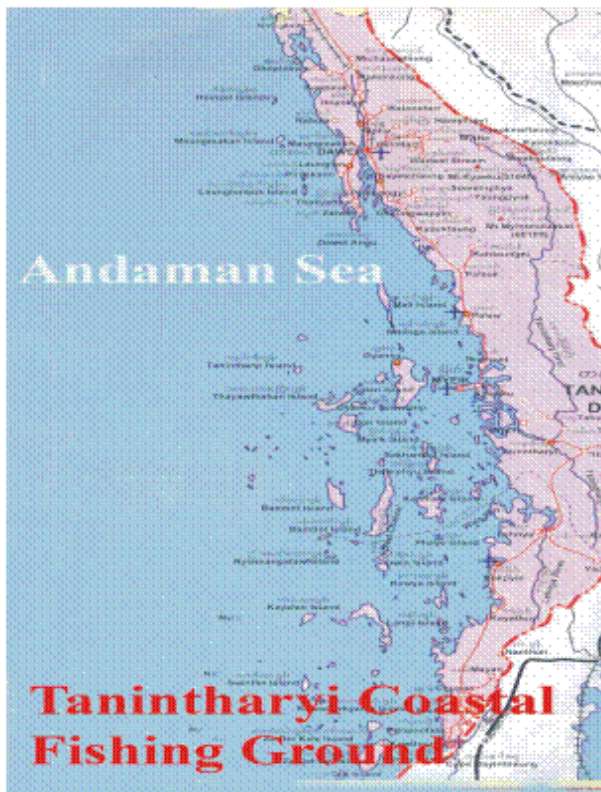
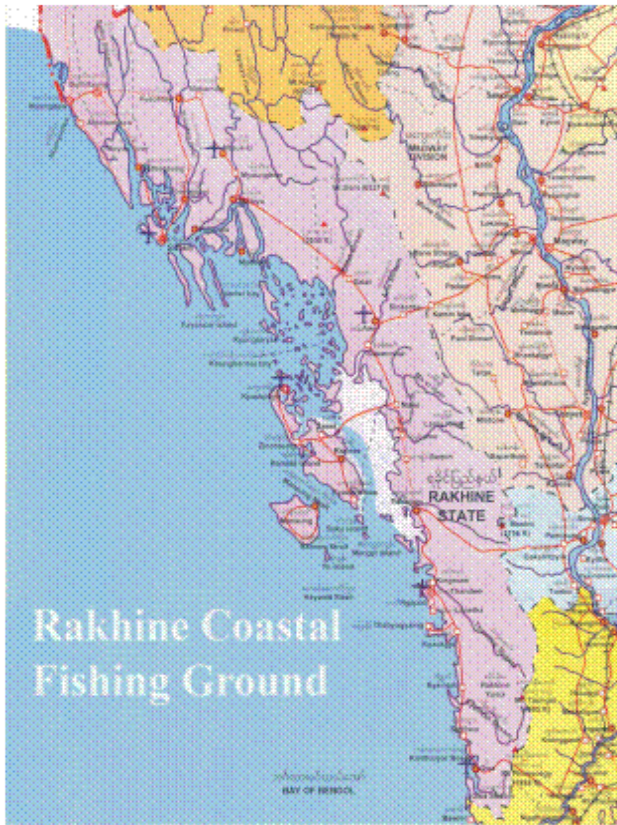
THE REPUBLIC OF THE UNION OF MYANMAR



Department of Fisheries Fishing Grounds of Myanmar (Zone wise)



MAPS OF FISHING GROUNDS



PART ONE
FISHERY STATISTICS

OUR VISION

“Our vision is to ensure a sufficiency of fish supplies not only for the present entire national people but also for future generations by conserving of the fisheries resources with sustainable fisheries at all times.”

**OUR MISSION**

- (1) Conservation and rehabilitation of fisheries resources;**
- (2) Promotion of fisheries researches and surveys;**
- (3) Collection and compilation of fishery statistics and information;**
- (4) Extension services;**
- (5) Supervision of fishery sectors;**
- (6) Sustainability of fishery resources;**

PER CAPITA FISH SUPPLY BY YEARS

No.	Year	Population (Million)	Production (Metric Ton)	Non-food use (Metric Ton)	Export (Metric Ton)	Per Capita Fish Supply (Kg)
1.	2011-2012 (Prov:)	62	4478208	* 895641	386981	51

*In the above figure, the quantities of fish of non-food use is estimated in which it is included for using amount of animal feeds, processing waste from raw material to finished products, and for fish meal etc.,.

FISHERY PRODUCTION
(2002-2003) - (2011-2012)

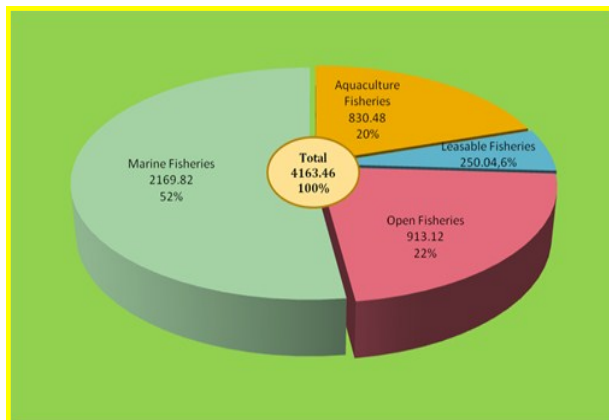
Thousand Metric Ton

No.	Year	Total	Aquaculture Fisheries	Leasable Fisheries	Open Fisheries	Marine Fisheries
1	2002-2003	1595.87	252.01	109.53	180.61	1053.72
2	2003-2004	1986.96	400.36	122.28	331.98	1132.34
3	2004-2005	2217.47	485.22	136.79	366.75	1228.71
4	2005-2006	2581.78	574.99	152.69	478.43	1375.67
5	2006-2007	2859.86	616.35	170.10	548.09	1525.32
6	2007-2008	3193.92	687.67	191.05	625.44	1689.76
7	2008-2009	3542.19	775.25	209.72	689.71	1867.51
8	2009-2010	3921.97	858.76	237.46	764.97	2060.78
9	2010-2011	4163.46	830.48	250.04	913.12	2169.82
10	2011-2012(Prov:)	4478.21	898.96	282.64	963.82	2332.79

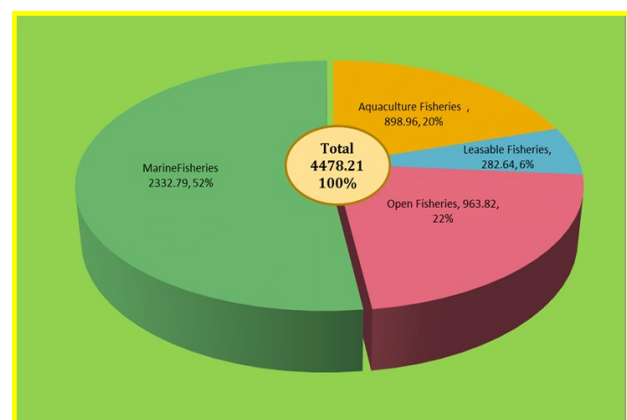
FISHERIES PRODUCTION

Unit-Thousand Metric Ton

(1)2010-2011



(2)2011-2012





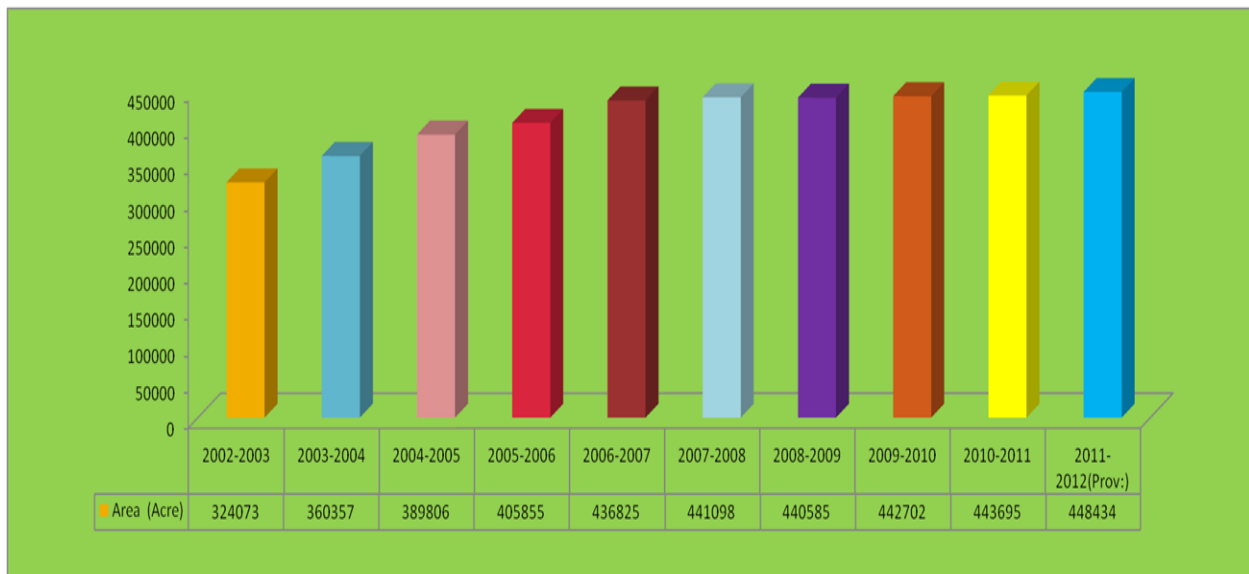
AQUACULTURE FISHERIES

TOTAL AQUACULTURE PONDS AND PRODUCTION

No.	Year	Area of Aquaculture Ponds (Acre)	Production of Aquaculture Ponds (Thousand Metric Ton)
1.	2002-2003	324073	252.01
2.	2003-2004	360357	400.36
3.	2004-2005	389806	485.22
4.	2005-2006	405855	574.99
5.	2006-2007	436825	616.35
6.	2007-2008	441098	687.67
7.	2008-2009	440585	775.25
8.	2009-2010	442702	858.76
9.	2010-2011	443695	816.12
10.	2011-2012(Prov:)	448434	899.54

AQUACULTURE PONDS (2002-2003)-(2011-2012)

Unit: Acre



TOTAL AREA OF AQUACULTURE PONDS

Unit - Acre

Year	Area		
	Fish Pond	Shrimp Pond	Total
2002-2003	124112	199961	324073
2003-2004	155509	204848	360357
2004-2005	182452	207354	389806
2005-2006	197150	208705	405855
2006-2007	212234	224591	436825
2007-2008	215373	225725	441098
2008-2009	215930	224655	440585
2009-2010	217835	224867	442702
2010-2011	218746	224949	443695
2011-2012(Prov:)	220136	228298	448434

AQUACULTURE POND BY STATES AND DIVISIONS

Unit-Acre

No.	State/ Division	2002-2003			2003-2004			2004-2005		
		Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total
1	Kachin	698	-	698	736	-	736	859	-	859
2	Kayah	105	-	105	132	-	132	132	-	132
3	Kayin	269	50	319	274	80	354	276	80	356
4	Chin	86	-	86	86	-	86	86	-	86
5	Sagaing	4023	-	4023	4220	-	4220	4433	-	4433
6	Taninthayi	98	98	196	138	97	235	232	723	955
7	Bago	10756	184	10940	17176	184	17360	19849	12	19861
8	Magway	403	-	403	416	-	416	421	-	421
9	Mandalay	5342	-	5342	6146	-	6146	6191	-	6191
10	Mon	453	839	1292	479	919	1398	582	912	1494
11	Rakhine	-	155533	155533	-	155533	155533	-	155533	155533
12	Yangon	46500	7394	53894	48183	9697	57880	51500	9820	61320
13	Shan	1621	-	1621	1816	-	1816	1844	-	1844
14	Ayeyarwady	53758	35863	89621	75707	38338	114045	96047	40274	136321
	Total	124112	199961	324073	155509	204848	360357	182452	207354	389806

AQUACULTURE POND BY STATES AND DIVISIONS

Unit-Acre

State/ Division	2005-2006			2006-2007			2007-2008		
	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total
Kachin	868	-	868	1154	-	1154	1222	-	1222
Kayah	332	-	332	360	-	360	400	-	400
Kayin	326	80	406	396	80	476	396	80	476
Chin	86	-	86	100	-	100	101	-	101
Sagaing	4490	-	4490	4435	-	4435	4569	-	4569
Taninthayi	342	777	1119	351	791	1142	329	791	1120
Bago	24192	12	24204	25570	12	25582	26354	12	26366
Magway	421	-	421	417	-	417	419	-	419
Mandalay	6334	-	6334	6224	-	6224	6205	-	6205
Mon	819	873	1692	842	1125	1967	848	1125	1973
Rakhine	-	155533	155533	-	155533	155533	-	155533	155533
Yangon	58586	10136	68722	58527	10195	68722	59870	11329	71199
Shan	2986	-	2986	2305	-	2305	3107	-	3107
Ayeyarwady	97368	41294	138662	111553	56855	168408	111553	56855	168408
Total	197150	208705	405855	212234	224591	436825	215373	225725	441098

AQUACULTURE POND BY STATES AND DIVISIONS

Unit-Acre

State/ Division	2008-2009			2009-2010			2010-2011			2011-2012		
	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total	Fish Pond	Shrimp Pond	Total
Kachin	1408	-	1408	1492	-	1492	1938	-	1938	1910	-	1910
Kayah	510	-	510	400	-	480	638	-	638	638	-	638
Kayin	399	80	479	629	80	629	400	80	480	400	80	480
Chin	101	-	101	101	-	101	108	-	108	107	-	107
Sagaing	4569	-	4569	4794	-	4794	5159	-	5159	5465	-	5465
Taninthayi	341	821	1162	351	821	1172	351	821	1172	922	4141	5063
Bago	26276	12	26288	25888	12	25900	25748	12	25760	26003	40	26043
Magway	419	-	419	426	-	426	430	-	430	425	-	425
Mandalay	6411	-	6411	6783	-	6783	6898	-	6898	7154	-	7154
Mon	884	1125	2009	894	1125	2019	920	1125	2045	969	1125	2094
Rakhine	-	155533	155533	-	155533	155533	-	155533	155533	-	155533	155533
Yangon	59835	10229	70064	59870	10229	70099	59870	10229	70099	59864	10229	70093
Shan	3268	-	3268	3298	-	3298	3377	-	3377	3387	-	3387
Ayeyarwady	111509	56855	168364	112909	57067	169976	112909	57149	170058	112892	57149	170041
Total	215930	224655	440585	217835	224867	442702	218746	224949	443695	220136	228297	448433

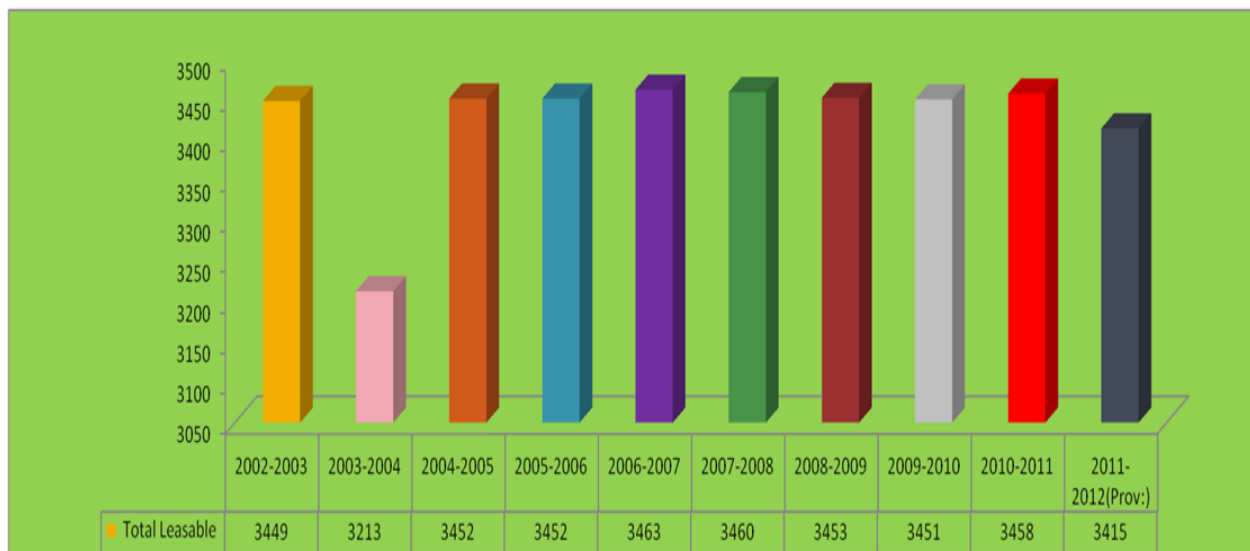


INLAND FISHERIES

THE PRODUCTION OF LEASABLE FISHERIES AND OPEN FISHERIES

No.	Year	Total amount of Leasable Fisheries (Number)	Production of Leasable Fisheries (Thousand Metric Ton)	Production of Open Fisheries (Thousand Metric Ton)	Total Production of Inland Fisheries (Thousand Metric Ton)
1	2002-2003	3449	109.53	180.61	290.14
2	2003-2004	3213	122.28	331.98	454.26
3	2004-2005	3452	136.79	366.75	503.54
4	2005-2006	3452	152.69	478.43	631.12
5	2006-2007	3463	170.10	548.09	718.19
6	2007-2008	3460	191.01	625.04	816.05
7	2008-2009	3453	209.72	689.71	899.43
8	2009-2010	3451	237.46	764.97	1002.43
9	2010-2011	3458	248.44	913.12	1161.56
10	2011-2012 (Prov:)	3415	282.82	964.44	1247.26

NUMBER OF LEASABLE FISHERIES IN MYANMAR (2002-2003) -(2011-2012)





MARINE FISHERIES

FISHING VESSEL

Unit - Number

No.	Year	Small Fishing Boat		Off-shore Vessels		Total
		Powered Boat	Non-Powered Boat	National	Foreign	
1	2002-2003	15607	14813	2309	22	32751
2	2003-2004	13664	16335	2121	27	32147
3	2004-2005	14176	16687	2150	451	33464
4	2005-2006	14099	16361	2022	254	32736
5	2006-2007	14284	16284	1871	206	32645
6	2007-2008	14289	15219	1863	248	31619
7	2008-2009	14025	14645	1758	356	30784
8	2009-2010	13788	17054	1814	391	33047
9	2010-2011	13255	15102	2047	396	30800
10	2011-2012(Prov:)	12288	15463	2230	264	30245

SMALL FISHING BOATS AND OFF-SHORE VESSELS**(2002-2003) - (2011-2012)**

FISHING VESSEL

Unit-Number

No.	Year	State and Division	Trawl	Purse Seine	Drift net	Long line	Stick-held falling net	Trap	Total
1	2002-2003	Head office	416	47	58	20	-	-	541
		Rakhine	84	-	1	-	-	-	85
		Taninthayi	298	17	-	35	7	58	415
		Ayeyarwady	-	-	786	-	-	-	786
		Mon	-	-	266	1	-	-	267
		Yangon	186	12	15	2	-	-	215
		Total		984	76	1126	58	7	58
2	2003-2004	Head office	359	47	92	21	-	1	520
		Rakhine	24	-	-	-	-	-	24
		Taninthayi	312	22	1	24	8	33	400
		Ayeyarwady	-	-	737	-	-	-	737
		Mon	-	-	246	-	-	-	246
		Yangon	144	9	39	2	-	-	194
		Total		839	78	1115	47	8	34
3	2004-2005	Head office	408	58	145	32	-	1	644
		Rakhine	25	-	-	-	-	-	25
		Taninthayi	371	26	13	28	9	39	486
		Ayeyarwady	-	-	679	-	-	-	679
		Mon	1	-	226	-	-	-	227
		Yangon	79	5	5	-	-	-	89
		Total		884	89	1068	60	9	40
4	2005-2006	Head office	452	69	367	17	-	15	920
		Rakhine	9	-	-	-	-	3	12
		Taninthayi	337	37	7	23	29	30	463
		Ayeyarwady	-	-	421	-	-	-	421
		Mon	-	-	206	-	-	-	206
		Yangon	-	-	-	-	-	-	-
		Total		798	106	1001	40	29	48
5	2006-2007	Rakhine	2	-	-	-	-	6	8
		Taninthayi	334	54	-	2	22	75	487
		Ayeyarwady	-	-	526	-	-	-	526
		Mon	-	-	172	-	-	-	172
		Yangon	-	-	-	-	-	-	-
		Total		336	54	698	2	22	81

FISHING VESSEL

Unit-Number

No.	Year	State and Division	Trawl	Purse Seine	Drift net	Long line	Stick-held falling net	Trap	Total
6	2007-2008	Head office	389	81	145	-	-	46	661
		Rakhine	5	-	-	-	-	4	9
		Taninthayi	376	71	1	1	19	101	569
		Ayeyarwady	-	-	464	-	-	-	464
		Mon	-	-	160	-	-	-	160
		Yangon	-	-	-	-	-	-	-
Total			770	152	770	1	19	151	1863
7	2008-2009	Head office	387	72	142	-	-	39	640
		Rakhine	-	-	-	-	-	-	-
		Taninthayi	416	87	2	2	21	62	590
		Ayeyarwady	-	-	373	-	-	-	373
		Mon	-	-	155	-	-	-	155
		Yangon	-	-	-	-	-	-	-
Total			803	159	672	2	21	101	1758
8	2009-2010	Head office	413	63	150	3	-	41	670
		Rakhine	-	-	-	-	-	-	-
		Taninthayi	480	100	2	-	35	66	683
		Ayeyarwady	2	-	327	-	-	5	334
		Mon	-	-	127	-	-	-	127
		Yangon	-	-	-	-	-	-	-
Total			895	163	606	3	35	112	1814
9	2010-2011	Head office	463	80	159	6	-	30	738
		Rakhine	5	-	-	-	-	-	5
		Taninthayi	498	88	-	-	35	58	679
		Ayeyarwady	-	-	492	1	-	4	493
		Mon	-	-	128	-	-	-	128
		Yangon	-	-	-	-	-	30	30
Total			966	168	779	7	35	122	2077
10	2011-2012	Head office	532	85	162	2	-	23	804
		Rakhine	6	-	-	-	-	-	6
		Taninthayi	534	186	-	14	296	61	1091
		Ayeyarwady	-	-	185	-	-	2	187
		Mon	-	-	142	-	-	-	142
		Yangon	-	-	-	-	-	-	-
Total			1072	271	489	16	296	86	2230




EXPORT

FISHERY EXPORTS

No.	Year	Fish		Prawns		Others		Total	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2002-2003	136036.22	143.14	22868.11	105.20	54095.27	69.04	212999.60	317.38
	US \$	57915.65	62.85	14930.30	79.71	8870.55	24.38	81716.50	166.94
2	2003-2004	Euro 8237.53	5.57	3584.20	12.84	843.82	1.57	12665.55	19.98
	Kyats	58462.46	51826.60	4468.88	16355.75	48149.78	46301.64	111081.12	114483.99
	US \$	77162.91	79.86	18335.93	92.05	8036.14	17.82	103534.98	189.73
3	2004-2005	Euro 3092.18	1.95	1104.30	5.47	347.61	0.83	4544.09	8.25
	Kyats	79145.50	71685.28	4222.58	13125.94	64333.03	47017.61	147701.11	131828.83
	US \$	125107.81	131.79	18941.05	89.05	45842.42	50.55	189891.28	271.39
4	2005-2006	Euro 2207.68	1.48	2047.82	8.94	269.68	0.48	4525.18	10.90
	Kyats	45740.21	46888.31	2358.77	5436.21	28554.81	22656.69	76653.79	74981.21
5	2006-2007	US \$ 235858.25	240.20	25369.89	120.89	82198.47	107.07	343426.61	468.16
6	2007-2007	US \$ 245473.15	315.46	21061.30	109.74	85117.60	135.82	351652.05	561.02
7	2008-2009	US \$ 234060.74	273.27	18382.10	88.85	72267.70	121.11	324710.54	483.23
8	2009-2010	US \$ 277823.74	309.857	17439.31	56.329	79829.384	130.404	375092.43	496.59
9	2010-2011	US \$ 273043.74	342.441	19142.91	68.661	81706.06	144.413	373892.71	555.515
10.	2011-2012	US\$ 283688.76	396.276	17995.03	86.187	85297.53	171.387	386981.32	653.85

TOP TEN SPECIES OF EXPORTED FISH AND FISHERIES PRODUCT OF MYANMAR

No.	Species (Common Name)		MT(Ordinary)	US\$(Million)
1.	Rohu		85036.415	89.207
2.	Hilsa		15408.375	47.445
3.	Live Eel		10736.984	40.392
4.	White Pomfret		5754.398	35.167
5.	Tiger		4101.672	34.916
6.	Live Crab		12540.736	33.330
7.	Pink		10588.019	33.002
8.	Ribbon Fish		9742.936	20.561
9.	Rosy Jew Fish		4975.651	16.338
10.	Dried Prawn		2327.249	14.945

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2002-2003)**

NO	COUNTRY	Quantity - Metric Ton							
		FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	51889.22	62776832	2926.42	11586078	45992.21	54220537	100807.85	128583447
2	JAPAN	1757.14	2102799	4455.44	27786739	605.27	1005713	6817.85	30895251
3	MALAYSIA	22980.42	17757565	2250.87	6299157	2389.06	3074173	27620.35	27130895
4	THAI LAND	16851.36	12682113	2149.03	10928655	2068.88	1806578	21069.27	25417346
5	SINGAPORE	9290.91	12011388	2515.96	9810193	967.96	1007429	12774.83	22829010
6	UNITED STATES	1468.53	2803555	2323.49	14872286	-	-	3792.02	17675841
7	HONG KONG (PRC)	2203.14	3106199	1151.44	4680883	954.49	6687300	4309.07	14474382
8	BANGLADESH	13893.90	9605284	154.41	824150	619.49	188729	14667.80	10618163
9	UNITED KINGDOM	3062.56	4721267	986.37	3748766	18.56	23977	4067.49	8494010
10	UAE	4312.79	4768929	143.47	447047	34.84	44512	4491.10	5260488
11	AUSTRALIA	1171.38	2169238	758.38	2614273	57.63	147053	1987.39	4930564
12	KOREA	2037.55	2457030	348.72	1175780	133.69	435692	2519.96	4068502
13	CANADA	169.69	369709	511.27	2680407	-	-	680.96	3050116
14	SWITZERLAND	1789.92	2022689	106.48	571206	45.00	23000	1941.40	2616895
15	GREECE	105.74	147131	439.50	2231057	5.22	22305	550.46	2400493
16	BULGARIA	183.24	260856	610.52	1807586	3.34	15346	797.10	2083788
17	SYRIAN ARAB REPUBLIC	789.40	919910	109.48	493030	50.56	71492	949.44	1484432
18	BELGIUM	33.08	85139	534.94	1257886	-	-	568.02	1343025
19	INDIA	549.69	566111	145.65	385421	14.99	16484	710.33	968016
20	INDONESIA	119.94	149490	48.41	168751	56.47	64767	224.82	383008
21	KYRGYZSTAN	359.60	347575	0.45	450	-	-	360.05	348025
22	VIET NAM	126.88	108369	46.32	125027	63.63	87664	236.83	321060
23	AUSTRIA	78.56	179245	14.84	50613	-	-	93.40	229858
24	DENMARK	107.95	167244	0.28	9333	6.59	48061	114.82	224638
25	PARKISTAN	131.57	135154	10.37	42482	-	-	141.94	177636
26	PHILIPPINES	47.71	93362	21.62	75613	-	-	69.33	168975
27	ITALY	157.44	82121	9.43	66930	0.25	2730	167.12	151781
28	NETHERLAND	33.11	65008	13.50	60750	-	-	46.61	125758
29	SRILANKA	5.20	16580	15.64	84852	-	-	20.84	101432
30	GERMANY	39.45	88728	-	-	0.12	1620	39.57	90348
31	IRAQ	73.03	88975	0.04	80	-	-	73.07	89055
32	IRELAND	50.00	81875	-	-	-	-	50.00	81875
33	LAOS	7.59	11957	9.96	69796	-	-	17.55	81753
34	SWEDEN	-	-	11.21	74034	-	-	11.21	74034
35	TURKEY	-	-	18.00	66704	0.12	1620	18.12	68324
36	HUNGARY	1.00	2540	0.60	20000	6.90	42207	8.50	64747
37	FINLAND	43.49	57562	-	-	-	-	43.49	57562
38	BRUNEI DARUSSALAM	9.30	12893	10.12	39781	-	-	19.42	52674
39	CUBA	44.46	42170	-	-	-	-	44.46	42170
40	FRANCE	-	-	15.48	41770	-	-	15.48	41770
41	RUSSIAN FEDERATION	23.24	34559	-	-	-	-	23.24	34559
42	IRAN	22.54	24877	-	-	-	-	22.54	24877
43	POLAND	14.50	22200	-	-	-	-	14.50	22200
	TOTAL	136036.22	143146228	22868.11	105197566	54095.27	69038989	212999.60	317382783

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2003-2004) (IN US \$)

Quantity - Metric Ton
Value - US \$

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	JAPAN	1605.75	1645821	4508.80	31069039	290.27	853533	6404.82	33568393
2	MALAYSIA	13074.11	11086040	1339.00	3553692	2436.67	4319533	16849.78	18959265
3	SINGAPORE	7065.32	7982444	1502.32	7150819	1301.60	2598483	9869.24	17731746
4	CHINA	7683.82	9491906	1053.54	2887252	1068.24	3567603	9805.60	15946761
5	HONGKONG (PRC)	2153.76	2839344	734.17	2955430	1102.23	6839449	3990.16	12634223
6	UNITED STATES	647.70	806310	1160.15	7971647	-	-	1807.85	8777957
7	THAILAND	1106.02	2200885	943.29	4793346	1340.41	1411517	3389.72	8405748
8	VIET NAM	4213.90	5363701	263.12	2136293	31.26	450693	4508.28	7950687
9	UNITED KINGDOM	3968.84	4623471	361.14	2055026	-	-	4329.98	6678497
10	U A E	5052.36	4657804	125.62	689616	5.21	23352	5183.19	5370772
11	AUSTRALIA	1056.19	2431208	625.74	2687749	-	-	1681.93	5118957
12	KOREA	852.87	791211	183.96	842169	164.66	1850665	1201.49	3484045
13	CANADA	191.42	303682	434.52	2578832	19.27	520659	645.21	3403173
14	BANGLADESH	1834.64	1309102	148.51	1292434	787.00	588813	2770.15	3190349
15	SWITZERLAND	2568.91	2414827	58.11	512254	7.00	35000	2634.02	2962081
16	GREECE	26.70	31359	383.82	1912208	-	-	410.52	1943567
17	INDIA	297.02	264283	89.99	778237	241.61	766183	628.62	1808703
18	BULGARIA	200.43	135480	420.07	1374093	5.64	27436	626.14	1537009
19	SYRIAN ARAB REPUBLIC	870.38	981819	71.04	469610	22.26	11592	963.68	1463021
20	INDONESIA	72.00	97432	29.83	633149	44.53	488774	146.36	1219355
21	BELGIUM	82.78	96848	425.19	1104149	-	-	507.97	1200997
22	KYRGYZSTAN	1155.51	1112057	7.85	20340	-	-	1163.36	1132397
23	DENMARK	285.21	470731	8.19	34440	1.79	24284	295.19	529455
24	BRUNEI DARUSSALAM	571.49	496005	3.41	15808	-	-	574.90	511813
25	SRI LANKA	306.11	301465	-	-	-	-	306.11	301465
26	PARKISTAN	250.92	237055	-	-	-	-	250.92	237055
27	SPAIN	252.32	222301	-	-	-	-	252.32	222301
28	IRAN	197.85	166175	-	-	-	-	197.85	166175
29	GERMANY	98.93	111365	11.40	28100	-	-	110.33	139465
30	TURKEY	-	-	27.14	86330	-	-	27.14	86330
31	LAOS	-	-	9.96	69796	-	-	9.96	69796
32	RUSSIAN FEDERATION	52.27	47333	-	-	-	-	52.27	47333
33	IRAQ	36.00	47128	-	-	-	-	36.00	47128
34	ITALY	47.81	45324	-	-	-	-	47.81	45324
35	NETHERLAND	13.96	14820	0.05	403	-	-	14.01	15223
36	PHILIPPINES	12.00	14400	-	-	-	-	12.00	14400
37	FINLAND	10.35	12157	-	-	-	-	10.35	12157
38	CUBA	-	-	0.11	9800	-	-	0.11	9800
39	HUNGARY	-	-	-	-	0.90	3600	0.90	3600
40	AUSTRIA	-	-	0.26	631	-	-	0.26	631
	TOTAL	57915.65	62853293	14930.30	79712692	8870.55	24381169	81716.50	166947154

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2003-2004) (IN EURO)**

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	JAPAN	822.11	606004	1234.57	6460132	3.56	7652	2060.24	7073788
2	HONGKONG (PRC)	1388.38	652257	301.08	1197053	199.68	859192	1889.14	2708502
3	CHINA	1465.81	1148086	303.44	746413	79.01	273967	1848.26	2168466
4	SINGAPORE	724.51	545086	234.74	853756	137.22	61119	1096.47	1459961
5	U A E	1249.82	942614	45.96	68757	-	-	1295.78	1011371
6	MALAYSIA	655.87	485792	159.30	244680	139.05	130418	954.22	860890
7	VIET NAM	-	-	215.99	743686	14.58	17496	230.57	761182
8	THAILAND	73.55	59221	228.14	563979	82.19	19615	383.88	642815
9	SWITZERLAND	583.82	385453	34.77	107061	-	-	618.59	492514
10	GREECE	-	-	121.67	424210	-	-	121.67	424210
11	BELGIUM	9.74	9218	194.58	380123	-	-	204.32	389341
12	CANADA	63.21	19376	109.15	270424	-	-	172.36	289800
13	KOREA	63.60	35181	96.81	230037	13.18	23442	173.59	288660
14	INDIA	50.00	46800	34.23	55149	146.00	138888	230.23	240837
15	UNITED KINGDOM	209.34	147822	47.65	89546	-	-	256.99	237368
16	INDONESIA	26.00	17030	72.40	151132	-	-	98.40	168162
17	AUSTRALIA	81.00	34023	62.36	122103	-	-	143.36	156126
18	SPAIN	138.76	112393	-	-	1.22	2126	139.98	114519
19	KYRGYZSTAN	187.63	57669	10.87	13036	28.13	33750	226.63	104455
20	BULGARIA	26.41	8568	46.38	77561	-	-	72.79	86129
21	ITALY	117.17	69392	-	-	-	-	117.17	69392
22	BANGLADESH	87.98	64491	-	-	-	-	87.98	64491
23	TURKEY	71.53	18209	30.11	44724	-	-	101.64	62933
24	SYRIAN ARAB RE-PUBLIC	68.23	50819	-	-	-	-	68.23	50819
25	DENMARK	25.78	23614	-	-	-	-	25.78	23614
26	IRAN	27.20	16755	-	-	-	-	27.20	16755
27	HUNGARY	5.06	4621	-	-	-	-	5.06	4621
28	PHILIPPINES	12.00	4400	-	-	-	-	12.00	4400
29	CUBA	3.02	2174	-	-	-	-	3.02	2174
	TOTAL	8237.53	5567068	3584.20	12843562	843.82	1567665	12665.55	19978295

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2003-2004) (IN KYAT)

NO	COUNTRY	Quantity - Metric Ton															
		FISH				PRAWNS				OTHERS				TOTAL			
		Value - Kyat		Value - Kyat		Value - Kyat		Value - Kyat		Value - Kyat		Value - Kyat					
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE				
1	CHINA	47568.84	39355340162	3876.77	12682783730	34147.38	41148234452	85592.99	93186358344								
2	THAILAND	10893.62	12471255000	591.91	3672970962	14002.60	5153408474	25488.13	21297634436								
	TOTAL	58462.46	51826595162	4468.68	16355754692	48149.98	46301642926	111081.12	114483992780								

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2004-2005) (IN US \$)**

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	JAPAN	2844.81	2975759	6917.24	42014206	212.31	212672	9974.36	45202637
2	SINGAPORE	11065.39	12636698	1196.10	5068300	836.36	1645170	13097.85	19350168
3	CHINA	5762.35	8299134	869.99	2557816	1508.32	7020261	8140.66	17877211
4	U A E	13203.74	13488461	774.19	3159436	10.90	28035	13988.83	16675932
5	MALAYSIA	5250.75	6839264	1825.20	4920202	1436.79	3041111	8512.74	14800577
6	HONGKONG (PRC)	1179.69	1930258	1643.30	7001910	1209.03	2876001	4032.02	11808169
7	BANGLADESH	15281.78	9394291	197.53	1285042	1257.03	350615	16736.34	11029948
8	UNITED KINGDOM	5775.66	8097243	164.35	701867	0.23	563	5940.24	8799673
9	THAILAND	6286.47	3748741	898.21	2712826	329.87	391248	7514.55	6852815
10	AUSTRALIA	1098.16	2644698	555.13	2548003	20.95	27277	1674.24	5219978
11	INDONESIA	111.53	95964	593.21	4253205	308.95	302078	1013.69	4651247
12	KOREA	880.29	1277765	377.78	1837000	314.52	996989	1572.59	4111754
13	CANADA	346.96	604809	502.79	2915901	2.02	10185	851.77	3530895
14	VIET NAM	576.86	407080	443.95	2718424	125.87	119038	1146.68	3244542
15	INDIA	498.96	516871	349.60	1612633	382.67	633982	1231.23	2763486
16	BELGIUM	253.87	288206	229.32	2166822	-	-	483.19	2455028
17	BULGARIA	412.11	365612	207.38	1631637	-	-	619.49	1997249
18	SWITZERLAND	1762.75	1733748	28.01	126800	9.75	48730	1800.51	1909278
19	KYRGYZSTAN	1565.27	1515795	1.42	12848	-	-	1566.69	1528643
20	GREECE	-	-	315.44	1494078	-	-	315.44	1494078
21	SYRIAN ARAB REPUBLIC	181.97	192563	148.27	715916	25.34	38426	355.58	946905
22	PARKISTAN	886.44	809132	0.01	44	9.38	10800	895.83	819976
23	SWEDEN	654.83	622669	-	-	3.03	8165	657.86	630834
24	BRUNEI DARUSSALAM	272.02	295656	15.12	96763	-	-	287.14	392419
25	UNITED STATES	120.10	139423	15.12	137457	-	-	135.22	276880
26	IRAN	228.66	227966	-	-	-	-	228.66	227966
27	SPAIN	174.79	166816	14.04	16534	19.74	39480	208.57	222830
28	MAXICO	145.38	161497	7.60	18240	-	-	152.98	179737
29	PORTUGAL	-	-	14.55	156284	-	-	14.55	156284
30	SRILANKA	50.23	44632	10.80	59973	-	-	61.03	104605
31	GERMANY	17.80	17460	10.39	66968	13.08	15025	41.27	99453
32	PHILIPPINES	59.50	93100	-	-	-	-	59.50	93100
33	DENMARK	71.38	65429	-	-	-	-	71.38	65429
34	HUNGARY	39.56	52964	-	-	-	-	39.56	52964
35	RUSSIAN FEDERATION	52.00	46400	-	-	-	-	52.00	46400
36	POLAND	-	-	9.88	44915	-	-	9.88	44915
37	NETHERLAND	24.77	37590	-	-	-	-	24.77	37590
38	AUSTRIA	26.08	25706	-	-	-	-	26.08	25706
39	ITALY	-	-	0.01	17	-	-	0.01	17
	TOTAL	77162.91	79859400	18335.93	92052067	8036.14	17815851	103534.98	189727318

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2004-2005) (IN EURO)

NO	COUNTRY	Quantity - Metric Ton						Value - Euro	
		FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	JAPAN	-	-	411.56	2261456	-	-	411.56	2261456
2	HONGKONG (PRC)	1654.11	1156642	59.90	225748	-	-	1714.01	1382390
3	KOREA	21.16	10652	257.22	1112615	8.28	18332	286.66	1141599
4	CHINA	415.08	227373	97.21	449347	52.67	246222	564.96	922942
5	THAILAND	417.52	240136	28.02	124122	186.25	136677	631.79	500935
6	HUNGARY	-	-	-	-	94.02	396579	94.02	396579
7	AUSTRALIA	-	-	87.74	365955	-	-	87.74	365955
8	GREECE	-	-	42.55	197814	-	-	42.55	197814
9	VIET NAM	-	-	54.27	182540	-	-	54.27	182540
10	CANADA	-	-	15.22	151309	2.37	15895	17.59	167204
11	BELGIUM	-	-	17.19	147330	-	-	17.19	147330
12	SINGAPORE	66.46	46758	10.36	86961	0.88	1768	77.70	135487
13	BULGARIA	-	-	15.12	134742	-	-	15.12	134742
14	MALAYSIA	148.60	76901	-	-	3.14	13235	151.74	90136
15	U A E	192.30	84265	-	-	-	-	192.30	84265
16	SWEDEN	90.37	60091	-	-	-	-	90.37	60091
17	SWITZERLAND	37.00	23595	7.94	34784	-	-	44.94	58379
18	KYRGYZSTAN	35.23	17777	-	-	-	-	35.23	17777
19	BANGLADESH	14.35	5392	-	-	-	-	14.35	5392
	TOTAL	3092.18	1949582	1104.30	5474723	347.61	828708	4544.09	8253013

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2004-2005) (IN KYAT)

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
		Quantity - Metric Ton		Value - Kyat					
1	CHINA	54072.34	52868.42	3851.63	10836.28	48706.05	37362.57	106630.02	101067.27
2	THAILAND	25033.14	18793	370.95	2290	15622.78	9653	41026.87	30736
3	INDIA	40.02	23.78	-	-	4.20	1.68	44.22	25.46
	TOTAL	79145.50	71685.28	4222.58	13125.94	64333.03	47017.61	147701.11	131828.83

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2005-2006) (IN US \$)

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	46229.90	44796480	3577.90	10033957	32351.18	31420952	82158.98	86251389
2	JAPAN	435.30	677249	6088.02	37178818	3280.80	2826115	9804.12	40682182
3	U A E	16266.40	16894855	1482.12	3734376	10.57	25478	17759.09	20654709
4	MALAYSIA	6516.40	9668974	932.64	3853959	3491.38	6773157	10940.42	20296090
5	SAUDI	15129.74	16839744	23.88	102798	29.79	61206	15183.41	17003748
6	SINGAPORE	5730.22	7756408	1142.19	6938627	886.85	1537062	7759.26	16232097
7	HONGKONG (PRC)	696.51	994818	2041.72	8616846	2660.75	5117616	5398.98	14729280
8	BANGLADESH	16180.51	12204450	285.43	1761930	1652.68	587445	18118.62	14553825
9	UNITED KING- DOM	5400.80	7728474	78.63	505439	72.31	142326	5551.74	8376239
10	THAILAND	3106.05	2894314	766.91	1780361	564.73	731162	4437.69	5405837
11	VIET NAM	724.97	568130	689.61	3588663	294.92	375296	1709.50	4532089
12	AUSTRALIA	896.23	2460822	345.24	1659292	83.53	147155	1325.00	4267269
13	KUWAIT	3534.38	3460889	37.72	70501	103.02	53858	3675.12	3585248
14	BELGIUM	255.54	332513	247.12	2138732	0.60	2800	503.26	2474045
15	CANADA	321.69	539814	249.40	1342081	1.66	5752	572.75	1887647
16	GERMANY	-	-	288.92	1862705	-	-	288.92	1862705
17	BRUNEI DARUSSALAM	51.20	76300	176.08	1625143	-	-	227.28	1701443
18	KOREA	196.25	310017	146.17	744970	194.28	498547	536.70	1553534
19	JORDAN	1485.51	1302916	-	-	-	-	1485.51	1302916
20	INDIA	200.87	402244	224.11	603975	-	-	424.98	1006219
21	INDONESIA	15.70	31766	69.39	548440	54.60	88900	139.69	669106
22	PARKISTAN	686.76	661267	0.05	440	0.59	1384	687.40	663091
23	QATAR	335.05	356309	1.60	6556	0.43	785	337.08	363650
24	BEHRAIN	321.83	345676	1.17	3026	-	-	323.00	348702
25	MAXICO	295.40	331335	-	-	-	-	295.40	331335
26	SWEDEN	40.02	63885	31.10	184518	-	-	71.12	248403
27	GREECE	-	-	13.45	158665	-	-	13.45	158665
28	SRILANKA	-	-	-	-	81.07	97290	81.07	97290
29	SOUTH AFRICA	25.67	51697	0.11	717	0.60	1409	26.38	53823
30	ITALY	-	-	-	-	16.25	41125	16.25	41125
31	PHILIPPINES	26.30	35630	-	-	-	-	26.30	35630
32	COLUMBO	-	-	-	-	9.20	11040	9.20	11040
33	SWITZERLAND	2.61	3780	-	-	0.61	1620	3.22	5400
34	PORTUGAL	-	-	0.37	851	-	-	0.37	851
35	EGYPT	-	-	-	-	0.02	100	0.02	100
	TOTAL	125107.81	131790756	18941.05	89046386	45842.42	50549580	189891.28	271386722

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2005-2006) (IN EURO)**

Quantity - Metric Ton

Value - Euro

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	JAPAN	-	-	875.85	4542403	-	-	875.85	4542403
2	HONGKONG (PRC)	1315.58	779109	216.88	815213	44.10	152646	1576.56	1746968
3	KOREA	-	-	370.01	1261925	-	-	370.01	1261925
4	SINGAPORE	379.89	317342	129.34	550561	-	-	509.23	867903
5	AUSTRALIA	27.20	21659	114.48	541157	-	-	141.68	562816
6	CHINA	221.39	159736	67.59	179223	43.61	98828	332.59	437787
7	THAILAND	99.28	63314	91.66	265335	43.31	57310	234.25	385959
8	VIET NAM	-	-	73.73	234282	-	8932	73.73	243214
9	MALAYSIA	49.05	44696	-	-	138.66	166088	187.71	210784
10	BELGIUM	-	-	18.41	149858	-	-	18.41	149858
11	GERMANY	-	-	35.63	139643	-	-	35.63	139643
12	SWEDEN	-	-	20.74	124404	-	-	20.74	124404
13	KUWAIT	27.23	19544	16.38	71388	-	-	43.61	90932
14	U A E	73.66	66512	5.78	21114	-	-	79.44	87626
15	INDIA	-	-	11.34	45360	-	-	11.34	45360
16	JORDAN	14.00	5197	-	-	-	-	14.00	5197
17	BEHRAIN	0.40	370	-	-	-	-	0.40	370
	TOTAL	2207.68	1477479	2047.82	8941866	269.68	483804	4525.18	10903149

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2005-2006) (IN KYAT)**

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	8682.59	9770.69	1736.65	1727.93	8766.13	7579.53	19185.37	19078.15
2	THAILAND	37024.13	37103.51	622.12	3708.29	19723.64	15066.19	57369.89	55877.99
3	INDIA	33.49	14.11	-	-	65.04	10.96	98.53	25.07
TOTAL		45740.21	46888.31	2358.77	5436.22	28554.81	22656.68	76653.79	74981.21

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2006-2007) (IN US \$)

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	45180.13	59.676	5826.48	17.100	39190.47	53.886	90197.08	130.662
2	THAILAND	93741.55	74.047	2865.74	13.004	25157.70	22.829	121764.99	109.880
3	JAPAN	220.22	0.386	7867.50	45.516	4123.78	4.545	12211.50	50.447
4	SINGAPORE	14987.67	16.402	1681.23	11.362	1693.18	2.670	18362.08	30.434
5	BANGLADESH	21981.61	19.203	413.19	2.559	1274.52	0.598	23669.32	22.360
6	MALAYSIA	4208.89	6.988	815.04	4.001	5264.58	10.114	10288.51	21.103
7	SAUDI	17897.36	19.773	43.26	0.143	90.09	0.213	18030.71	20.129
8	U A E	12231.10	12.913	1724.81	4.571	37.81	0.044	13993.72	17.528
9	KUWAIT	14975.11	14.392	3.52	0.029	2.68	0.006	14981.31	14.427
10	HONGKONG (PRC)	170.97	0.347	1650.79	7.638	2543.54	5.982	4365.30	13.967
11	UNITED KINGDOM	5543.08	7.854	140.85	0.971	92.84	0.266	5776.77	9.091
12	AUSTRALIA	1070.52	3.309	671.64	3.748	75.53	0.146	1817.69	7.203
13	VIET NAM	225.56	0.275	332.36	1.933	1007.75	0.889	1565.67	3.097
14	KOREA	133.92	0.217	477.39	2.171	216.35	0.539	827.66	2.927
15	INDONESIA	65.58	0.104	-	-	1124.90	2.192	1190.48	2.296
16	BELGIUM	492.82	0.561	192.13	1.327	0.38	0.001	685.33	1.889
17	CANADA	344.20	0.538	158.37	1.102	0.62	0.001	503.19	1.641
18	NETHERLAND	-	-	129.12	1.129	-	-	129.12	1.129
19	GERMANY	51.00	0.062	149.11	0.966	-	-	200.11	1.028
20	JORDAN	748.70	0.983	-	-	-	-	748.70	0.983
21	BRUNEI DARUSSALAM	-	-	112.86	0.949	-	-	112.86	0.949
22	PARKISTAN	676.02	0.633	-	-	-	-	676.02	0.633
23	PHILIPPINES	50.50	0.604	-	-	-	-	50.50	0.604
24	INDIA	174.16	0.209	33.06	0.124	300.00	0.151	507.22	0.484
25	BAHRAIN	301.75	0.293	1.68	0.002	0.19	-	303.62	0.295
26	QATAR	259.24	0.267	2.01	0.003	0.85	0.001	262.10	0.271
27	SWEDEN	18.70	0.021	31.29	0.226	0.05	-	50.04	0.247
28	PORTUGAL	-	-	19.50	0.195	-	-	19.50	0.195
29	MAURITIUS	-	-	26.96	0.119	-	-	26.96	0.119
30	SWITZERLAND	41.72	0.055	-	-	0.66	0.001	42.38	0.056
31	EGYPT	26.00	0.043	-	-	-	-	26.00	0.043
32	MEXICO	23.00	0.021	-	-	-	-	23.00	0.021
33	DOMINICA	17.17	0.021	-	-	-	-	17.17	0.021
	TOTAL	235858.25	240.197	25369.89	120.888	82198.47	105.074	343426.61	466.159

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2007-2008) (IN US \$)**

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	40468.00	71.664	3864.69	13.665	40647.82	63.395	84980.51	148.724
2	MALAYSIA	59081.47	48.628	1576.95	8.139	20177.51	30.193	80835.93	86.960
3	SINGAPORE	26437.35	46.326	2638.23	16.716	3019.42	7.321	32095.00	70.363
4	THAILAND	36646.36	33.866	802.98	4.024	11371.49	18.095	48820.83	55.985
5	JAPAN	103.99	0.256	7366.75	39.403	3053.22	2.426	10523.96	42.085
6	SAUDI	18519.66	34.271	46.30	0.312	232.12	0.563	18798.08	35.146
7	KUWAIT	27742.95	29.924	0.46	0.001	151.91	0.101	27895.32	30.026
8	BANGLADESH	18134.39	20.390	973.65	6.059	1121.68	0.554	20229.72	27.003
9	U A E	8730.05	11.290	725.05	2.579	12.60	0.033	9467.70	13.902
10	HONGKONG (PRC)	298.45	0.722	1386.72	7.410	1456.24	4.532	3141.41	12.664
11	UNITED KINGDOM	6081.22	11.393	13.95	0.068	124.91	0.901	6220.08	12.362
12	INDONESIA	39.65	0.063	-	-	1400.00	4.670	1439.65	4.733
13	AUSTRALIA	612.77	2.065	306.06	1.832	115.69	0.323	1034.52	4.220
14	VIET NAM	65.09	0.200	374.27	2.665	1141.42	1.214	1580.78	4.079
15	KOREA	120.96	0.258	377.01	1.989	462.32	1.059	960.29	3.306
16	BRUNEI DARUSSALAM	584.06	0.962	115.45	1.339	-	-	699.51	2.301
17	CANADA	288.93	0.832	204.46	1.376	1.08	0.005	494.47	2.213
18	INDIA	249.99	0.414	22.68	0.128	620.05	0.409	892.72	0.951
19	PARKISTAN	477.87	0.730	-	-	-	-	477.87	0.730
20	BELGIUM	67.45	0.175	61.19	0.534	-	-	128.64	0.709
21	MORITIUS	-	-	78.34	0.420	-	-	78.34	0.420
22	SWEDEN	42.18	0.072	33.09	0.257	0.33	0.001	75.60	0.330
23	GERMANY	-	-	49.20	0.371	-	-	49.20	0.371
24	QATAR	230.34	0.332	1.30	0.002	-	-	231.64	0.334
25	BEHRAIN	183.45	0.253	0.25	.	-	-	183.70	0.253
26	SWITZERLAND	18.49	0.032	15.85	0.181	1.50	0.004	35.84	0.217
27	JORDAN	159.10	0.203	-	-	-	-	159.10	0.203
28	RUSSIAN FEDERATION	-	-	14.65	0.152	-	-	14.65	0.152
29	NETHERLAND	-	-	11.77	0.122	-	-	11.77	0.122
30	MEXICO	43.77	0.057	-	-	-	-	43.77	0.057
31	ITALY	25.62	0.053	-	-	-	-	25.62	0.053
32	ISRAEL	19.54	0.032	-	-	6.29	0.017	25.83	0.049
TOTAL		245473.15	315.463	21061.30	109.744	85117.60	135.816	351652.05	561.023

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2008-2009) (IN US \$)**

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	SINGAPORE	46048.65	76.474	6089.29	33.830	4615.67	8.740	56753.61	119.044
2	CHINA	21705.15	38.578	1999.86	6.787	35216.25	60.788	58921.26	106.153
3	THAILAND	81643.39	62.623	713.44	2.949	7132.68	11.406	89489.51	76.978
4	MALAYSIA	4227.02	8.173	1452.41	5.231	17324.93	27.856	23004.36	41.260
5	KUWAIT	34419.36	31.834	1.54	0.003	2.75	0.007	34423.65	31.844
6	JAPAN	60.83	0.118	4360.77	20.882	2092.46	2.400	6514.06	23.400
7	SAUDI	17403.76	20.429	22.04	0.055	276.62	0.860	17702.42	21.344
8	BANGLADESH	12363.75	11.036	1117.13	7.036	1214.10	0.614	14694.98	18.686
9	U.A.E	10101.99	12.070	482.56	1.647	25.73	0.065	10610.28	13.782
10	U.K	5029.96	10.058	28.25	0.243	134.43	0.373	5192.64	10.674
11	HONGKONG (PRC)	6.62	0.025	836.83	4.086	438.60	1.350	1282.05	5.461
12	VIET NAM	194.26	0.379	358.93	1.394	1639.88	2.197	2193.07	3.970
13	INDONESIA	-	-	63.24	0.489	1560.35	3.240	1623.59	3.729
14	KOREA	35.27	0.057	467.12	1.529	415.59	0.687	917.98	2.273
15	AUSTRALIA	183.29	0.648	83.68	0.414	83.88	0.377	350.85	1.439
16	BRUNEI DARUSSALAM	-	-	67.83	0.722	-	-	67.83	0.722
17	BELGIUM	16.38	0.021	100.70	0.596	-	-	117.08	0.617
18	MEXICO	63.32	0.092	54.87	0.496	-	-	118.19	0.588
19	QATAR	225.52	0.242	9.60	0.048	1.86	0.004	236.98	0.294
20	SWEDEN	-	-	32.69	0.232	-	-	32.69	0.232
21	GERMANY	-	-	13.22	0.137	7.15	0.048	20.37	0.185
22	JORDAN	200.20	0.184	-	-	-	-	200.20	0.184
23	INDIA	33.77	0.091	-	-	70.77	0.067	104.54	0.158
24	RUSSIAN FEDERATION	52.00	0.053	15.28	0.035	14.00	0.031	81.28	0.119
25	FRANCE	11.69	0.048	-	-	-	-	11.69	0.048
26	BAHRAIN	26.00	0.025	-	-	-	-	26.00	0.025
27	NETHERLAND	8.56	0.009	10.82	0.012	-	-	19.38	0.021
	TOTAL	234060.74	273.267	18382.10	88.853	72267.70	121.110	324710.54	483.230

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2009-2010) (IN US \$)

NO	COUNTRY	FISH		PRAWNS		OTHERS		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	15055.763	30.254	1894.965	4.946	39040.605	69.876	55991.333	105.076
2	THAILAND	108511.603	84.816	970.069	2.751	13335.913	11.662	122817.585	99.229
3	SINGAPORE	38970.058	73.421	4429.010	14.493	3025.494	8.343	46424.562	96.257
4	KUWAIT	58731.236	52.942	15.826	0.020	0.860	0.002	58747.922	52.964
5	MALAYSIA	3717.892	6.211	2232.750	6.439	15400.454	23.477	21351.096	36.127
6	SAUDI	20123.837	22.470	5.435	0.011	297.359	0.791	20426.631	23.272
7	JAPAN	144.012	0.185	4451.966	14.671	1619.559	2.052	6215.537	16.908
8	U.A.E	12492.105	14.346	980.753	2.353	44.352	0.085	13517.210	16.784
9	BANGLADESH	11634.476	10.583	891.442	4.578	1467.426	1.096	13993.344	16.257
10	U.K	6000.391	11.023	146.198	1.122	139.086	0.282	6285.675	12.427
11	INDONESIA	-	-	9.000	0.076	2515.126	6.171	2524.126	6.247
12	HONGKONG (PRC)	48.537	0.147	887.738	3.112	251.191	1.161	1187.466	4.420
13	VIET NAM	97.220	0.212	336.043	0.943	1791.395	3.032	2224.658	4.187
14	AUSTRALIA	361.295	0.848	22.400	0.075	304.943	1.567	688.638	2.490
15	KOREA	99.098	0.183	70.251	0.278	470.094	0.660	639.443	1.121
16	BAHRAIN	565.861	0.684	0.203	0.001	1.559	0.005	567.623	0.690
17	QUATAR	491.643	0.622	3.848	0.005	6.758	0.012	502.249	0.639
18	JORDAN	454.607	0.449	-	-	-	-	454.607	0.449
19	INDIA	184.893	0.292	-	-	108.810	0.096	293.703	0.388
20	NETHERLAND	32.875	0.044	26.928	0.181	8.400	0.034	68.203	0.259
21	SWEDEN	36.627	0.048	17.392	0.055	-	-	54.019	0.103
22	BELGIUM	-	-	20.880	0.096	-	-	20.880	0.096
23	FRANCE	-	-	12.280	0.062	-	-	12.280	0.062
24	GERMANY	-	-	11.544	0.054	-	-	11.544	0.054
25	SOUTH AFRICA	15.708	0.027	2.391	0.007	-	-	18.099	0.034
26	PERKISTAN	27.000	0.027	-	-	-	-	27.000	0.027
27	CANMERRO	27.000	0.023	-	-	-	-	27.000	0.023
	TOTAL	277823.737	309.857	17439.312	56.329	79829.384	130.404	375092.433	496.590

**IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2010-2011) (IN US \$)**

NO	COUNTRY	Quantity - Metric Ton							
		Value - US \$							
		FISH		PRAWNS		OTHERS		TOTAL	
	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	
1	CHINA	31965.020	78.186	5453.100	18.568	40496.148	82.950	77914.268	179.704
2	THAILAND	118997.163	91.524	2633.957	9.433	13003.189	9.638	134634.309	110.595
3	SINGAPORE	18867.479	41.481	2290.962	7.860	4254.894	10.037	25413.335	59.378
4	KUWAIT	50639.928	56.675	1.890	0.003	2.000	0.005	50643.818	56.683
5	MALAYSIA	4365.321	9.531	601.324	1.803	15703.282	28.085	20669.927	39.419
6	SAUDI	19237.123	24.045	25.213	0.054	211.924	0.574	19474.260	24.673
7	JAPAN	7.103	0.068	5255.547	19.338	1934.499	2.476	7197.149	21.882
8	U.A.E	11486.150	15.634	727.034	1.969	79.309	0.186	12292.493	17.789
9	BANGLADESH	8653.347	8.701	750.141	4.115	1969.464	1.350	11372.952	14.166
10	U.K	6396.855	12.765	15.352	0.156	76.227	0.164	6488.434	13.085
11	HONGKONG (PRC)	53.922	0.165	945.280	3.738	178.755	0.802	1177.957	4.705
12	VIET NAM	5.233	0.019	302.685	0.938	1345.834	2.666	1653.752	3.623
13	INDONESIA			11.340	0.016	1479.029	3.536	1490.369	3.552
14	AUSTRALIA	345.086	0.830			243.621	1.158	588.707	1.988
15	KOREA	138.392	0.273	35.230	0.182	572.612	0.615	746.234	1.070
16	BAHRAIN	486.134	0.623	0.915	0.001	0.560	0.001	487.609	0.625
17	QUATAR	459.460	0.590	1.204	0.001	0.910	0.004	461.574	0.595
18	JORDAN	351.216	0.431	-	-	-	-	351.216	0.431
19	ITALY	248.138	0.420	-	-	-	-	248.138	0.420
20	BELGIUM	-	-	61.407	0.318	-	-	61.407	0.318
21	INDIA	73.020	0.090			142.437	0.142	215.457	0.232
22	SOUTH AFRICA	56.302	0.136	5.047	0.012	1.336	0.004	62.685	0.152
23	SWEDEN	64.043	0.074	11.131	0.065	-	-	75.174	0.139
24	PERKISTAN	103.835	0.115	-	-	-	-	103.835	0.115
25	FRANCE	-	-	14.146	0.091	-	-	14.146	0.091
26	BUREIN	30.524	0.051	-	-	-	-	30.524	0.051
27	NETHERLAND	12.951	0.014	-	-	10.031	0.020	22.982	0.034
	TOTAL	273043.745	342.441	19142.905	68.661	81706.061	144.413	373892.711	555.515

IMPORT BY FISHERY PRODUCT TRADING COUNTRIES
(2011-2012) (IN US\$)

No.	COUNTRY	FISH		PRAWN		OTHER		TOTAL	
		QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
1	CHINA	43186.478	125.910	5430.558	24.047	44158.609	108.802	92775.645	258.759
2	THAILAND	121751.779	105.342	1674.967	8.238	12851.853	10.877	136278.599	124.457
3	MALAYSIA	5578.830	13.855	1758.879	6.461	15988.195	33.307	23325.904	53.623
4	KUWAIT	45449.555	51.074	9.794	0.019	37.131	0.062	45496.480	51.155
5	SINGAPORE	9538.352	19.785	1686.515	6.859	4657.022	7.878	15881.889	34.522
6	JAPAN	34.612	0.093	5028.298	27.638	1776.505	2.630	6839.415	30.361
7	SAUDI	20377.182	27.574	35.026	0.061	359.488	0.975	20771.696	28.610
8	BANGLADESH	12614.208	13.909	1080.428	6.088	3602.222	3.127	17296.858	23.124
9	U.A.E	15463.178	19.590	511.342	1.573	70.840	0.157	16045.360	21.320
10	U.K	6163.152	13.449	29.549	0.118	83.148	0.278	6275.849	13.845
11	VIET NAM	-	-	364.419	2.354	570.752	1.067	935.171	3.421
12	AUSTRALIA	610.873	1.566	4.309	0.013	260.731	0.994	875.913	2.573
13	HONGKONG (PRC)	12.587	0.069	248.661	1.820	28.181	0.217	289.429	2.106
14	KOREA	94.132	0.118	57.937	0.545	741.554	0.854	893.623	1.517
15	BAHRAIN	974.074	1.375	1.770	0.003	2.770	0.006	978.614	1.384
16	QUATAR	914.355	1.209	20.031	0.040	16.010	0.040	950.396	1.289
17	ITALY	421.501	0.668					421.501	0.668
18	SWEDEN	123.200	0.151	22.464	0.145			145.664	0.296
19	INDIA	103.583	0.166			54.800	0.064	158.383	0.230
20	INDONESIA	-	-	17.085	0.143	35.376	0.047	52.461	0.190
21	SOUTH AFRICA	105.231	0.180	2.196	0.004	2.290	0.004	109.717	0.188
22	NETHERLAND	107.000	0.126	-	-	-	-	107.000	0.126
23	PERKISTAN	53.900	0.055	-	-	-	-	53.900	0.055
24	PHILLIPINE	-	-	10.800	0.018	-	-	10.800	0.018
25	CRYPUS	10.955	0.012	-	-	-	-	10.955	0.012
26	ISREAL	-	-	-	-	0.056	0.001	0.056	0.001
27	EGYPT	0.046	-	-	-	-	-	0.046	0.000
	TOTAL	283688.763	396.276	17995.028	86.187	85297.533	171.387	386981.324	653.850

**TOP TEN COUNTRIES IMPORTED FISHERY PRODUCTS
FROM MYANMAR (2002-2003 TO 2003-2004)**

Quantity - Metric Ton
Value - US \$ Million

Quantity - Metric Ton
Value - US \$ Million

No.	2002-2003		
	Countries	Quantity	Value
1	China	100807.85	128.58
2	Japan	6817.85	30.89
3	Thailand	27620.35	27.13
4	Malaysia	21069.35	25.42
5	Singapore	12774.83	22.83
6	Hongkong	3792.02	17.67
7	United States	4309.07	14.47
8	Vietnam	14667.80	10.62
9	United Kingdom	4067.49	8.49
10	UAE	4491.10	5.26

No.	Countries	2003-2004		
			Quantity	Value
1	China	US \$	9805.60	15.95
		EURO	1848.26	2.17
		KYAT	85592.99	93.19
2	Japan	US \$	6404.82	33.57
		EURO	2060.24	7.07
		KYAT	-	-
3	Thailand	US \$	3389.72	8.41
		EURO	383.88	0.64
		KYAT	25488.13	21.30
4	Malaysia	US \$	16849.78	18.96
		EURO	954.22	0.86
		KYAT	-	-
5	Singapore	US \$	9869.24	17.73
		EURO	1096.47	1.46
		KYAT	-	-
6	Hongkong	US \$	3990.16	12.63
		EURO	1889.14	2.71
		KYAT	-	.-
7	United States	US \$	1807.85	8.78
		EURO	-	-
		KYAT	-	-
8	Vietnam	US \$	4508.28	7.95
		EURO	230.57	0.76
		KYAT	-	-
9	United Kingdom	US \$	5940.02	8.800
		EURO	-	-
		KYAT	-	-
10	Australia	US \$	1674.24	5.220
		EURO	87.74	0.366
		KYAT	-	-

**TOP TEN COUNTRIES IMPORTED FISHERY PRODUCTS
FROM MYANMAR (2004-2005 TO 2005-2006)**

Quantity - Metric Ton
Value - US \$ Million

Quantity - Metric Ton
Value - US \$ Million

No.	2004-2005			
	Countries		Quantity	Value
1	China	US \$	8140.66	17.877
		EURO	564.96	0.923
		KYAT	106630.02	101.067
2	Japan	US \$	9974.36	45.203
		EURO	411.56	2.261
		KYAT	-	-
3	Thailand	US \$	7514.55	6.853
		EURO	631.79	0.501
		KYAT	41026.87	30.736
4	Singapore	US \$	13097.85	19.350
		EURO	-	-
		KYAT	-	-
5	U A E	US \$	13988.83	16.676
		EURO	-	-
		KYAT	-	-
6	Malaysia	US \$	8512.74	14.800
		EURO	-	-
		KYAT	-	-
7	Hongkong (P R C)	US \$	4032.02	11.808
		EURO	1714.01	1.382
		KYAT	-	-
8	Bangladesh	US \$	16736.34	11.030
		EURO	-	-
		KYAT	-	-
9	United Kingdom	US \$	5940.02	8.800
		EURO	-	-
		KYAT	-	-
10	Australia	US \$	1674.24	5.220
		EURO	87.74	0.366
		KYAT	-	-

No.	2005-2006			
	Countries		Quantity	Value
1	China	US \$	82158.98	86.251
		EURO	332.59	0.438
		KYAT	19185.37	19.078
2	Thailand	US \$	4437.69	5.406
		EURO	234.25	0.386
		KYAT	57369.89	55.878
3	Japan	US \$	9804.12	40.682
		EURO	875.85	4.542
		KYAT	-	-
4	U A E	US \$	17759.09	20.655
		EURO	79.44	0.088
		KYAT	-	-
5	Malaysia	US \$	10940.42	20.296
		EURO	187.71	0.211
		KYAT	-	-
6	Saudi	US \$	15183.41	17.004
		EURO	-	-
		KYAT	-	-
7	Singapore	US \$	7759.26	16.232
		EURO	509.23	0.868
		KYAT	-	-
8	Hongkong (PRC)	US \$	5398.98	14.729
		EURO	1576.56	1.747
		KYAT	-	-
9	Bangladesh	US \$	18118.62	14.554
		EURO	-	-
		KYAT	-	-
10	United Kingdom	US \$	5551.74	8.376
		EURO	-	-
		KYAT	-	-

**TOP TEN COUNTRIES IMPORTED FISHERY PRODUCTS
FROM MYANMAR (2006-2007 TO 2007-2008)**

Quantity - Metric Ton
Value - US \$ Million

Quantity - Metric Ton
Value - US \$ Million

No.	2006-2007			No.	2007-2008		
	Countries	Quantity	Value		Countries	Quantity	Value
1	China	90197.08	130.662	1	China	84980.51	148.724
2	Thailand	121764.99	109.880	2	Malaysia	80835.93	86.960
3	Japan	12211.50	50.440	3	Singapore	32095.00	70.363
4	Singapore	18362.08	30.434	4	Thailand	48820.83	55.985
5	Bangladesh	23669.32	22.360	5	Japan	10523.96	42.085
6	Malaysia	10288.51	21.103	6	Saudi	18798.08	35.146
7	Saudi	18030.71	20.129	7	Kuwait	27895.32	30.026
8	UAE	13993.72	17.528	8	Bangladesh	20229.72	27.003
9	Kuwait	14981.31	14.427	9	UAE	9467.70	13.902
10	Hongkong (PRC)	4365.30	13.967	10	Hongkong(PCR)	3141.41	12.664

**TOP TEN COUNTRIES IMPORTED FISHERY PRODUCTS
FROM MYANMAR (2008-2009 TO 2009-2010)**

Quantity - Metric Ton
Value - US \$ Million

Quantity - Metric Ton
Value - US \$ Million

No.	2008-2009		
	Countries	Quantity	Value
1	Singapore	56753.61	119.044
2	China	58921.26	106.153
3	Thailand	89489.51	76.978
4	Malaysia	23004.36	41.260
5	Kuwait	34423.65	31.844
6	Japan	6514.06	23.400
7	Saudi	17702.42	21.344
8	Bangladesh	14694.98	18.686
9	UAE	10610.28	13.782
10	United Kingdom	5192.64	10.674

No.	2009-2010		
	Countries	Quantity	Value
1	China	55991.33	105.076
2	Thailand	122817.59	99.229
3	Singapore	46424.56	96.257
4	Kuwait	58747.92	52.964
5	Malaysia	21351.10	36.127
6	Saudi	20426.63	23.272
7	Japan	6215.54	16.908
8	UAE	13517.21	16.784
9	Bangladesh	13993.34	16.257
10	United Kingdom	6285.68	12.427

**TOP TEN COUNTRIES IMPORTED FISHERY PRODUCTS
FROM MYANMAR (2010-2011 TO 2011-2012)**

Quantity - Metric Ton
Value - US \$ Million

Quantity - Metric Ton
Value - US \$ Million

No.	2010-2011		
	Countries	Quantity	Value
1	China	77914.27	179.704
2	Thailand	134634.31	110.595
3	Singapore	25413.33	59.378
4	Kuwait	50643.82	56.683
5	Malaysia	20669.93	39.419
6	Saudi	19474.26	24.673
7	Japan	7197.15	21.882
8	U.A.E	12292.49	17.789
9	Bangladesh	11372.95	14.166
10	U.K	6488.43	13.085

No.	2011-2012		
	Countries	Quantity	Value
1	China	92775.645	258.759
2	Thailand	136278.599	124.457
3	Malaysia	23325.904	53.623
4	Kuwait	45496.48	51.155
5	Singapore	15881.889	34.522
6	Japan	6839.415	30.361
7	Saudi	20771.696	28.610
8	Bangladesh	17296.858	23.124
9	UAE	16045.36	21.320
10	U.K	6275.849	13.845



FISH SUPPLY IN YANGON

FISH SUPPLY IN YANGON

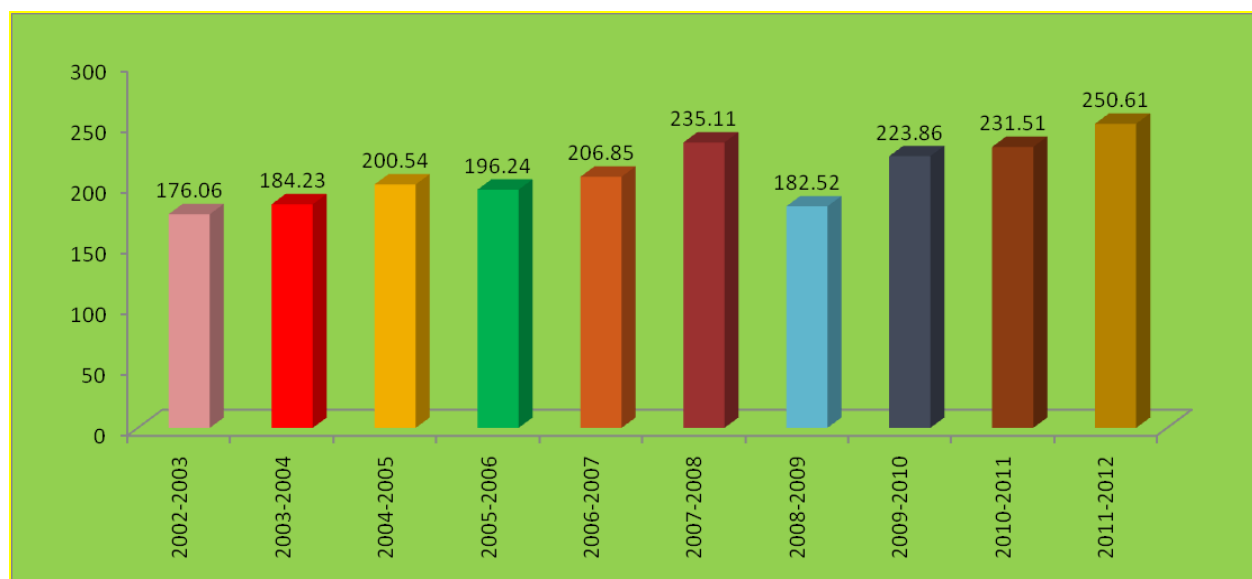
Unit - Thousand Metric Ton

No.	Year	Production		
		Fresh Water	Marine	Total
1	2002-2003	80.84	95.22	176.06
2	2003-2004	80.61	103.62	184.23
3	2004-2005	77.53	123.01	200.54
4	2005-2006	84.05	112.19	196.24
5	2006-2007	102.90	103.95	206.85
6	2007-2008	91.28	143.83	235.11
7	2008-2009	78.83	103.69	182.52
8	2009-2010	91.39	132.47	223.86
9	2010-2011	93.07	138.44	231.51
10	2011-2012	97.67	152.94	250.61

FISH SUPPLY IN YANGON

(2002-2003) -(2011-2012)

Unit-Thousand Metric Ton





FISH SEED PRODUCTION AND HATCHERIES

SEED PRODUCTION BY FISH HATCHERIES UNDER DOF

Unit: Million

No.	Myanmar Name	Common Name	Scientific Name	2002-03	2003-04	2004-05	2005-06	2006-07
1.	Nga Myit Chin	Rohu	Labeo rohita	352.267	449.400	433.610	478.640	529.739
2.	Shwe Wa Nga Gyin	Common Carp	Cyprinus carpio	51.688	58.430	57.760	70.485	52.628
3.	Myetsar Nga Gyin	Grass Carp	Ctenopharyngodon idella	3.416	3.720	5.950	6.181	8.034
4.	Nga Khaung Pwa	Catla	Catla catla	3.666	4.880	5.450	4.676	4.638
5.	Yaung Sone Nga Gyin	Colour Carp	Carrasius spp:	-	-	-	-	-
6.	Tilapia	Tilapia	Tilapia spp:	10.387	15.490	12.020	13.972	13.727
7.	Ngwe Yaung Nga Gyin	Silver Carp	Hypophthalmichthys molitrix	5.497	3.120	3.120	2.813	3.134
8.	Khaung Gyi Nga Gyin	Big Head	Aristichthys nobilis	3.426	1.850	1.950	2.413	2.639
9.	Nga Khu	Cat Fish	Clarias batrachus	0.793	0.410	1.040	0.601	1.803
10.	Nga Dan	Stripped Catfish	Pangasius sutchi	17.911	7.410	15.640	11.267	17.052
11.	Nga Phan Ma	Rohtee	Rohtee alfrediana	-	0.850	0.030	0.200	0.350
12.	Nga Gyin Phyu	Mrigal	Cirrhina mrigala	2.958	6.150	6.850	4.825	3.817
13.	Pa Cu (Ye Cho Nga Mote)	Fresh water pomfret	Pirictus spp:	-	0.590	2.570	6.054	15.302
14.	Nga Khone Ma	Tarpian	Barbodes gonionotus	0.27	13.460	40.750	43.401	37.095
15.	Nga Net Pyar	Black carp	Labeo calabasu	-	0.010	0.040	-	-
16.	Nga Thyine	Minor Carp	Leabo Fdolizkae					-
17.	Be Lar	Snakeskin gourami	Trichogester pectoralis					-
18.	Vietnam Nga Dan	Stripped Catfish	Pangasius bacourti					-
Total				452.283	565.770	586.780	645.528	689.958

SEED PRODUCTION BY FISH HATCHERIES UNDER DOF

Unit - Million

No.	Myanmar Name	Common Name	Scientific Name	2007-08	2008-09	2009-10	2010-11	2011-12
1.	Nga Myit Chin	Rohu	Labeo rohita	541.700	517.800	527.260	460.179	535.409
2.	Shwe Wa Nga Gyin	Common Carp	Cyprinus carpio	68.500	47.500	77.370	83.882	49.223
3.	Myetsar Nga Gyin	Grass Carp	Ctenopharyngodon idella	6.300	5.900	4.170	8.397	3.833
4.	Nga Khaung Pwa	Catla	Catla catla	6.100	5.000	5.190	11.733	6.547
5.	Yaung Sone Nga Gyin	Colour Carp	Carrasius spp:	-	-	-	-	-
6.	Tilapia	Tilapia	Tilapia spp:	13.400	12.200	20.060	18.363	17.883
7.	Ngwe Yaung Nga Gyin	Silver Carp	Hypophthalmichthys molitrix	3.000	3.200	3.380	5.629	6.894
8.	Khaung Gyi	Big Head	Aristichthys nobilis	2.100	2.300	2.190	3.8	3.539
9.	Nga Khu	Cat Fish	Clarias batrachus	-	-	-	-	0.05
10.	Nga Dan	Stripped Catfish	Pangasius sutchi	11.700	10.000	4.660	9.384	5.660
11.	Nga Phan Ma	Rohtee	Rohtee alfrediana	-	-	-	-	-
12.	Nga Gyin Phyu	Mrigal	Cirrhina mrigala	3.400	1.800	2.850	6.652	4.554
13.	Pa Cu (Ye Cho Nga Mote)	Fresh water pomfret	Pirictus spp:	9.300	10.800	3.290	6.733	3.690
14.	Nga Khone Ma	Tarpian	Barbodes gonionotus	75.200	66.500	86.230	181.439	112.761
15.	Nga Net Pyar	Black carp	Labeo calabasu	-	-	0.05	-	-
16.	Nga Thylene	Minor Carp	Leabo Fdolizkae	-	-	0.06	-	-
17.	Be Lar	Snakeskin gourami	Trichogester pectoralis	-	-	-	0.06	0.02
18.	Vietnam Nga Dan	Stripped Catfish	Pangasius bacourti	-	-	-	0.002	-
19.	Nga Kye	Sconpion catfish	Heteropneustcs fossilis	-	-	-	-	0.30
20.	Nga Phane	Nga Phane	Cyprinus intha	-	-	-	-	0.003
21.	Sultan	Sultan Fish	Teptobanbus hoevenii	-	-	-	-	0.004
Total				743.380	708.312	736.760	796.253	750.370

**FISH HATCHERIES UNDER DOF
(2006-2007)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
Yangon Region			1722.130
1	Hlaw Kar	Mingalardone Township, Yangon.	1067.876
2	Twante	Twante	417.859
3	Laydaukkan	Thingankyun Township	236.395
Bago Region			595.926
4	Bago (Kali)	Bago Township	364.162
5	Thanappin	Thanappin	113.071
6	Oakpho	Oakpho	118.693
Mandalay Region			2831.688
7	Pathein Gyi		781.818
8	Myit Thar	Kueme Township	711.645
9	Natyekan	Amayapuya Township	513.975
10	Pyinmanar	Pyinmanar	639.120
11	Matayar	Mata-yar	185.130
Ayeyarwady Region			716.671
12	Pathein	Pathein	248.275
13	Talotehla	Talote-hla, Maubin Township	99.000
14	Hinthada	Hinthada	101.496
15	Pantanaw	Pantanaw	175.900
16	Aung-hate		92.000
Magway Region			31.272
17	Taungdwingyi	Magway	31.272
Kachin State			157.972
18	Waing-maw	Kachin State	103.854
19	Bamaw	Bamaw	54.118
Sagaing Region			263.017
20	Shwe Bo	Shwe Bo Township	52.191
21	Yay Oo	Yay Oo Township	210.826
Mon State			102.295
22	Thahtone	Thahtone Township	102.295
Shan State			34.314
23	Lashio	Lashio Township	11.174
24	Nyaung Shwe	Nyaung Shwe Township	23.140

**PRAWN HATCHERIES UNDER DOF
(2006-2007)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
1	A-lae-tan-kyaw	Mowndaw Township	-
2	Kyauk-phyu	Kyauk-phyu Township	-
3	Thaketa	Yangon	4.614
4	Wa-maw (Long-lone)	Dawei	-
5	Lone-thar	Tan-twe	50.000
6	Ye-chan-pyin	Sittwe	1.000

**FISH HATCHERIES UNDER DOF
(2007-2008)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
Yangon Region			178.990
1	Hlaw Kar	Mingalardone Township, Yangon.	90.350
2	Twante	Twante	52.130
3	Laydaukkan	Thingankyun Township	36.510
Bago Region			80.620
4	Bago (Kali)	Bago Township	44.180
5	Thanappin	Thanappin	15.620
6	Oakpho	Oakpho	20.820
Mandalay Region			303.100
7	Pathein Gyi		82.630
8	Myit Thar	Kueme Township	76.630
9	Natyekan	A-ma-ya-pu-ya Township	59.140
10	Pyinmanar	Pyin-ma-nar	56.300
11	Matayar	Ma-ta-yar	28.400
Ayeyarwady Region			120.810
12	Pathein	Pathein	18.850
13	Talotehla	Ta-lote-hla, Ma-u-bin Township	27.380
14	Hinthada	Hin-tha-da	14.740
15	Pantanaw	Pan-ta-naw	34.560
16	Aung-hate		25.280
Magway Region			4.850
17	Taungdwingyi	Magway	4.030
18	Pwint Phyu		0.820
Kachin State			7.720
19	Waing maw	Kachin State	3.740
20	Bamaw	Bamaw	3.980
Sagaing Region			31.410
21	Shwe Bo	Shwe Bo Township	8.320
22	Yay Oo	Yay Oo Township	21.070
23	Kalay		2.020
Mon State			9.300
24	Thahtone	Thahtone Township	9.300
Shan State			3.590
25	Lashio	Lashio Township	0.320
26	Nyaung Shwe	Nyaung Shwe Township	3.270
Kayin State			0.310
27	Pha aan	Pha-aan Township	0.310

**PRAWN HATCHERIES UNDER DOF
(2007-2008)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
1	A-lae-tan-kyaw	Mowndaw Township	0.25
2	Kyauk-phyu	Kyauk-phyu Township	1.21
3	Thaketa	Yangon	-
4	Wa-maw (Long-lone)	Dawei	1.20
5	Lone-thar(TZ)	Tan-twe	3.52
6	Ye-chan-pyin	Sittwe	-
7	Thazin (Pale Nadi)	Pathein	14.30
8	Chaung Tha (Sein Ngwe Mya)	Pathein	21.00
9	Soe Mae Kyi (Sit Aye Paing)	Sittwe	-
10	Lone-thar (W.B)	Tan-twe	6.60

**FISH HATCHERIES UNDER DOF
(2008-2009)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
Yangon Region			216.947
1	Hlaw Kar	Mingalardone Township, Yangon.	90.556
2	Twante	Twante	87.150
3	Laydaukkan	Thingankyun Township	39.241
Bago Region			61.970
4	Bago (Kali)	Bago Township	36.216
5	Thanappin	Thanappin	13.512
6	Oakpho	Oakpho	12.242
Mandalay Region			297.513
7	Pathein Gyi		82.283
8	Myit Thar	Kueme Township	80.974
9	Natyekan	A-ma-ya-pu-ya Township	59.028
10	Pyinmanar	Pyin-ma-nar	57.031
11	Matayar	Ma-ta-yar	18.197
Ayeyarwady Region			66.842
12	Pathein	Pathein	6.199
13	Talotehla	Ta-lote-hla, Ma-u-bin Township	16.843
14	Hinthada	Hin-tha-da	5.955
15	Pantanaw	Pan-ta-naw	21.882
16	Aung-hate		15.963
Magway Region			5.155
17	Taung dwin gyi	Magway	3.500
18	Pwint Phyu		1.655
Kachin State			7.061
19	Waing-maw	Kachin State	3.874
20	Bamaw	Bamaw	3.187
Sagaing Region			13.933
21	Shwe Bo	Shwe Bo Township	3.869
22	Yay Oo	Yay Oo Township	7.761
23	Kalay		2.303
Mon State			6.661
24	Thahtone	Thahtone Township	6.661
Shan State			6.244
25	Lashio	Lashio Township	-
26	Nyaung Shwe	Nyaung Shwe Township	6.244
Kayin State			0.633
27	Pha aan	Pha-aan Township	0.633

**PRAWN HATCHERIES UNDER DOF
(2008-2009)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
1	A-lae-tan-kyaw	Mowndaw Township	-
2	Kyauk-phyu	Kyauk-phyu Township	0.8
3	Thaketa	Yangon	-
4	Wa-maw (Long-lone)	Dawei	0.85
5	Lone-thar(TZ)	Tan-twe	2.09
6	Ye-chan-pyin	Sittwe	0.65
7	Thazin (Pale Nadi)	Pathein	28.00
8	Chaung Tha (Sein Ngwe Mya)	Pathein	8.70
9	Soe Mae Kyi (Sit Aye Paing)	Sittwe	2.00
10	Lone-thar (W.B)	Tan-twe	2.50

**FISH HATCHERIES UNDER DOF
(2009-2010)**

Unit - Million

No.	Fish Hatcheries	Location	Production
Yangon Region			163.100
1	Hlaw Kar	Mingalardone Township, Yangon.	91.400
2	Twante	Twante	31.400
3	Laydaukkan	Thingankyun Township	40.300
Bago Region			91.200
4	Bago (Kali)	Bago Township	43.100
5	Thanappin	Thanappin	27.100
6	Oakpho	Oakpho	21.000
Mandalay Region			313.600
7	Pathein Gyi		84.300
8	Myit Thar	Kueme Township	79.600
9	Natyekan	A-ma-ya-pu-ya Township	59.500
10	Pyinmnar	Pyinmanar	69.200
11	Matayar	Matayar	21.000
Ayeyarwady Region			115.300
12	Pathein	Pathein	26.300
13	Talotehla	Talotehla, Maubin Township	26.900
14	Hinthada	Hinthada	10.100
15	Pantanaw	Pantanaw	30.000
16	Aung-hate		22.000
Magway Region			7.300
17	Taungdwingyi	Magway	4.900
18	Pwint Phyu		2.400
Kachin State			9.700
19	Waing maw	Kachin State	6.200
20	Bamaw	Bamaw	3.500
Sagaing Region			29.100
21	Shwe Bo	Shwe Bo Township	7.600
22	Yay Oo	Yay Oo Township	17.700
23	Kalay		3.800
Mon State			3.500
24	Thahtone	Thahtone Township	3.500
Shan State			3.200
25	Lashio	Lashio Township	-
26	Nyaung Shwe	Nyaung Shwe Township	3.200
Kayin State			0.700
27	Pha aan	Pha-aan Township	0.700

**FISH HATCHERIES UNDER DOF
(2010-2011)**

			Unit - Million
No.	Fish Hatcheries	Location	Production
Yangon Region			186.800
1	Hlaw Kar	Mingalardone Township, Yangon.	101.800
2	Twante	Twante	44.500
3	Laydaukkan	Thingankyun Township	40.500
Bago Region			68.200
4	Bago (Kali)	Bago Township	40.100
5	Thanappin	Thanappin	15.400
6	Oakpho	Oakpho	12.700
Mandalay Region			373.500
7	Pathein Gyi		97.900
8	Myit Thar	Kueme Township	111.000
9	Natyekan	Amayapuya Township	58.900
10	Pyinmanar	Pyinmanar	78.700
11	Matayar	Matayar	27.000
Ayeyarwady Region			101.800
12	Pathein	Pathein	20.900
13	Talotehla	Talotehla, Maubin Township	10.800
14	Hinthada	Hinthada	9.600
15	Pantanaw	Pantanaw	35.300
16	Aung hate		25.200
Magway Region			8.600
17	Taungdwingyi	Magway	5.500
18	Pwint Phyu		3.100
Kachin State			19.000
19	Waing-maw	Kachin State	9.200
20	Bamaw	Bamaw	9.800
Sagaing Region			26.600
21	Shwe Bo	Shwe Bo Township	10.600
22	Yay Oo	Yay Oo Township	10.300
23	Kalay		5.700
Mon State			5.100
24	Thahtone	Thahtone Township	5.100
Shan State			3.100
25	Lashio	Lashio Township	-
26	Nyaung Shwe	Nyaung Shwe Township	3.100
Kayin State			3.500
27	Pha aan	Pha aan Township	3.500

**FISH HATCHERIES UNDER DOF
(2011-2012)**

Unit - Million

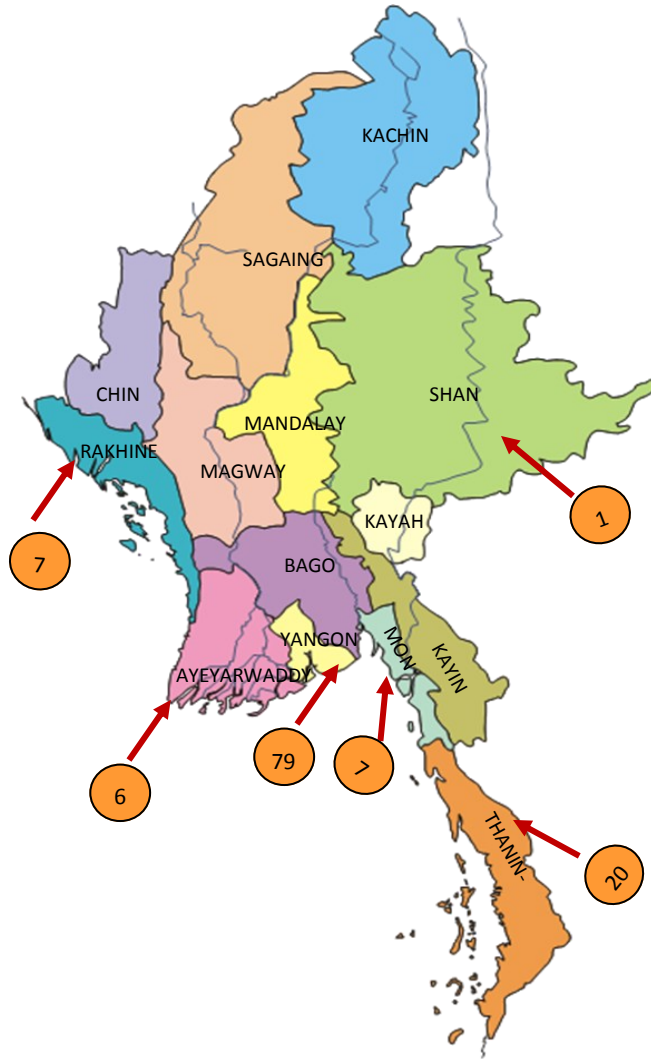
No.	Fish Hatcheries	Location	Production
Yangon Region			180.268
1	Hlaw Kar	Mingalardone Township, Yangon.	81.844
2	Twante	Twante	47.555
3	Laydaukkan	Thingankyun Township	50.869
Bago Region			69.665
4	Bago (Kali)	Bago Township	39.964
5	Thanappin	Thanappin	15.156
6	Oakpho	Oakpho	14.545
Mandalay Region			314.509
7	Pathein Gyi		82.420
8	Myit Thar	Kueme Township	77.225
9	Natyekan	Amayapuya Township	37.111
10	Pyinmanar	Pyinmanar	100.070
11	Matayar	Matayar	17.683
Ayeyarwady Region			128.953
12	Pathein	Pathein	25.896
13	Talotehla	Talotehla, Maubin Township	15.252
14	Hinthada	Hinthada	13.010
15	Pantanaw	Pantanaw	47.436
16	Aung hate		27.359
Magway Region			7.532
17	Taungdwingyi	Magway	4.582
18	Pwint Phyu		2.950
Kachin State			13.630
19	Waing-maw	Kachin State	8.089
20	Bamaw	Bamaw	5.521
Sagaing Region			0.020
21	Shwe Bo	Shwe Bo Township	23.987
22	Yay Oo	Yay Oo Township	5.353
23	Kalay		11.814
Mon State			6.820
24	Thahtone	Thahtone Township	6.713
Shan State			6.713
25	Lashio	Lashio Township	2.914
26	Nyaung Shwe	Nyaung Shwe Township	-
Kayin State			2.914
27	Pha aan	Pha aan Township	2.197
			2.197

PROCESSING PLANTS, ICE PLANTS

AND

COLD STORAGE

MAP OF THE SITUATION COLD STORES & ROCESSING PLANTS IN REGIONS AND STATES OF MYANMAR



YANGON	79
AYEYARWADDY	6
THANINTHAYI	20
MON	7
SHAN	1
RAKHINE	7
TOTAL COLD STOREAGES	120

**ICE PLANTS
(BY REGIONAL AND STATE)**

NO.	REGIONAL AND STATE	NUMBER OF PLANTS	CAPACITY OF ICE PLANT (METRIC TON PER DAY)
1	YANGON	106	2364.06
2	TANINTHAYI	48	2535.6
3	RAKHINE	39	456
4	AYEYARWADY	70	869
5	MON	29	528
6	MANDALAY	7	30
7	SHAN	2	3.20
	TOTAL	301	6785.8

PART TWO
MYANMAR FISHERIES IN BRIEF

National Policy on Fishery Sector

- (1) To promote all-round development in the fisheries sector;
- (2) To increase fish production for domestic consumption and share the surplus with neighbouring country;
- (3) To encourage the expansion of marine and freshwater aquaculture;
- (4) To upgrade the socio-economic status of fishery communities.

The National Management Policies of Ministry of Livestock and Fisheries

- (1) To boost distribution of quality fish and animal strains;
- (2) To strive for all-round development of fish and meat production sector;
- (3) To exceed the fish and meat for the domestic consumption and to export the surplus for earning foreign exchange;
- (4) To make arrangements to increase investments in the fishery and livestock sector;
- (5) To further development prawn breeding;
- (6) To protect and conserve the fishery resources both in freshwater fisheries and marine fisheries;
- (7) To boost freshwater fish production to meet local demand and to strive with might and main for development of fishery resources;
- (8) To improve the socio-economic standard of farmers raising and production livestock, fish and prawn under the leadership of the government;

RELEASE OF FISH FINGERLINGS



Releasing fish fingerlings to enhance and restore fishery resources has been practiced in Myanmar.

PADDY CUM FISH CULTURE



Department of fisheries has initiated and encouraged the paddy cum fish farming in Myanmar.

IMPLEMENTATION OF GENETIC IMPROVEMENT

Department of Fisheries has initiated the implementation of genetic improvement in rohu (*labeo rohita*)



PUBLIC AWARENESS OF THE CONSERVATION OF FISHERIES RESOURCES



The departmental personnel of DoF discussed with the local people in Ayeyarwaddy Region for the public awareness on the sustainable small scale fisheries and aquaculture livelihood in coastal mangrove ecosystem.

Fisheries in Myanmar

Fisheries in Myanmar's Economy

1. The fishery sector is considered as the most important one after the agriculture sector to fulfill the protein requirement of the people of Myanmar and to provide the food security as well as to get the opportunity for the employment to a large number of fishery communities and rural dwellers. Moreover, fish is second only to rice in the Myanmar diet.
2. Myanmar is endowed with rich natural resources both in freshwater and marine fisheries. Nowadays, the increasing pressures from industrial and urban development and increased demand for fish and fishery products owing to population growth as well as global climate change can cause for damage to degradation of ecosystems including fisheries resources.

State of Fisheries

3. In 2011-2012 fiscal year, the total production of fish was 4.48 million metric tons in Myanmar. In this period, the production of freshwater fish was 2.15 million metric tons (48 % of the total fish production) and the production of marine fish was 2.33 million metric tons (52% of the total production of fish in Myanmar).
4. The exported amount of fish and fishery product was (0.387) million metric tons and the value of which was (653.85) million in US\$ in 2011-2012. It was exported to (27) different countries. The exported amount was (8.6%) of the total production of fish in Myanmar in this period, 2011-2012.
5. The people of Myanmar like fish and fishery products which are essential of daily meals of them, no wonder, fish sauce and fish and shrimp paste are the favorite dishes of Myanmar. Fish constitutes a major source for animal protein in the diet of Myanmar people. According to the statistics of 2011-2012, the Republic of the Union of Myanmar has a population (60.85) million and the per capita consumption of fish was (51) kg in the fiscal year 2011-2012.

Type of Fisheries in Myanmar

6. The type of fisheries in Myanmar is determined by nature of catch. It can be classified into freshwater fisheries and marine fisheries. Freshwater fisheries consists of (a) fish culture, (b) leasable, (c) open fisheries. Marine fisheries include (a) inshore fisheries and (b) off-shore fisheries.
7. In the inshore fisheries, the fishing boats operate within from shoreline to (5) nautical miles in the northern area, (10) nautical miles in the Southern area. In this area, the fishing boat which is build by traditional type with not more than 30 feet long or using less than a 12HP engine power, operates for fishing. The fishing gears for using are driftnet, gillnet and long

8. In offshore fisheries, the offshore fishing vessels operate beyond from outer limit of the inshore fishing zone to the Exclusive Economic Zone (EEZ). The fishing vessels are more than 30 feet long or using more than 12HP engine operating in offshore area. In this area, the commercial fishing gears are trawl net, purse seine, and long line.

Ministry's Policy on Fishery Sector

9. The national policies and principle objectives of the livestock and fisheries sector are as follows;-

- (1) To boost distribution of quality fish and animal strains;
- (2) To strive for all-round development of fish and meat production sector;
- (3) To exceed the fish and meat for the domestic consumption and to export the surplus for earning foreign exchange;
- (4) To make arrangements to increase investments in the fishery and livestock sector;
- (5) To further development prawn breeding.
- (6) To protect and conserve the fishery resources both in freshwater fisheries and marine fisheries.
- (7) To boost freshwater fish production to meet local demand and to strive with might and main for development of fishery resources;
- (8) To improve the socio-economic standard of farmers raising and production livestock, fish and prawn under the leadership of the government;

Management of Fisheries

10. Department of Fisheries (DOF) is responsible for the development of fishery sector of the Union of Myanmar and the responsibilities of DOF for development and management in fisheries are as follows;-

- (1) Conservation and rehabilitation of fishery resources;
- (2) Promotion of fisheries researches and surveys;
- (3) Collection and compilation of fishery statistics and information;
- (4) Extension services;
- (5) Supervision of fishery sectors;
- (6) Sustainability of fishery resources;

Fish Price Survey

11. Department of Fisheries is implementing the fish price survey in Yangon every year.

The Providing Financial Assistance and Loans from Livestock and Fisheries Development Bank

12. In the fiscal year 2011-2012, Livestock and Fisheries Development Bank (LFDB) loaned (100.64) billion of kyats to the owners of aquaculture, and factories in Myanmar for the development of fishery sector.

Main Factors Affecting in the Production of Fisheries

13. The conservation of fisheries resources and the maintenances of ecological system are the main factors in the development of fisheries .Ecosystem of the world should be studied on the basis of their principle habitats for a wide variety of flora and fauna. Regarding the maintenances of ecosystem in fisheries, the management of conservation in the freshwater bodies (ponds, lakes, rivers, dams) which provide good habitats for phytoplankton, zoo plankton, including aquatic plants and fishes and the conservation of marine ecosystem approach in marine water and its habitats to numerous plants, animals like zoo plankton, fishes, shrimps, oyster and so on., should also be studied as well. Moreover, the conservation of mangrove forest wetland and land-based ecosystem are substantial for development policy with a sustainable basis.

14. As we all know, mangrove are a source of shelters for fish. Many of coastal species spent the critical early stage of their lives in mangrove waters. So, the mangrove conservation is essential to save fisheries resources. Consequently, it ensures the sustainability of fisheries in the long term. Besides, the maintenance of ecological system is the conservation of reef and coral and declaration the marine protected areas (MPAs). It is the effective approach to improve the marine environment. The understanding of ecosystem function and its maintenance can help the development of fisheries in a sustainable manner.

15. The weather conditions depend on the environment. Deforestation is one of the factors for destroying the natural environment. So the forest conservation is needed by everybody. In the fishery sector, another important thing is the prevention of the fish disease which has been a difficult problem for fish-farmers. So, the sufficiency on the supply of good water quality is an essential matter.

16. Moreover, The public awareness for environment is very important for the sustainable fisheries and the people should be educated about the environment not to do over fishing and degrading the environment which are harming them-selves. It is, because we are being a part of the complex network of its environment.

The Role of the Private Sector in Fisheries

17. The role of the private sector of fisheries in Myanmar is operated by private entrepreneurs who can manage their business in their own ways in accordance with the rules and regulations which are laid down for them by the Government.

18. Regarding on this matter, since 1988 Myanmar made some dramatic and radical changes in social, political, and economic fronts. From that time onward, the market oriented economic system has been adopted in Myanmar. Since then, all fishery business in Myanmar was carried out by the private sector. Consequently, all state owned infrastructure of fishery sector such as, fishing vessels, ice-plants, processing plants, cold stores, fish-meal plants, canning plants etc. were sold out or leased to the private owners by the Government.

Legal Affairs

19. There are four relevant fisheries laws promulgated by the Government of Myanmar to manage the fishery industry and to protect the fishery resources more efficiently.

No.	Year enacted	Name of Fisheries Laws
1	1989	Law relating to the fishing rights of foreign fishing vessels
2	1989	Aquaculture Law
3	1990	Myanmar Marine Fisheries Law
4	1991	Freshwater Fisheries Law

20. After enacted these four fisheries law, the Government of Myanmar promulgated the two amending laws. These are as follows:-

No.	Year enacted	Name of Amending Laws
1.	1993	Law amending the Myanmar Marine Fisheries Law
2.	1993	Law amending the law relating to the fishing rights of foreign fishing vessels

Taking Action to the Illegal Harvest

21. Department of Fisheries manages the conservation of the fishery resources. With regard to the conservation of the fisheries resources and to maintain for the long- term of the fisheries resources, DOF is managing to stop the illegal harvest for exporting such as alive river eel (not allow to export which is an under size as 3 cm diameter of its body) and alive mud crab (not allow to export which is (100) gram down weigh). In the fiscal year 2011-2012, DOF seized the small alive river eels and the small alive mud crabs, and then released them to the open water for the conservation of the fisheries resources, which amounts are the alive river eels (24.001) metric tons, and the alive mud crabs (1.2) metric tons.

Food Security for Myanmar

22. For food sufficiency of Myanmar people including living people in rural area, the plan of implementation for food security were carried out by Department of Fisheries of Myanmar with the releasing fish fingerlings into natural resources such as lakes, dams, reservoirs, and open waters and the genetic improvement in rohu(*Labeo rohita*) to achieve the purpose of getting more and more growth rate of fish and the increase of fish production of per acre in order t to get more income by the fishers and fish farmers. Moreover, Department of Fisheries has initiated and encouraged the paddy cum fish farming in Myanmar. Since 2009, the Department of Fisheries under the Ministry of Livestock and Fisheries has been carried out the implementation of genetic improvement in Rohu(*Labeo rohita*) with the short-term and long-term planning . The yearly production of fish in Myanmar is mentioned as in below:-

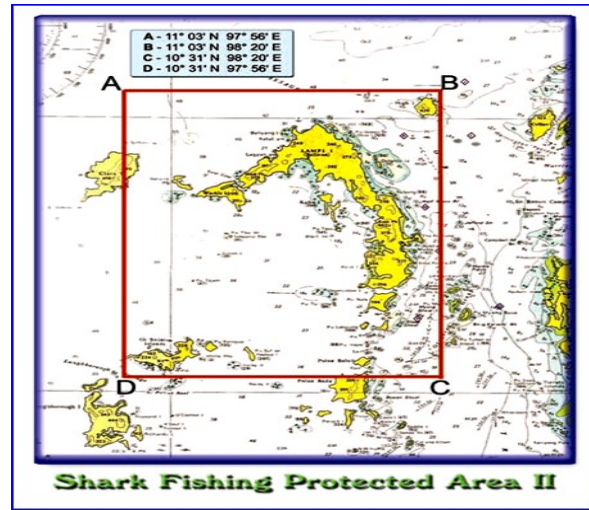
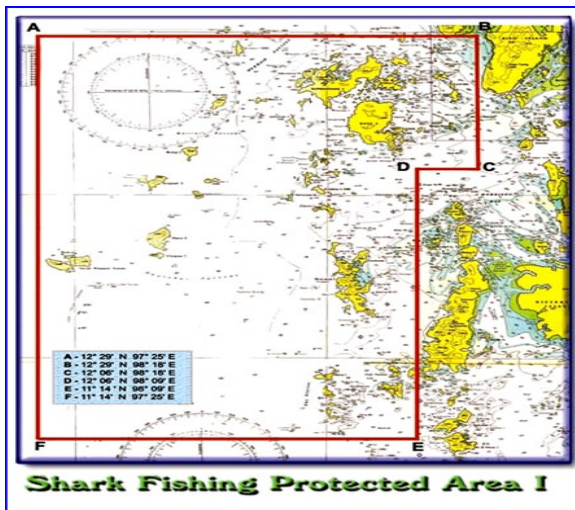
The Yearly Production of Fish in Myanmar

Unit: Thousand Metric Ton

Fiscal Year	Marine Fish Catch	Inland and Aquaculture	Total Fish Production
2006-2007	1525	1334	2859
2007-2008	1689	1504	3193
2008-2009	1867	1675	3542
2009-2010	2061	1860	3921
2010-2011	2161	1978	4139
2011-2012	2333	2145	4478

Marine Protected Areas (MPAs) and Marine Park and Marine Reserve

23. Conservation of fisheries resources has always been the primary concern of the Department of Fisheries, so Marine Park and Marine Reserves as well as fisheries protected area have been established under the Fisheries Law of Myanmar. Lampi island of the Thanninthyai coast has been designated as Maine Park and Marine Reserve in 1996. And then, regarding the shark resources conservation, no-body can conduct shark fishing operation in the protected areas stretching



Freshwater Fisheries(Inland Fisheries)

Myanmar, with her extensive inland waters and a long coastline of nearly 3,000 km, possesses rich fishery resources. She has impressive freshwater fisheries and marine resources are abundant and unique. Myanmar is one of the sufficient countries for fish and fishery products in the domestic consumption for food security and share the surplus with neighbouring and other countries to export for national income. The type of fisheries in Myanmar is determined by nature of catch and can be classified into freshwater fisheries (Inland fisheries) and marine fisheries.

Inland water surface area is 8.2 million hectares in Myanmar (FAO, 1996). The total area of natural lakes, resources and other man-made lake is 1.8 million hectares. The remaining are seasonally inundated flood plains. The rivers in Myanmar are very important for the inland fisheries because of the fertility of the soil with the catchments area of rivers which is a crucial factor in the ecology for the abundance of aquatic fauna and flora,

The inland fisheries are mainly situated on the riverine system of the country. The main rivers in Myanmar are Ayeyarwady, Chindwin, Sittaung and Thanlwin. These rivers flow from north to south into the sea such as eastern part of Bay of Bengal, Gulf of Mottama and the Andaman Sea and a huge network of river systems in the Ayeyarwady Delta. As a result, this is good for support not only to provide freshwater fisheries but also to provide brackish-water fisheries. Due to the rivers in Myanmar which flow with sweetness apart from the few river such as Thanlwin forms a deep gorge and swiftness, some species of fishes can be migration to against the current and move to find good breeding-grounds.

Moreover, at the mouth of the sea, the broad deltas called the delta of Ayeyarwady build up from the fertile topsoil carried down from the hills and consequently it is a source of wealth for fish habitats in the natural resources in Myanmar.



Marine Fisheries

Myanmar has a long seacoast of 2,832 kilometers with the natural resources, such as mangrove forests, wetlands, coral reefs, numerous offshore islands, sand beaches and so on. These resources come to play an important role in the fishery sector, supporting an adequate food fish supply to her people and share the surplus with other countries in the world. According to the survey result of the marine fisheries, it was noted about 1.0 million metric tons of pelagic fishes and 0.8 million tons of demersal fishes. The Maximum Sustainable Yield (MSY) is 1.05 million metric tons. This survey result is estimating between 200 meter depth, area covers 225,696 sq.km and it is needed to survey the un-survey area out of the 200 meter depth to the Exclusive Economic Zone (EEZ).



Type of fisheries in Myanmar is determined by nature of catch. Marine Fisheries include (a) in-shore fishery and (b) off-shore fishery. The Union of Myanmar enacted the “ Territorial Sea And Maritime Zone Law” on 9 April 1977 and the law clearly defined the baseline(straight line drawn between fixed points on the mainland, on islands or rocks officially recognized by Myanmar as its territory. Schedules of such points are indicated in the Law). The Territorial Sea (extending twenty-four nautical miles from the baselines). The Continental Shelf (extending two hundred nautical miles from the baseline) and the Exclusive Economic Zone in which the zone area covers a distance of two hundred nautical miles from the baselines.

Aquaculture

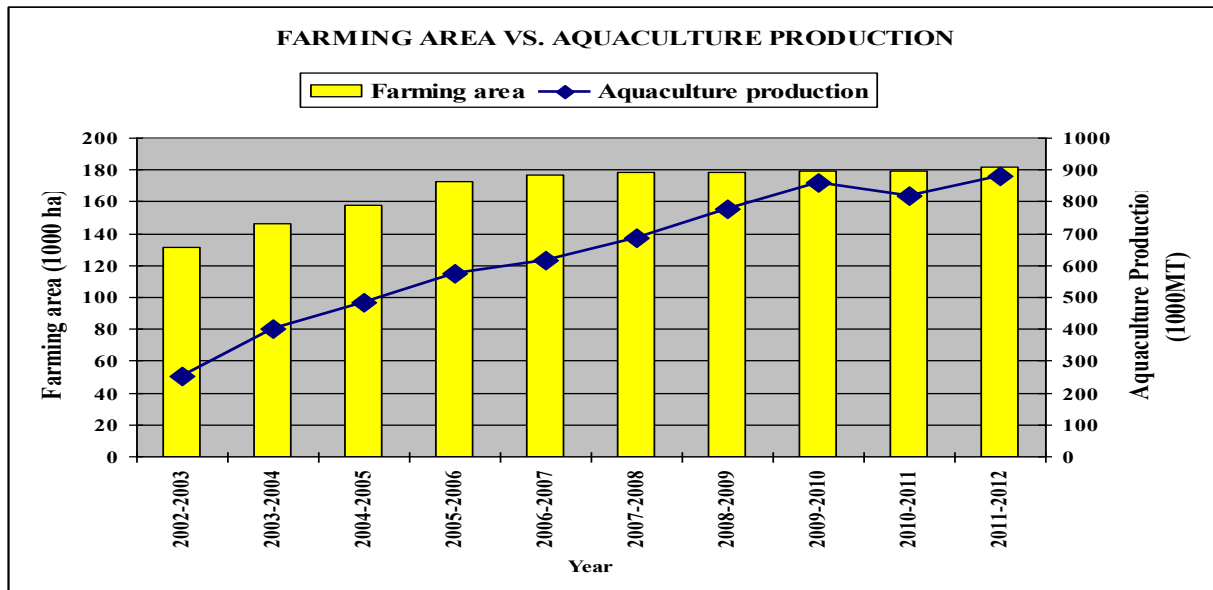
Under the Department of Fisheries, Aquaculture Division comprises of six sections such as Supervision of freshwater, marine fish and prawn section; Development of freshwater and marine fish and prawn section; Aquatic animal health and disease control section; Freshwater fish research section; Crocodile farm and Sea turtle conservation section and Freshwater fish garden section. Aquaculture Division is responsible for producing of good quality of fish and prawn seeds from the fish farmers, to ensure replacement of fish and prawn seeds into the natural water reservoir and man-made water bodies, to conduct research on marine and freshwater aquaculture, to educate and transfer technologies of aquaculture to fish farmers and to conduct environment-friendly aquaculture methods for sustainable fisheries development.

Duty and function of Aquaculture Division

- a. To ensure conservation of fisheries or aquatic resources not to be depleted,
- b. Monitoring, control and given good management and regulation on aquaculture industry,
- c. Strengthening good management for the development of environment-friendly aquaculture system and the encourage of cultured based capture fisheries to increase of fish production,
- d. Issuing the amendment of aquaculture laws, legislation and regulation as requirement in line with modernized technologies, location and duration,
- e. Supervision of expertise for the establishment of short-term and/or long-term aquaculture development programs,
- f. Data collecting, recording and analyzing on fish production and utilization of fisheries resources, and aquatic biodiversity related to aquaculture in national water body,
- g. Applying the international improved aquaculture system and ASEAN guidelines compliance with Myanmar weather and environmental conditions,
- h. Support to conduct training and capacity building of skillful technology and techniques of aquaculture systems,
- i. Seeking the improved technologies and providing extension and training for sustainable development and expanding of aquaculture industry as a whole,
- j. Implementing and managing to be able to fully imposing of revenue for aquaculture taxes,
- k. Regularly observing the aquaculture industry development as a whole and recording and reporting the extraordinary phenomenon of climate change impacts on aquaculture industry to higher authorities.

Aquaculture Development

Aquaculture areas have increased steady from year to year since 1990-1991 until now. It has increased from 12255 ha (1990-1991) to 64438.8 ha (2000-2001) and then to 179633.6 ha (2010-2011) and 182299.75 ha (2012). Aquaculture production has also increased steady annually from 6397 MT in 1990-1991 to 128225 MT (2000-2001) and 316825 MT (2010-2011). The production from aquaculture for food increased to 880833.6 tonnes (2011-2012), which was an increase of 7.84% compared to 816820 tonnes in the year 2010-2011. The production value also increased from US\$ 377.56 million in 2010-2011 to US\$ 411.62 million. Freshwater aquaculture remains the main contributor to this sub-sector contributed 93.66% or 824987.2 tonnes. Marine aquaculture, on the other hand, contributed 6.34% or 55846.4 tonnes. In 2011-2012 year, 880833.6 tonnes of fish/shrimp valued of 411.62213 million US\$ were produced from 182299.75 ha of aquaculture areas which included 89138.178 ha of fish ponds, 92428.307 ha of shrimp ponds and 733.271 ha of soft-shelled mud crab cultured ponds.



Freshwater Aquaculture

It commenced in 1954 with exotic species such as tilapia, gouramy and common carp. First instant it gained little interest among Myanmar people since the country was endowed with ample fishery resources and it was easier to harvest from the wild rather than farming. After the seed production through induced breeding techniques was succeeded in early 1960 fresh-water fish farming began to be widespread countrywide. Any way land utilization was one of major constraints. The aquaculture law was promulgated in 1990 and the land utilization was getting flexible. Currently over 20 species such as major and common carps, tilapia and cat fishes are being cultured. Rohu, *Labeo rohita*, is one of the major cultured species due to its popularity among domestic and high demand in foreign markets.

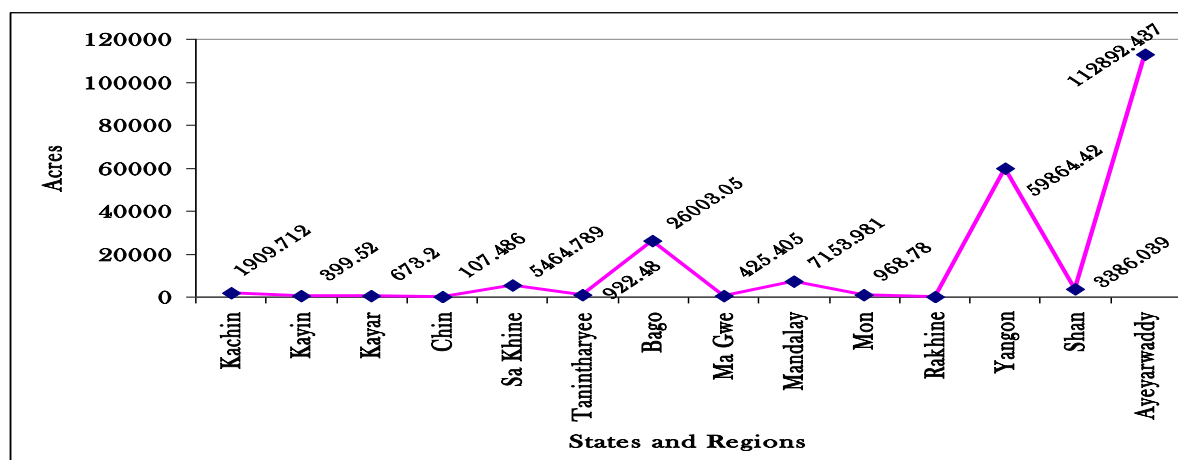
Seed production of freshwater fish by species from fish hatcheries under Department of Fisheries in 2011-2012

No	Myanmar Name	Common Name	Scientific Name	Production (million)
1	Nga Myit Chin	Rohu	<i>Labeo rohita</i>	535.409
2	Shwe Wa Nga Gyin	Common carp	<i>Cyprinus carpio</i>	49.223
3	Myetsar Nga Gyin	Grass carp	<i>Ctenopharyngodon idella</i>	3.833
4	Nga Khaung Pwa	Catla	<i>Catla catla</i>	6.547
5	Nga Gyin Phyu	Mrigal	<i>Cirrhina mrigala</i>	4.554
6	Ngwe Yaung Nga Gyin	Silver carp	<i>Hypophthalmichthys molitrix</i>	6.894
7	Khaung Gyi Nga Gyin	Big head	<i>Aristichthys nobilis</i>	3.539
8	Tilapia	Tilapia	<i>Tilapia spp:</i>	17.883
9	Nga Khu	Cat fish	<i>Clarias batrachus</i>	0.05
10	Nga Dan	Stripped Catfish	<i>Pangasianodon hypophthalmus</i>	5.660
11	Nga Khone Ma	Tarpian	<i>Barbodes gonionotus</i>	112.761
12	Pacu(Ye Cho Nga Mote)	Freshwater Pomfret	<i>Pirictus spp:</i>	3.690
13	Belar	Snakeskin gourami	<i>Trichogaster pectoralis</i>	0.02
14	Nga Phane	Nga Phane	<i>Cyprinus intha</i>	0.003
15	Nga Kyi	Sting Catfish	<i>Heteropneustes fossilis</i>	0.30
16	Sultan Nga	Sultan fish	<i>Leptobarbus hoevenii</i>	0.004
	Total			750.370

The Department of Fisheries enforced on culture system with small-scale fish ponds at country side for poverty alleviation program by impart the culture technique, conduct the on-site training among the local farmers.

The new species of cultured freshwater fishes such as *Ompok bimaculatus* (Indian butter catfish), *Catla carpiosimenses* (Nga thine), *Notopterus notopterus* (feather back), *Cyprinus Intha* (Nga phane), *Trichogester pectoralis* (snake skin gourami), *Pangasius bacourti* (stripped catfish), *Prochilodus luneatus*, *Leptobabus houbenii* (sultan fish), *Osphronemus exodon* (giant gourami), *Labeo gonius*, kuria labeo (Nga dain) were induced breeding by experimental scale.

In 2011-2012 freshwater fish pond amounted to 2220171.29 acres (88068.52 hectare) as shown in composition in following chart.



At present 27 freshwater fisheries stations under Department of Fisheries, established in all strategy areas, are conducting seed production and research works in order to enhance aquaculture industry.

Workforce

In the field of aquaculture, a total of 30802 culturists were involved in various aquaculture systems. Due to Myanmar's aquaculture is mainly based on pond cultured system, mostly men labours are working in fish/shrimp ponds. There are 125790 number of permanent men labours working in 2011-2012 year.

Fish Fries and Hatchling Production

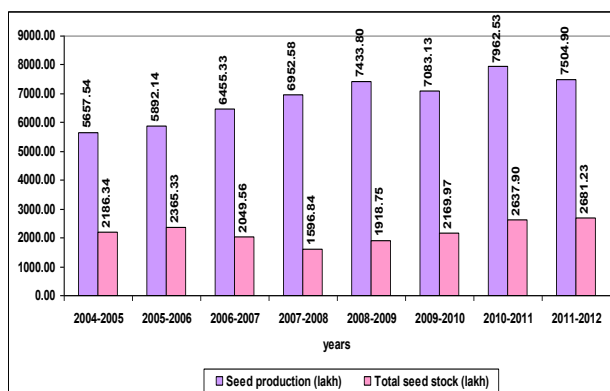
In 2011-2012, 27 nurseries/hatcheries owned by the Department of Fisheries had managed to produce a total of 750.37 million freshwater fish fries and hatchlings whereas 39 private nurseries/hatcheries around Myanmar had produced an impressive amount of 3266.992 million fries and hatchlings .

The Department of Fisheries is the sole competent authority and responsible for the management of fisheries, resources conservation, stock enhancement, research and compilation of fisheries statistics. According to genetic improvement program, the Department has been conducting on selective breeding method to obtain the good quality fish seeds.

Accordingly the Department replenishes the natural resources by stocking the hatchery bred quality fish seeds into open waters like rivers, dams, reservoirs, lakes and impoundments. Data on production and stocking of seeds from 2004-2005 to 2011-2012 appears as a graph there under.

At the same time in order to increase fish production and supplementary income, Department also initiated the paddy cum fish farming in appropriate regions through demonstration. 17830 acres of paddy field in States and Divisions were stocked with fish seed in 2011-2012.

Fish seed stocking into open waters



Paddy cum aquaculture



Freshwater prawn culture

Myanmar has a rich fishery resource of freshwater prawn species. The most common and prioritized species is commercially important giant freshwater prawn, *Macrobrachium rosenbergii*. Hatchery technology was attempted in 1980s and little success was obtained due to lack of technology on hatchery and grow-out operation. Monoculture of *M. rosenbergii* was conducted on semi-intensive level and a result with low production was gained. To minimize the operational cost of prawn farming the farmers changed to prawn and fish poly culture practice where prawn is stocked as minor component totaling 3000 hectares of prawn and fish polyculture farms in the whole country. Only few area of prawn monoculture farms are reported. Anyway the hatchery operation and culture technique become well established in government and private sector.

Recent year, many fish farmers benefits from poly-culture of freshwater prawn and major carps due to high price of freshwater prawn. Many backyard hatcheries for freshwater prawn are being set up to fill up the gap of high demand freshwater prawn seeds.

Ornamental fish

The ornamental fish industry is one of the main sectors to generate income through export. The production of ornamental fish was decreased by 1.425 million pieces in 2011-2012 compared to 1.445 million pieces in 2010-2011. Its value also decreased to US\$ 0.1847 million from US\$ 0.1926 million in the previous year.



Danio choprae



Danio kyathit



Botia histrionica



Inlecypris auropurpureus



Erethistes contra (Mini Cat)



Garra fluvatra



Botia kubotai



Puntius spp



Microrasbora nana



Microrasbora erythromicron

Shrimp Culture

Grow-out culture of marine shrimp, *Penaeus monodon* has been initiated since early 1980 practicing traditional trap and hold system particularly in western coastal area. Natural post-larvae of *Penaeus monodon* were trapped into the pond during the high tide period through sluice gates. There were no inputs in terms of pond preparation, eradication of predators, water fertilization, feeding etc. However 30 to 50 kilograms of large size of shrimp were harvested. As the ponds were usually as large as 50 to 100 hectares, the shrimp production could make more than enough money for the shrimp farmers. Having no laws concerned with aquaculture, those shrimp ponds existed as illegal ponds up to 1990. Only in 2000, the State Level Committee that was the Shrimp Aquaculture Development Committee formulated and implemented three years project plan of shrimp aquaculture development in Myanmar.

Before the project plan, existed shrimp pond area was 67445 acre. After the project in 2003, the shrimp pond area became 199960 acre but it consisted of 5250 acre of semi-intensive or intensive shrimp ponds.

As of 2011-2012 Myanmar has three types of shrimp farming ; Semi-intensive shrimp ponds 4270.41 acres, Extensive plus shrimp ponds 83519.92 acres and Extensive or traditional shrimp ponds 130332.02 acres totaling 218122.35 acres and production from those ponds were reported at 56982.02 MT.

Inadequate shrimp seed supply from local hatcheries in 2000 due to rapid increase in semi-intensive culture imposed ad hoc import shrimp seeds which were not properly inspected, leading to white spot diseases outbreak in shrimp ponds. Later, the Department of Fisheries enforced strong restriction such as banning on importing of shrimp seed without health certificate.

To secure the prime hygienic conditions of breeders and seeds, a private shrimp farm established a PCR lab in 2002 and in 2003, the Department of Fisheries established a PCR lab managed by skilled personals.

Recently, the Department of Fisheries huge encouraged to development of fish and shrimp culture in every states and regions for self -sufficient of local consumption and export market .

White shrimp culture

Department of Fisheries as the sole competent authority of fisheries sector, fully understands that *Penaeus vannamei* has the many advantageous factors for culture but it may also cause the negative impact to other shrimp aquaculture industry. DOF has been aware that vannamei may carry and outbreak the Taura Syndrome Virus (TSV). After a regional workshop in 2005 at Manila, that assessed the culture of vannamei ASEAN countries agreed to culture at reasonable documentation. At present 3-4 private farms are trying experimental culture of vannamei.



Status of Shrimp Hatcheries

In the year 2000, total number of shrimp hatcheries amounted to 13 only and in 2003 altogether 26 shrimp hatcheries were fully operating with capacity of 190 million shrimp post-larvae. Hatchery system is mainly based on advanced method. The breeders are available from Bay of Bengal and Andaman Sea. It is well famous that the brood-stocks from Andaman Sea are supreme in terms of quality and size. Only PCR negative the Pacific white shrimp SPF *vannamei* seeds has been permitted to import for culture in domestic water.

Seed production of freshwater prawn and marine shrimp by hatcheries under the DOF and Private Hatcheries in 2011-2012 fiscal years are as follows:

Commodity	Department of Fisheries owned		Private owned	
	Number of Hatcheries	Production (Million)	Number of Hatcheries	Production (Million)
Freshwater Prawn	1	0.6	11	89.0
Marine Shrimp	4	2.8	-	-

Marine Finfish Culture

Myanmar has many commercial and culturable species such as grouper, snapper, sea bass, mullet, milkfish etc. Among these species, grouper, snapper and sea bass are found as the most common and popular species that command the high price. There are 3-4 private farms that culture groupers in net cages. Private marine net cage farming is found to be lucrative despite some of the constraints of quality seed and technology requirement. In the development of marine fin fish aquaculture, adequate seed supply to meet the requirement becomes main constraint. The species are grouper, red snapper and sea bass and their seeds are being collected from the wild as seed production technology is not yet developed. However, Seabass (*Lates calcarifer*) and grouper (*Epinephelus malabaricus*) seed production have been successful in 2004 and 2010 in Department of Fisheries.



Others Mariculture

Some experimental farming of oyster, clam, sea weed etc. are under process in Myanmar.

Pilot farming project of sea weed, *Eucheuma cottonii* was initiated in southern Myanmar coastal areas jointly by the Department of Fisheries and MSC, a company from South Korea. Since the result showed very encouraging technical possibilities and economic return company submitted a proposal to invest 1000 hectare seaweed culture farm attached with a processing plant under 100% foreign investment. At present land area of 15 hectare has been allocated to MSC to construct a processing plant and construction is under way. The new endeavor will create employment opportunity for local people and also technology transfer to the local entrepreneurs and communities.

Like wise potential investors from Japan has conducted feasibility survey for seaweed (*Euchenma cottonii*) farming in the coastal area of Myanmar. At present, three Myanmar private companies, Kyaw Kyaw Phyo company, AIM company and Sea Treasure Island company are also conducting seaweed farming at Tanintharyi Division to extend the export scale.

The production of seaweeds recorded an increase from 292.05 tonnes in 2010-2011 to 400.96 tonnes in 2011-2012. The value was also increased from US\$ 0.204 million in 2010-2011 to 0.280 million in 2011-2012. The increase in terms of quantity was contributed by the increase in productivity and the culture area from 323.50 acres in 2010-2011 to 340.50 acres in 2011-2012.



Cold Water Species Aquaculture

Geographically Myanmar has embracing temperate cool and ice capped mountain in the north and warm and sandy tropical beach at the south. In the northern part of the country, cold water fish is one of the major sources of animal protein in the daily diet of rural ethnic people. In this regard, DoF has already run a plan to expand seed production through backyard hatchery technology and pilot scale of grow-out farming with appropriate and locally available feed ingredients.



Nga- Tauk
(Copper mahseer)



Yae-Geh- Nga
(*Schizothroax richardsonii*)



Nga-Ni
(*Tor spp.*)

Currently, some private companies are trailed on sturgeon farming at Shan State, such species imported from Vietnam. In this regard, culture of sturgeon is included in the future plan obtaining biotechnology from Vietnam.

Application of Good Aquaculture Practices (GAP)

The Department of Fisheries of Myanmar already initiated Good Aquaculture Practices as national standard in fish and shrimp farming since 2011. The Department of Fisheries established as National Task Force for implementation of GAP application in Myanmar last year and considered to follow up and practices on ASEAN's Standard on GAP for shrimp farming in compliance with the current status of shrimp farming practice in Myanmar. Myanmar learns and tries to follow the Strategies Plan on the Development and Implementation of ASEAN shrimp GAP. Support to GAP, DoF established the Directives and Regulation for prohibiting the use of chemical in aquaculture. Recently, cultured areas of about 11098.87 acres for fish, shrimp and soft-shelled crab farming have applied to get national GAP certificates. The Department of Fisheries has issued GAP certificates on 3826.58 acres (1549.2 ha) for 7 farmers during this year.



Inspection activities to issue GAP certificate by national taskforce team

Aquaculture support services

In 2011-2012, According to the coordinating plan among a Aquaculture Division, Regional and State of DOF and the fish hatcheries stations will support to fish farmers for providing breeders and technical advices to small-scale farmers for poverty reduction and rural development at the township level. Under supervision of aquaculture division , aquatic animal health and disease control section and Freshwater fish research section are giving on-site support services for fish farmers who want to check their ponds water/soil parameters and health condition of their cultured fish for preventing the fish disease . In addition, Aquatic animal health and disease control section also provides PCR check on shrimp diseases of shrimp seeds for shrimp farmers. In 2011-2012, Freshwater fish research section gave services of water on analysis 744 cases and soil analyses on 18 cases. Aquatic animal health and disease control section provided support services of on-site field analyses on 43 cases, lab disease analysis on 28 cases and PCR check for disease on 20 cases.

Aquaculture development training programmes

regional level in collaboration with SEAFDEC for promoting the aquaculture industry. For national level, four fish hatcheries stations and Institute of fisheries technology at Sagaing region offered several short-term training courses for the capacity-building of their skill. For international level, the Department of Fisheries (Aquaculture Division) was conducted the collaboration with Southeast Asia Fisheries Development Center (Aquaculture Department, Philippine) such as conducted international training course on mud crab culture at Chaung Thar shrimp hatchery. Primarily, extension officers in the regions/states department of fisheries, college/university teachers, students, entrepreneurs and small scale fish farmers were also benefited from the courses. Training programmes conducted this year are as below;



Training courses conducted during 2011-2012.

No.	Title	Duration	No. of participants
1	Training programme on "Freshwater fish seed production and genetic improvement" (Hlawgar Fishery Station)	4-14 July 2011	18
2	Training programme on "Basic freshwater fish culture" (Sagaing Institute of Fisheries Technology)	20 July 2011 to 2 August 2011	7
3	Training programme on "Basic freshwater fish culture" (Dargushizar village, Putao , Kachin state)	11-13 August 2011	31
4	Training programme on "Basic freshwater fish culture" (Zedam village, Putao, Kachin state)	18-20 August 2011	35
5	Training programme on "Basic freshwater fish culture" (Sagaing Institute of Fisheries Technology)	6-20 September 2011	10
6	Training course on "Basic integrated farming of freshwater prawn and fish culture technology" (Hlawgar Fishery Station)	14-24 November 2011	19
7	Training course on "Basic integrated farming of freshwater prawn and fish culture technology" (Yaezinn Fishery Station)	5-12 December 2011	28
8	Training course on "Breeding of Common carp and Basic freshwater fish culture"	14-28 February 2012	16
9	International training course on Mud crab culture	26 September 2011 to 1 October 2011	6 participants and 11 Observers

Activities of Fish Inspection and Quality Control Division in 2012

Fish Inspection and Quality Control Division, Department of Fisheries has approved (13) processing establishments which complied with EU regulation and submitted to European Commission and approved by European Commission for wild catch fishery products shown in EU website <https://ec.europa.eu>

EU Commission dispatch expert to assist to Myanmar fishery sector of Laboratory staffs for Training on drug residue monitoring plan on (17-7-2011 to 30-7-2011) and also Training EU requirement for Fishery Products in third countries on (5-12-2011 to 16-12-2012).

According to AQSIQ of China legislation Decree 118, Fish Inspection and Quality Control Division communicated with authorized person in AQSIQ China to get approval for the fish meal export to China and (6) Fish meal factories are approved in 2011 after the inspection of AQSIQ inspectors from China.

According to Circular Guiding on the Food Hygiene and Safety Control for importing countries must be registered in National Agro Forestry-Fisheries Quality Assurance Department (NAFIQAD). Fish Inspection and Quality Control Division linked with NAFIQAD to get approval to export marine products from Myanmar . After evaluation of documents submitted by DOF Myanmar. NAFIQAD approved (15) processing establishments for Vietnam market and NAFIQAD shown in their website www.nafiqad.net

Department of Fisheries has been implementing food safety management system such as Good Manufacturing Practices (GMP) ,Sanitation Standard Operating Procedures (SSOP) and Hazard Analysis Critical Control Points (HACCP) system in export orientated fishery establishments specifically according to ASEAN Economic community Blue print and world trade organization of Sanitary and photo sanitary agreement (SPS) and importing countries requirements.

Statistic of Exported Fish and Fishery products from Myanmar (2011-2012) book was published by FIQC. It mention about exported marine products by species wise, county wise, Company wise and top ten of exported Fish and Fishery products from Myanmar.

Myanmar have exported varieties of Marine Products such as Seawater fish , Fresh water fish , Seawater Prawn , Fresh Water prawn ,Soft Shell crab , Dried Prawn , Dried Fish , Live crab, Live Lobster etc. to (27) countries. Including EU member countries , Middle East , China , Japan and ASEAN countries.

In (2011-2012) fiscal year , Fish, Prawn and Other marine products total (316981.324) metric ton were exported from Myanmar and got total export earnings (653.850) million united states dollars.

Research and Development Training Supervision Section

Department of Fisheries, Research and Development Division, Fisheries Training Supervision Section has monitoring the fisheries training centers in Yangon (Gyogone), Pyapon and Sagaing to promote the Human Resources Development through the training. In the fiscal year 2011-2012, five training courses have been successfully conducted associated the fields of Aquaculture, Fisheries Management, Post Harvest Technology, Fishing Gear and English Speaking and Computer: totally 776 trainees could gain knowledge of fisheries relevant fields.

No.	Training Course	2011-2012		Remark
		No of Course	No of Trainees	
1.	Aquaculture	8	169	DOF Training Center (Sagaing, Pyapon), Fishery Station (Hlawgha, Yasin)
2.	Fisheries Management	5	669	DOF Training Center (Gyogone, Sagaing, Pyapon)
3.	Post Harvest Technology (Food Safety & Quality Control, Processing)	10	371	DOF Training Center (Gyogone, Pyapon), Laboratory of Microbiology & MFF
4.	Fishing Gear	4	124	DOF Training Center (Pyapon)*
5.	English Speaking & Computer	3	65	DOF Training Center (Gyogone, Sagaing)
Total		30	1398	

By hosting the **Regional Workshop on Strengthening Assessments of Fisheries and Aquaculture in the Asia-Pacific Region for Policy Development and Management** (4 to 6 October, 2011) in Yangon, **International Training Course on Mud crab Culture** (26 September to 1 October, 2011) and the **44th Meeting of the SEAFDEC Council** (2 April to 6 April, 2012) in Nay Pyi Taw, the 2011 – 2012 Fiscal year can be defined as a remarkable year for DOF in the arena of International relation.

By the Invitation of the International, Regional Organizations and Partner Countries, DOF Staffs had participated in the Meetings, Workshops, Seminars and Trainings in other countries and the experiences and knowledge gained from those events will contribute the objectives of DOF in her continuing efforts towards achieving sustainable fisheries development for food security. The participated list of events was as follows;

N o.	Organization	2011-2012					
		Training		Workshop/Meeting / Seminar/ Duty		Delegation/ Study Tour	
		Time	Person	Time	Person	Time	Person
1.	SEAFDEC	6	10	18	38	-	-
2.	BOBLME	-	-	11	18	-	-
3.	JICA	6	9	-	-	-	-
4.	SEASTAR 2000	-	-	2	4	-	-
5.	AKEC	-	-	1	1	-	-
6.	APAP	-	-	1	1	-	-
7.	NACA	1	1	3	4	-	-
8.	APFIC	-	-	1	2	-	-
9.	EU	-	-	2	5	-	-
10.	Gov Myanmar	-	-	3	3	-	-
11.	TICA	1	1	-	-	-	-
12.	KOICA	1	1	1	1	-	-
13.	Gov China	-	-	1	2	-	-
14.	FAO	1	1	4	6	1	4
15.	Gov Japan	1	1	-	-	1	1
16.	Gov Thai	-	-	1	1	-	-
17.	ACFS	-	-	1	2	-	-
18.	ISO	-	-	1	2	-	-
19.	Gov Egypt	1	1	-	-	-	-
	Total	18	25	51	90	2	5



Among the Meetings, the ASEAN- SEAFDEC Conference on Sustainable Fisheries for Food Security towards 2020 “Fish for the People 2020 :Adaption to a Changing Environment” , convened in Bangkok , Thailand from 13-17 June 2011 was participated by Myanmar delegates and the Ministerial Session was attended by H.E Mr. Khin Maung Aye , Deputy Minister of the Ministry of Livestock and Fisheries . Now, the Resolution and Plan of Action already endorsed by the 32nd AMAF have been implementing in Myanmar.



Within the Fiscal year, the following projects have been conducting in Myanmar for the development of fisheries sector in cooperation with FAO, JICA, BOBLME, SEAFDEC and WCS. These projects were as follows;

Sustainable Small Scale Fisheries and Aquaculture Livelihood in Coastal Mangrove Ecosystem (GCP/MYA/010/ITA) project, supported by FAO , from June 2009 to March 2013 in Ayeyarwady Division (US\$ 1.25 Million). (Project Manager : U Maung Maung Lwin ,Assit. Director)

Small Scale Aquaculture Extension for Promotion of Livelihood of Rural Communities in Myanmar Project (SAEP),supported by JICA , from 2009 to 2013 in Ayeyarwady Division, Pegu Division and Kayin State (US\$ 150000). (Project Manager: U Khin Maung Soe ,Dy. Director)

Sr.	Subject	Monbukagakusho Scholarship Program (Japan)			NACA Scholarship Program (Thailand)	TICA Scholarship Program (Thailand)		KOICA Scholarship Program (Korea)	
		M.Sc	Ph.D	Still Studies	M.S	B.Sc	M.Sc	M.Sc	Still Studies
1.	Marine Science	-	3	2(Ph.D)	-	-	-	-	-
2.	Aquatic Animal Nutrition	1	3	-	-	-	-	-	-
3.	Aquatic Bio Science	-	1	-	-	-	-	-	-
4.	Aquatic Resources Science	-	-	1(Ph.D)	-	-	-	-	-
5.	Aquaculture	-	-	-	2	-	1	-	-
6.	Applied Microbiology	-	-	-	-	-	1	-	-
7.	Science & Food Technology	-	-	-	-	4	-	-	-
8.	Fisheries Science	-	2	-	-	-	-	1	1(M.Sc)
	Total	1	9	3	2	4	2	1	1

Activities Conducted by Marine Fisheries Research Section

Bay of Bengal Large Marine Eco-system Programme (BOBLME)

The Bay of Bengal region is defined as comprising the Coastal watershed. Islands, coral reefs, continental shelves and coastal and marine waters of the Maldives, Sri Lanka, the East coast of India, Bangladesh, Myanmar, the West coast of Thailand, the west coast peninsular Malaysia, and the province of Aceh, Riau and North and west Sumatra, Indonesia. The water body is approximately 3.3 million Km² in area, together with the drainage systems, has been identified as one of the world sixty four last marine Eco-system, (LME) sharing a distinct bathymetry, hydrography, productively, and tropically dependent population.



One quarter of the world's population reside in the littoral countries of the Bay of Bengal, which mean 400 million people live in the Bay catchment area alone, many subsisting at or below the poor level. An average 65% of the regions appears to be on the increase. The Bay of Bengal region supports numerous of coastal fisheries, it is significant socio-economic importance to the countries boarding the water body, an estimate 2 million fisher operate in the coastal and inshore waters are directly employed in the sector. These fisheries are coastal demersal, shrimp and small pelagic fisheries, as well as offshore fisheries for tuna and similar species. One key issue in the region is over exploitation, Second key issue is habitat degradation and third key issue is land base pollution.

The main objective of the project is to maintain the sustainable fisheries management, to protect the critical habitat area, to secure the food security and poverty reduction, the bay of Bengal countries (8 countries) participating the long term regional fisheries management program, FAO of the United Nation to assist in the development of a project, funding by GEF and other donor such as Sida, NOAD, NOAA, World Bank. A series of workshop, meeting and training were held at the member countries, the regional coordinating Unit established the office at Phuket, Thailand.

Myanmar is one of the member countries, the competent authority for the project is Department of fisheries, under the Ministry of Livestock and Fisheries.

The first phase of the project year (2010-2014) is now implementing on the base of the project document, the five components are :

1. Strategic Action Programme
2. Coastal/Marine Natural Resources Management and Sustainable Use
3. Improved understanding and Predictability of the BOBLME Environment
4. Maintenance of Ecosystem Health and Management of Pollution
5. Project Management Monitoring and Evaluation, and knowledge Management

During 2010, Two National events are (1) National Inception Workshop, (2) National Task-force meeting (3) Myeik Archipelago Management workshop were held at Yangon Myanmar, and Participated seven workshop/meeting, three training course, at member countries.

In 2011, Two TDA national Consultation workshop held at Yangon, Fisheries Pre-assessment work and Policy review workshop was held at Yangon, Myanmar. Four research programs such as shark, marine Protected Area (MPAs) are being develop with International Expert and organization. Expert from Myanmar Participant in the following events. (1) Regional ICM workshop (Bangladesh) (2) Integrated Coastal Management ICM best practices and lesson learned workshop, Southeast Asia (Indonesia), (3) Shark working group meeting (Maldives), (4) APFIC-BOBLME, strengthening assessment of fisheries and Aquaculture workshop (Myanmar) (5) Myeik Archipelago workshop (Thailand), (6) APFIC-BOBLME Climate Change workshop (Nepal), (7) BOBLME workplan meeting (Thailand), (8) Project Steering Committee Meeting (Thailand) (9) Integrated Coastal Management at AIT (Thailand) (10) Fisheries Assessment Training Yangon, Myanmar) (11) BOBLME-MFF Communication workshop on Scientific paper writing (Thailand) (12) BOBLME-MFF Communication workshop on Scientific Presentation (Maldives).

In 2012, (1) BOBLME -NACA, Trans-boundary diseases in Aquaculture Workshop (Thailand), (2) BOBLME-FAO-SEAFDEC Marine Protected Area Working Group Meeting (Thailand), (3)TDA Confirmation and SAP Development Meeting (Thailand) (4) BOBLME Project, Workplan Development Meeting (Thailand)(5)The Sub-regional Consultative Meeting (Thailand) (6) BOBLME Fisheries Statistics Working Group Meeting (Indonesia) (7) The Project Steering Committee (PSC) meeting (Sri Lanka). Present time the BOBLME Project is implement by the 2011 Annual workplan.

The following major out puts achieved by the project: (1) Report on TDA Consultation (2) Presentation on Shark (3) Policy review Questionnaires (4) Status of MPAs in Myanmar (5) Assessment of the Hilsa and Indian Mackerel fisheries in Myanmar.

Ayeyarwady Dolphin Conservation Conducted by Department of Fisheries in Ayeyawady River

Ayeyarwady (Irrawaddy) River is one of the biggest river in Southeast Asia, and it's the most dominant feature in Myanmar (Burma). This arises from Northern hill streams and through steep gorges upstream of Bhamo, and then flow the entire length of country, for approximately 2,200 km, before the reaches of Andaman Sea.



The 19th century naturalist John Anderson described Ayeyarwady (Irrawaddy) dolphin in the Ayeyarwady Rivers as morphologically distinct from *Orcaella brevirostris*.

The Department of Fisheries (DoF) protected and conserved the Ayeyarwady dolphin (especially established Ayeyarwady Dolphin Protected Area) the area between and Kyaukmyaung 72 Kilometers segment of Ayeyarwady River.

Every year the Ayeyarwady Dolphin monitoring and surveillance team which collaborate with Wildlife Conservation Society (WCS) and the Department of Fisheries staffs conducted visual boatbase survey, and the teams always identified and estimate the population and group size and threats to the dolphins between the protected area. DoF already printed poster for people awareness and a pamphlet (about Ayeyarwady Dolphin and conservation activities) to the local communities who live along the both river side of the river. Myanmar is one of the country for Eco-tourism who can enjoy cooperative fishing practice with Ayeyarwady dolphin and cast-net fishermen. During the open season, at the upper reaches of the Ayeyarwady River, the cast net fisherman who conduct cooperative fishing practices cooperation with dolphin, it is one of the famous fishing practices of Myanmar. As a part of inland fisheries management for the sustainable fisheries development, Ayeyarwady dolphin conservation Team initiated and encourage the cooperative fishermen, to be practice pen culture a fish species(rohu) grow-out farming in natural water in the protected area of Ayeyarwady river segment and the Ayeyarwady Dolphin Conservation supported fingerling fish and fish pallet to those fisherman. After 3 months, some fish are released into natural water of Ayeyarwady river for the conservation of freshwater fishery resources, some are for the fishermen to get surplus income.



The Ayeyarwady dolphin conservation team conducted patrol the protected area twice a month and also conduct educational program in the Protected Area to prevent illegal fishing techniques and fishing gears which can harm the dolphin and fishes along the river. The Conservation Team conducted the mercury contamination on fishes in Ayeyarwady River.

A wide range of research and conservation activities have thus been implemented in the protected area under a guidance of Department of Fisheries.

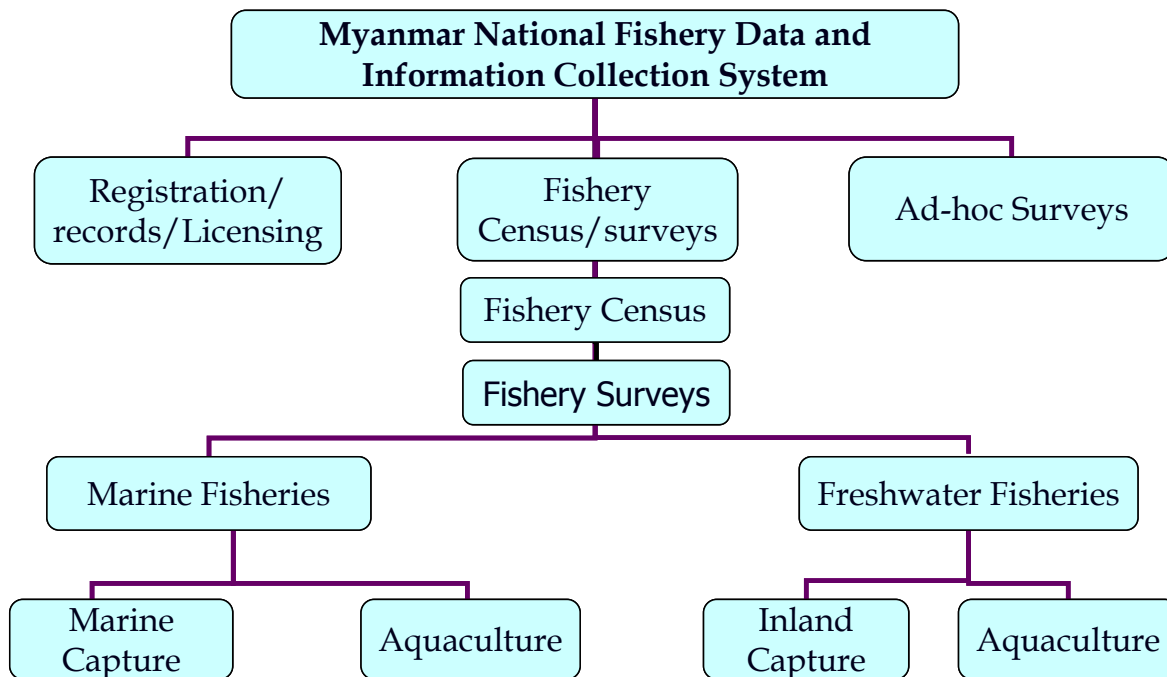
Planning and Statistical Division

Fisheries statistics are not only a key component of a fisheries information system required for policy, planning, monitoring and management of fisheries but also a vital tool for knowing about the current and past status of fisheries and its trends on the development of the sector.

In major data collection fisheries statistics in Myanmar are three main sources of statistics, such as censuses, surveys and registration and licensing. The Central Statistical Organization (CSO) is the only authoritative organization in Myanmar that has the mandate to collect, process, organize and supply data for the use of planners, policy makers and reporting for all users. The Directorate of Livestock and Fisheries under the Ministry of Livestock and Fisheries (MOLF) is conducting the data collection, compilation, analysis and dissemination for fisheries and Livestock sector. The data collection in fisheries is implemented by the Department of Fisheries (DoF).

The objectives of fishery data collection

- (1) To fulfill the requirements of information for the users in relation to fishery sector;
- (2) To access and focus fisheries resources potential and productivity;
- (3) Prediction and planning to meet the sustainable fisheries;
- (4) Making policy and decision on fishery sector;



The approaches to a Rural Development and Poverty Alleviation in Livestock & Fisheries Sector

1..Rural populace Rural populace constitute the majority of the population not only in Myanmar but also in most countries. As Myanmar is an agricultural country , 70% of hervast population lives directly or indirectly, on income derived from agriculture. Some farmers run their lives for fishing at their part time-work . So the



fishery sector is considered as the most important one after the agriculture sector.

2. In the livestock and fisheries sector, the supervisory committees for Rural Development and Poverty Alleviation was formed and these committees carried out the task of its goals for rural development and poverty alleviation in livestock and fisheries sector. Moreover, these committees is carrying out the tasks for achieving poverty alleviation and to generate more earning ensuring development of livestock and fisheries industries in rural areas.

MYANMAR FISHERIES FEDERATION



Myanmar Fisheries Federation (MFF) is one of the highest NGOs commercial organizations to encourage and promote fishery industries of Myanmar. It was created by Myanmar Fisheries Association in order to enable the fishery entrepreneurs from states and divisions to join it on 1st December 1998. Moreover, Myanmar Fisheries Federation was constituted as a member of ASEAN Fisheries Federation in 2002.

Some of the active association under MFF are Myanmar Shrimp Association, Myanmar Fish Farmers Association, Myanmar Fishery Products Processor and Exporters Association, Myanmar Aqua Fish Association, Myanmar Marine Fisheries Association, Myanmar Freshwater Capture Fisheries Association, Crab Entrepreneurs Association. Apart from this, local level Associations are formed in line with public administrative structure such as division/ state, district and township level fisheries federations.

Department of Fisheries (DoF) and Myanmar Fisheries Federation (MFF) are like twins under the Ministry of Livestock and Fisheries' umbrella. In order to better manage the fishery sector, DoF and MFF has teamed up to work together to achieve our common goal as stated in our regional slogan:- "Fish for the people".

Myanmar Fisheries Federation is one of the highest NGOs commercial organization to encourage and promote fishery industries of Myanmar as well as to support the fishermen and fish farmers.

In order to exchange views and to know the up-date information of the livestock and fishery sector, the regular weekly meetings are held at the conference hall in the MFF every week since June 6, 2005 for the development of Myanmar Fisheries.

Myanmar Fisheries Federation performs many supporting roles.

- (1) MFF is able to support application made by its members to Department of Fisheries to undertake fisheries and aquaculture activities.
- (2) MFF also can recommend application to the Livestock and Fisheries Bank for loan application.
- (3) MFF has a good support from the government and can negotiate directly for members' benefits.
- (4) MFF also helps with negotiation of selling and harvesting of fish; and shrimp and working collectively.

There are many members with small property. The membership fee is Kyats: 300 per year and Kyats: 5,000 for life. Any individual interested in it can contact MFF for further information at the address given below:-

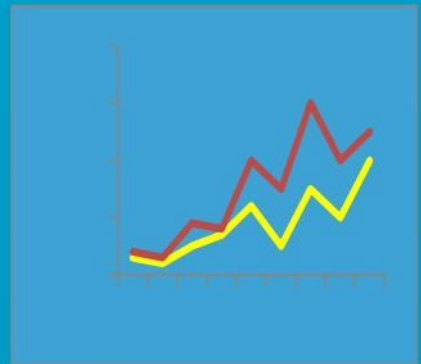
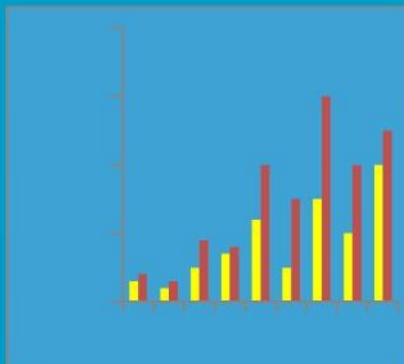
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AQUACULTURE DEVELOPMENT HAS CONTRIBUTED TO FOOD SECURITY AND POVERTY ALLEVIATION



Statistics: For Better Fishery Management