

THE STATUS OF QATAR'S FISHERIES DURING 1980-1990

By

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حالة المصايد القطرية في الفترة من ١٩٨٠ - ١٩٩٠

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لقد أجريت دراسة على وضع المصايد القطرية خلال الفترة من ١٩٨٠ إلى ١٩٩٠ ، وذلك بالاستعانة بالبيانات التي تنشرها إدارة الثروة السمكية سنوياً . وقد شملت هذه الدراسة كمية الإنتاج والعائد السنوي من الأسماك القطرية كما تمت دراسة الإنتاج والعائد الربحي لأهم عائلات الاسماك في المياه القطرية .

وقد أوضحت الدراسة أن الإنتاج السنوي القطري قد زاد زيادة ملحوظة ابتداء من عام ١٩٨٦ . وقد أدت هذه الزيادة إلى تناقص استيراد الاسماك من الدول المجاورة من ٣٠٪ من قيمة الاستهلاك الكلي عام ١٩٨٥ إلى ٦,٣٪ فقط عام ١٩٨٩ . كما أوضحت الدراسة أيضاً أن ٨ عائلات من الأسماك تشكل حوالي ٧٨٪ من قيمة الإنتاج الكلي وحوالي ٧٦٪ من القيمة الكلية لمبيعات الأسماك القطري خلال الفترة المذكورة . وهذه العائلات هي كما يلي مرتبة ترتيباً تنازلياً حسب كمية الإنتاج السنوي :

عائلة ليثرينيدي - عائلة كارانجيدي - عائلة سيرانيدي - عائلة سباريدي - عائلة سكومبريدي - عائلة سيجانيدي - عائلة ليوتجانيدي - وعائلة سفيرانيدي .

وقد تمت مناقشة مسار الإنتاج والعائد السنوي والترتيب طبقاً لرغبة المستهلك لكل عائلة من هذه العائلات على حده . كما وضعت بعض التوصيات والأقتراحات وذلك بهدف الوصول بالمصايد القطرية إلى الدرجة المثلى للإنتاج .

Key Words: Arabian Gulf, Commercial fishes, Composition, Consumption, Qatar's fisheries, Revenue.

ABSTRACT

The present study was conducted to overview the status of Qatar's fisheries during 1980-1990, using the fishery statistics data, issued annually by the Department of Fisheries, Ministry of Municipal Affairs & Agriculture, Qatar. Annual local catch, market patterns, annual revenue and contribution of the commercially important fish families to the total catch, have been analyzed. The study demonstrated that the annual local production has sharply increased in recent years. This has resulted in reducing the amounts of fish imported from neighbouring countries from 30% of the total consumption in 1986 to only 6.3% in 1989. The study also showed that 8 families; Lethrinidae, Carangidae, Serranidae, Scombridae, Sparidae, Siganidae, Lutjanidae, and Sphyrænidae (in descending order) contributed about 78% of the total local catch and 76% of the total annual fisheries revenue during the mentioned period. The annual catch pattern, demand, price, revenue and rank of each family have been critically discussed.

INTRODUCTION

About 150 fish species, belonging to 50 families, are currently recorded in Qatari waters (Sivasubramaniam & Ibrahim, 1982). However, only about 43 species, belonging to 26 families are economically important. Among these, 8 families, namely; Lethrinidae, Carangidae, Serranidae, Scombridae, Sparidae, Siganidae, Lutjanidae and Sphyrænidae are the most important. They represented about 78% of the total fish catch from 1980 to 1990 (Anonymous, 1980-1990). These families also contributed

about 76% of the annual retail value of the commercial catch through that period.

However, basic information on stock abundance, distribution, fishing rates and efforts and market potentials of these fishes is not available. Collective data on, and relevant analyses of Qatar's fisheries are, therefore, imperative for better development and management.

The present study was designed to throw the light on local catch and consumption, market pattern and annual revenue of

Table 2

Annual landings (MT) and percentage of total production of commercially important fish families in Qatar during 1980-1990.

Year	Family																Total	
	Lethrinidae		Carangidae		Serranidae		Scombridae		Sparidae		Siganiidae		Lutjanidae		Sphyraenidae			
	landing	%	landing	%	landing	%	landing	%	landing	%	landing	%	landing	%	landing	%		
1980	248	14.3	366	21.1	171	9.9	144	8.3	41	2.2	166	9.6	126	7.2	57	3.3	1319	75.9
1981	346	15.3	553	24.3	248	10.9	230	10.2	61	2.7	123	5.4	173	7.6	56	2.5	1790	78.9
1982	356	18.0	446	22.6	230	11.6	177	9.0	45	6.6	122	6.2	107	5.5	53	2.7	1536	82.2
1983	472	22.3	415	19.6	318	15.0	158	7.5	80	3.8	112	5.3	133	6.3	57	2.7	1745	82.5
1984	781	25.0	404	12.9	373	11.9	304	9.8	172	5.5	156	5.0	166	5.3	91	2.9	2447	78.3
1985	493	19.8	383	15.4	345	13.9	289	11.6	145	5.8	147	5.9	95	3.8	79	3.2	1979	79.4
1986	441	22.3	337	17.0	204	10.3	124	6.3	115	5.8	98	4.9	101	5.1	100	5.0	1520	76.7
1987	672	25.1	394	14.7	236	8.8	114	4.3	177	6.6	128	4.8	132	5.0	152	5.7	2005	75.0
1988	728	23.6	381	12.4	308	10.0	143	4.6	276	8.9	136	4.4	152	4.9	141	4.6	2265	73.4
1989	1105	25.3	516	11.8	427	9.8	213	4.9	386	8.8	186	4.2	239	5.5	182	4.2	3254	74.5
1990	1157	20.3	737	12.9	1015	17.8	562	9.9	319	5.6	257	4.5	183	3.2	52	0.9	4282	75.1
Mean	618	21.0	449	16.8	352	11.8	224	7.9	165	5.7	148	5.5	146	5.4	93	3.4	2195	77.5

Table 3

Average annual price (QR/kg) and retail value (% of the overall fish selling) of the economically important fish families in Qatari waters during 1980-1990.

Year	Family															
	Lethrinidae		Carangidae		Serranidae		Scombridae		Sparidae		Siganiidae		Lutjanidae		Sphyraenidae	
	price	%	price	%	price	%	price	%	price	%	price	%	price	%	price	%
1980	7.9	11.1	11.1	22.3	10.2	9.6	14.7	11.6	8.3	1.9	17.2	15.7	4.0	2.8	7.1	2.2
1981	6.5	10.1	10.9	27.1	8.4	9.4	13.6	14.0	8.3	2.3	15.5	8.6	3.2	2.5	6.4	1.6
1982	7.6	13.5	11.9	26.6	10.9	12.6	13.4	11.9	8.6	3.8	15.1	9.2	3.9	2.1	5.9	1.6
1983	8.1	17.4	13.6	25.7	10.4	15.0	12.8	9.2	8.0	2.9	17.4	8.9	4.9	3.0	7.2	1.9
1984	8.3	21.0	14.9	19.5	9.1	11.0	14.5	14.3	10.9	6.1	18.0	9.1	4.8	2.6	8.4	2.5
1985	7.1	15.4	11.5	19.4	9.6	14.6	13.4	17.1	10.4	6.7	14.9	9.7	4.8	2.0	6.5	2.3
1986	4.9	13.8	10.1	21.8	8.6	11.2	14.0	11.1	10.4	7.6	13.5	8.5	4.3	2.8	5.1	3.3
1987	3.6	12.2	12.0	23.8	8.4	10.0	12.2	7.0	10.0	8.9	13.4	8.6	4.0	2.7	8.4	3.7
1988	3.8	11.5	10.7	17.0	7.8	10.0	12.3	7.3	10.3	11.9	13.0	7.4	4.0	2.5	5.0	2.9
1989	3.3	10.7	11.1	16.8	8.1	10.2	11.8	7.4	8.9	10.1	14.0	7.7	3.7	2.6	5.1	2.7
1990	3.1	8.7	10.4	18.7	7.0	17.3	10.8	18.8	8.2	6.4	15.8	9.9	4.0	1.8	4.6	0.6
Mean	4.4	13.1	11.8	21.7	9.0	11.9	13.0	11.4	9.3	6.2	15.3	9.4	4.1	2.5	6.0	2.3

The production of siganid fishes in Qatar has been fluctuating between 100 and 180 MT/year, during 1980-1990 with the exception of the year 1990 where that catch mounted 257 MT (Fig. 3). Despite that rabbitfish production represented only 5.5% of the total annual landings during the mentioned period, their selling value contributed 9.4% to the total revenue.

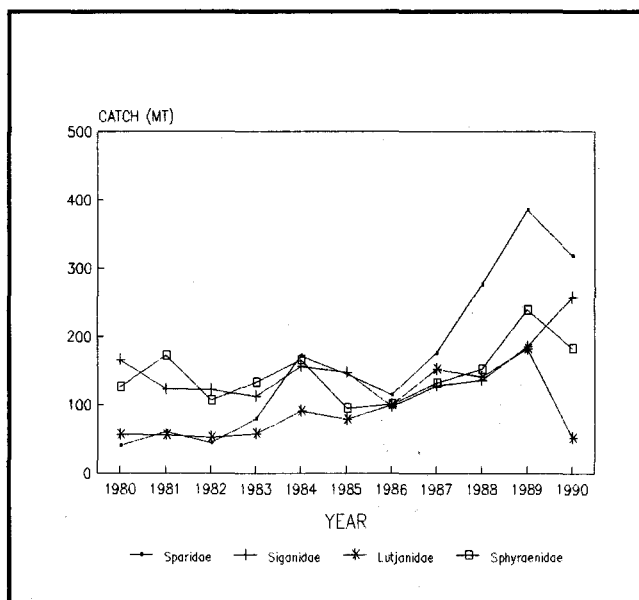


Fig. 3: The mean annual catch of the less dominating families; Sparidae, Siganidae, Lutjanidae and Sphyraenidae in Qatar during 1980-1990.

As a result of the increased demand for rabbitfish in Qatar associated with shortage in production, the government of Qatar has initiated a pilot project to investigate the potential of their intensive culture, under controlled conditions. The preliminary results are encouraging (Kawahara *et al*, 1991).

7. Family Lutjanidae:

This family is represented by seven species in Qatar's fisheries (Appendix 1). However, lutjanid fishes are not separated into their respective species. Instead, they are all landed under two local names; Naiser and Hamrah. The average annual landings of these fishes has been relatively steady during 1980-1990, ranging from about 100 to 180 MT/year, with the exception of 1989, where the production reached 239 MT (Fig. 3). Lutjanid fishes represented 5.4% of the total local production during the mentioned period. Meanwhile, they contributed only 2.5% of the total retail selling value. The demand for these fishes in Qatar is relatively low. This is reflected on their low prices, which ranged from 3 to 5 QR/kg with an average of 4.1 QR/kg. This price is the lowest among all commercial fishes landed in Qatar.

8. Family Sphyraenidae:

Two species; *Sphyraena jello* and *S. obtusata* represent sphyraenid fishes in Qatari commercial catch. The demand for these fishes is not as high as it is for other valuable species. This is reflected on the relatively low production (3.4% of the total local landing) and price (6.2 QR/kg). In addition, the price of these fishes has been gradually decreasing since mid eighties (Table 3).

Table 4

Ranking of economically important fish families in Qatari waters according to their annual prices, and local demand during 1980-1990.

Family	Average annual price (QR/kg)	Rank
Siganidae	15.3	1
Scombridae	13.0	2
Carangidae	11.8	3
Sparidae	9.3	4
Serranidae	9.0	5
Sphyraenidae	6.0	6
Lethrinidae	4.4	7
Lutjanidae	4.1	8

CONCLUSIONS AND RECOMMENDATIONS

The demand for Siganid, carangid, Scombrid, and Sparid fishes in Qatar is sharply increasing. However, it is apparent from the foregoing analyses of Qatar's fisheries during 1980-1990 that the exploitation rate of these fishes may have been lower than what their fisheries could sustain. In addition, information on the biology, stock assessment and distribution, spawning and nursery grounds, life cycles and migration of these fishes in the Gulf is lacking. Intensive studies should, therefore, be conducted in cooperation with neighbouring countries, in order to better understand their life systems, and, in turn, better manage their fisheries. Export of low demanded fish families such as Lethrinidae, Lutjanidae and Sphyraenidae to countries where the demand is high, should also be considered.

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Appendix 1

Fish species represented in the catch of the commercially important families in Qatari waters during 1980-1990.

Family	Species	Common name	Qatari name
<i>Lethrinidae</i>	<i>Lethrinus lentjan</i>	Redspot Emperor	Shery
	<i>L. nebulosus</i>	Starry Pigface bream	Shery
	<i>L. miniatus</i>	Longface Emperor	Shery
	<i>L. kallopterus</i>	Orange spotted emperor	Shery
<i>Carangidae</i>	<i>Alepes mate</i>	Cravalle	Karary
	<i>A. melanoptera</i>	Blackfin cravalla	Qerfah
	<i>Carangoides bajad</i>	Yellow spotted cavalla	Jush
	<i>C. chrysophrys</i>	Longnose cavalla	Ozayni
	<i>C. malabaricus</i>	Malabar cavalla	Zubaidy
	<i>Decapterus kiliche</i>	Scad mackerel	Saddah
	<i>Gnathanodon speciosus</i>	Golden trevally	Rabeeb
	<i>Selar crumenophthalmus</i>	Bigeye scad	Dordoman
	<i>Selaroides leptolepis</i>	Yellow stripe trevally	Yannisah
	<i>Seriola dumerili</i>	Greater amber jack	Hamam
	<i>Seriolina nigrofasciata</i>	Black banded trevally	Hamamah
<i>Trachurus indicus</i>	Horse mackerel	Khadra	
<i>Serranidae</i>	<i>Epinephelus tauvina</i>	Greasy grouper	Hamoor
	<i>E. chlorostigma</i>	Brown spotted grouper	Qatmah
	<i>E. jayakari</i>	White spotted grouper	Hamoor
<i>Scombridae</i>	<i>Scomberomorus commerson</i>	King Mackerel	Kanaad
<i>Sparidae</i>	<i>Mylio bifasciatus</i>	Picnic Sea bream	Faskar
	<i>Argyrops spinifer</i>	Longspine Sea bream	Koofar
	<i>Crenidens crenidens</i>	Goldlined Sea bream	Gurgufan
<i>Siganidae</i>	<i>Siganus canaliculatus</i>	Rabbitfish	Safi Arabi
	<i>S. Javus</i>	Rabbitfish	Safy Snaify
<i>Lutjanidae</i>	<i>Lutjanus fluviflamma</i>	Black spot snapper	Naisar
	<i>L. johni</i>	Snapper	Naisar
	<i>L. kasmira</i>	Blue and yellow Snapper	Naisar
	<i>L. lineolatus</i>	Bigeye Snapper	Naisar
	<i>L. Russelli</i>	Russel's Snapper	Naisar
	<i>L. malabaricus</i>	Red Snapper	Hamra
	<i>Pinjalo pinjalo</i>	Pinjalo Snapper	Naqroor
<i>Sphyraenidae</i>	<i>Sphyraena jello</i>	Banded Barracuda	Jed
	<i>S. obtusata</i>	Obtuse Baracuda	Ghelli