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The role of Istanbul fish co-operatives in Turkish fisheries

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In 2000, Turkey's total fish catch was about 600 000 tons. Eighty-six percent came from the marine environment. Turkey's first fishery co-operative was established in 1949 in Istanbul. Today there are 34 fish co-operatives and 2 427 co-operative members in the Istanbul vicinity. The Istanbul fish market sells more than 73 fish species and about 37 853 tons a year.

Key words: Istanbul fish co-operatives, Marketed fish, Turkish fisheries

INTRODUCTION

Turkey is a 779 452 km² peninsula surrounded by the Black, Bosphorus, Aegean and Mediterranean Seas. The Black Sea has been one of most productive seas in the world during the past 2-3 decades (ACARA & OKUŞ, 1996). Turkey receives 92.7% of its fish from the Black Sea and is currently the 30th largest fish producer in the world, after Denmark, France, Spain and United Kingdom.

Turkey is the 3rd largest fish producer amongst the Mediterranean countries belonging to the EC. In 2000, the total catch was about 600 000 tons and 86% of the fish was obtained from the marine environment. Some 8% was freshwater fish from inland waters (ÇELİKKALE *et.al.*, 1998).

Aquaculture is increasing in importance in Turkey for both marine and freshwater species (ANON, 2000 a, b). There was a steady increase from 1960 to 1988 due to planned development strategies applied as state policy and the fisheries law that was enacted in 1971 (TIMUR, 1999). The Marmara Sea provides 10.5% of the total Turkish sea production. However this proportion should be higher. The Marmara Sea is located between the Dardanelles and the Bosphorus, both of which have a variable water temperature throughout the year (PEKTAŞ, 1953; ALBEK, 1987). There are regular fish migrations in both seas (ARTÜZ, 1962; ARTÜZ. & BAYKUT, 1987). There are 200 fish species in the Marmara and most are of economic value, however, the total fish catch from the Marmara has not reached a sufficient level (ANON, 2000 b).

The first fishery co-operative in Turkey was established in 1942 and registered in 1949 as part of an effort to increase food production during the wartime years. Fishery development was intensified in the 1950s when the Marshall Plan promised fisherman monetary and technical aid if they organised into co-operatives (KNUDSEN, 1998). But poor organisation and an insufficient number of members blocked their development up to date. The distribution of co-operatives and unions in Turkey is shown in Table 1.

Table 1. The distribution of fish unions and co-operatives in Turkey (TIMUR, 2002)

<i>Fishery union</i>	<i>No. of co-operatives</i>	<i>No. of members</i>
İstanbul Region	34	2427
East Black Sea Region	9	1003
Izmir Region	11	427
Marmara Region	17	2867
Total	71	6724

MATERIAL AND METHODS

A study of Istanbul fish co-operatives and unions in the Bosphorus and surrounding areas with high fishing potential was carried out. A questionnaire was forwarded to the co-operatives and unions asking about their location, distribution, number of members, fishing capacity, fishing nets, fish species and problems in the Istanbul region.

RESULTS

Thirty-four fishery co-operatives operate within the Istanbul city border (Fig. 1). Twelve are on the Anatolian side of the city, 18 are on the European side and 4 are in the Marmara Sea (Table 2). The first fishery co-operative was the Balık Müstahsilleri Kooperatifi, established at Kumkapı in 1949.

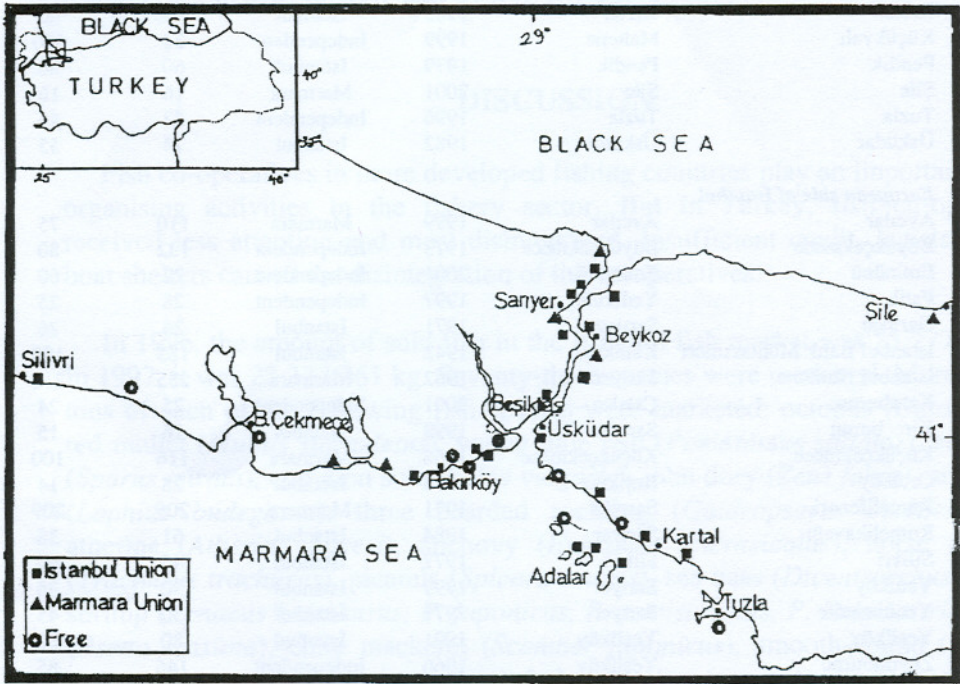


Fig. 1. Location of fish co-operatives in and around Istanbul, Turkey

Table 2. Fishery co-operatives within the city borders of Istanbul

	Name of co-operative	District	Date established	Name of Union	No. of members	Fishing capacity (boats/vessels)
<i>Anatolian side of Istanbul</i>						
1	Anadoluhisarı	Beykoz	1978	Istanbul	36	35
2	Anadolukavağı	Beykoz	1971	Istanbul	41	41
3	Beykoz	Beykoz	1993	Istanbul	38	90
4	Bostancı	Bostancı	1988	Istanbul	38	27
5	İstanbul	Beykoz	1962	Marmara	74	50
6	Kadıköy	Kadıköy	1990	Independent	108	107
7	Kartal	Kartal	1985	Istanbul	122	60
8	Küçükyalı	Maltepe	1999	Independent	32	160
9	Pendik	Pendik	1979	Istanbul	60	60
10	Şile	Şile	2001	Marmara	16	16
11	Tuzla	Tuzla	1996	Independent	52	45
12	Üsküdar	Üsküdar	1982	Istanbul	74	55
<i>European side of Istanbul</i>						
1	Avcılar	Avcılar	1999	Marmara	110	75
2	Büyükçekmece	Büyükçekmece	1973	Independent	132	80
3	Eminönü	Eminönü	2001	Independent	22	60
4	Fatih	Yedikule	1997	Independent	28	25
5	Gariççe	Sarıyer	1971	Istanbul	26	26
6	İstanbul Balık Mühtassilleri	Kumkapı	1942	Istanbul	185	100
7	İstanbul Numune	Sarıyer	1962	Marmara	235	210
8	Karaburun	Çatalca	2001	Independent	25	24
9	Kireçburnu	Sarıyer	1999	Istanbul	16	15
10	Küçükçekmece	Küçükçekmece	1962	Marmara	116	100
11	Ortaköy	Beşiktaş	1978	Istanbul	28	14
12	Rumelifeneri	Sarıyer	1971	Marmara	205	209
13	Rumelikavağı	Sarıyer	1984	Istanbul	61	38
14	Silivri	Silivri	1977	Istanbul	40	40
15	Yeniköy	Sarıyer	1999	Istanbul	30	35
16	Yenimahalle	Sarıyer	1971	Istanbul	50	45
17	Yeşilköy	Yeşilköy	1991	Istanbul	80	80
18	Zeytinburnu	Yeşilköy	1966	Independent	146	85
<i>Marmara Sea</i>						
1	Adalar	Heybeliada	1973	Istanbul	35	28
2	Burgazada	Burgazada	1995	Istanbul	58	50
3	Büyükada	Büyükada	1995	Istanbul	32	25
4	Kınalıada	Kınalıada	1979	Independent	76	60
	Total				2,427	2,170

The total number of co-op members is 2 427 persons. The total number of vessels is 2 170 of which 1 748 are small (maximum 75 hp) and 381 are large (greater than 75 hp). The co-op fishing equipment includes long lines, trawl and drift gill nets, bag shaped fishing nets and extended nets (KARAKULAK & IŞIK, 1999).

The species caught include Atlantic bonito (*Sarda sarda*), blue fish (*Pomatomus saltator*), turbot (*Psetta maxima*), horse mackerel (*Trachurus* spp.), anchovy (*Engraulis encrasicolus*), blue whiting (*Micromesistius poutassou*), red mullet (*Mullus* spp.), grey mullet (*Mugil* spp.), sand mussel (*Chamelea gallina*), snail (*Rapana thomasiana*), sea bream (*Sparus aurata*), shrimp (*Penaeus semisulcatus*), small scaled scorpion fish (*Scorpaena porcus*), gar fish (*Belone belone*) and three-bearded rocking (*Gaidropsarus mediterraneus*). The amount of fish sold on the Istanbul fish market in 2001 was 37 852 702 kg.

DISCUSSION

Fish co-operatives in more developed fishing countries play an important role in organising activities in the fishery sector. But in Turkey, fish co-operatives received less attention and most disintegrated. Insufficient credit, legislation and boat shelters caused the disintegration of the co-operatives.

In 1996, the amount of sold fish in the Istanbul fish market was 23 277 419 kg. In 1997, it was 23 327 061 kg. Seventy-three species were marketed. More than 15 tons of each of the following fish species were marketed: octopus (*Octopus* sp.), red mullet (*Mullus surmuletus*), young blue fish (*Pomatomus saltator*), sea bream (*Sparus aurata*), common sole (*Solea vulgaris*), john dory (*Zeus faber*), angler fish (*Lophius budegassa*), three bearded rockling (*Gaidropsarus mediterraneus*), atherine (*Atherina boyeri*), anchovy (*Engraulis encrasicolus*), horse mackerel (*Trachurus trachurus*), picarels (*Spicara smaris*), sea bass (*Dicentrarchus labrax*), shrimp (*Penaeus kerathurus*, *P. japonicus*, *P. semisulcatus*, *P. longirostris*), turbot (*Psetta maxima*), chub mackerel (*Scomber japonicus*), smooth-hound (*Mustelus* sp.), sea bream (*Pagellus erythrinus*), hake (*Merluccius merluccius*), blue fin tuna (*Thunnus thynnus*), gilt sardine (*Sardinella aurita*), red mullet (*Mullus surmuletus*), twaite shad or rock herring (*Alosa fallax*), mackerel (*Scomber scomber*), saddled bream (*Oblada melanura*) and thornback ray (*Raja clavata*) (TİMUR & DOĞAN, 1999).

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Uloga ribarskih zadruga u turskom ribarstvu

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SAŽETAK

Ukupni godišnji ulov ribe u Turskoj iznosi oko 600 000 t, od toga 86% iz mora. Prva Ribarska zadruga osnovana je 1942. godine u Istanbulu. Danas oko Istanbula postoje 34 ribarske zadruge sa 2 427 članova. Na ribarnici Istanbula prodaje se više od 73 vrsta riba, a njezin godišnji kapacitet je 23 277 t.

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