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# The Various Aspects of Fisheries Cooperatives in Türkiye

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**Abstract:** Aquaculture, which is one of the most important sources of animal protein, is also one of the important sectors that provide continuous input to the economies of many countries today. The fact that Türkiye is surrounded by seas on three sides and has rich inland water resources necessitates Türkiye to be an important country in terms of production, marketing and consumption of aquaculture. The fact that the current situation of fishing production, marketing and consumption in Türkiye can be improved is defined as an opportunity for the restructuring of the sector and at this point, Fishing Cooperatives are becoming a subject that should be adopted as a value. It should not be forgotten that cooperatives that offer a partnership model that prioritizes mutual assistance, solidarity and cooperation will contribute to the acceleration of development in this sector in Türkiye. Based on the fact that Fisheries Cooperatives, which were established according to the Cooperatives Law No. 1163 and have 594 cooperatives and a total of 31 029 partners, are a serious alternative to the problems of the sector, this study aims to address various aspects of Fisheries Cooperatives in Türkiye and to develop suggestions for the development of the sector.

**Keywords:** Cooperative, Organization, Seafood, Fishering Cooperative.

# Çeşitli Yönleriyle Türkiye'de Su Ürünleri Kooperatifçiliği

Özet: En önemli hayvansal protein kaynaklarından birisi olan su ürünleri, sektör olarak da günümüzde birçok ülkenin ekonomisine sürekli girdi sağlayan önemli sektörlerden biridir. Türkiye'nin üç tarafının denizlerle çevrili olması ve iç su kaynaklarının zenginliği, su ürünleri bakımından Türkiye'yi gerek üretim gerek pazarlama gerekse tüketimde önemli bir ülke olmasını zorunlu kılmaktadır. Türkiye'de su ürünleri üretimi, pazarlaması ve tüketiminin mevcut durumunun geliştirilebilir olması sektörün yeniden yapılanması için bir fırsat olarak tanımlanmakta ve bu noktada Su Ürünleri Kooperatifleri bir değer olarak benimsenmesi gereken bir konu haline gelmektedir. Karşılıklı yardımlaşma, dayanışma ve iş birliğini önceleyen bir ortaklık modeli sunan kooperatiflerin Türkiye'de de gelişimin ivme kazanması bu sektöre katkı sağlayacağı da unutulmamamladır. 1163 sayılı Kooperatifler kanununa göre kurulan ve sayıları 594 olan kooperatif ve toplam 31 029 ortağı ile Su Ürünleri Kooperatifçiliğinin sektörün sorunları için ciddi bir alternatif olduğu noktasından hareket ederek bu çalışmada, Türkiye'de Su Ürünleri Kooperatifleri çeşitli yönleri ile ele alınması ve sektörün gelişimi için önerilerin geliştirilmesi amaçlanmıştır.

Anahtar Kelimeler: Kooperatif, Organizasyon, Su ürünleri, Su Ürünleri Kooperatifi.

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#### 1. Introduction

It is generally accepted that there is a linear relationship between eating habits, adequate and balanced nutrition and healthy lives, and societies that can achieve this are characterized as developed societies (Çalışkan, 2010; Strauss and Thomas, 1998; Johnston, 1980). Almost all of the compulsory needs that form the basis of human life are related to nutrition and are met with foodstuffs. Among these foods, especially fish meets the basic nutrient needs of the body with its rich protein source and is among the important nutrients in maintaining a healthy life (Maciel *et al.* 2009; Atar and Alçiçek, 2009). In addition to this functional role, other aquaculture products, especially fish, have become more important among the economic gains of countries, especially in recent years. In general, aquaculture is characterized as the common name given to all kinds of foodstuffs obtained from the sea or fresh water, and in addition to this biological definition, the economic value of aquaculture products is also highly valued by both producers and consumers.

Aquaculture production is carried out by two different methods, fishing and aquaculture, and while the share of the world's aquaculture production has been decreasing proportionally over the years, the share of aquaculture production has been increasing. According to FAO data, approximately 187 million tons of aquaculture was carried out in the world in 2022 and 51% of this was obtained by aquaculture and the remaining 49% by fishing (FAO, 2025). Thus, the amount of aquaculture products obtained by aquaculture in the world has been more than the amount of aquaculture products obtained by fishing for the first time after this year. China ranks first in the world with a share of 35% in aquaculture production, followed by India, Indonesia, Vietnam, Peru and Russia. Consumption of aquaculture products is gradually increasing worldwide as well as production. The reason for this increase is directly related to both population growth and the tendency of people to seek a healthier, protein-rich diet. According to 2020 data, global consumption of aquaculture products reached approximately 178 million tons, with China, the USA, Japan, Indonesia and India ranking first in consumption, and average per capita consumption increased from 9.1 kg in the 1960s to 20.7 kg in 2022. The share of seafood trade in the world has steadily increased and now accounts for about 1% of global trade and 9.1% of global agricultural trade, with more than 230 countries involved and a turnover of approximately 193 billion dollars. According to FAO data for 2024, world aquaculture exports are approximately 41.9 million tons, with China, Norway, Russia and Vietnam ranking first, respectively. In the same data, the world's total aquaculture imports amounted to 41.4 million tons, with China, USA, Japan, Thailand and Spain ranking first (Ministry of Agriculture and Forestry, 2024).

It is known that Türkiye is an ambitious country in terms of aquaculture due to being surrounded by seas on three sides and the potential of inland water resources. In 2023, approximately 557 thousand tons of aquaculture products were produced in Türkiye and 55% of this was obtained through aquaculture. It is an important fact that the seas are dominant in Türkiye's aquaculture production with 72%. According to the data of 2023, Muğla ranks first with 38.2% in marine aquaculture, followed by İzmir with 26.8%, Mersin with 7.2% and Sinop with 6.8%. In inland waters, Elazığ ranks first with 25%, followed by Muğla with 15%, Kahramanmaraş with 5.4% and Şanlıurfa with 5.7%. Sea bass, trout (inland), sea bream, sea bream, sea trout (marine), mussels, yellow mouth and tuna are in the first place in Türkiye's. Türkiye's aquaculture catch is approximately 454 thousand tons, of which approximately 421 tons is obtained from the seas and a large part of this catch is obtained from the Eastern Black Sea. Among the aquaculture species obtained through fishing in Türkiye, anchovy ranks first with approximately 223 thousand tons, followed by sprat, sardines and horse mackerel (Ministry of Agriculture and Forestry, 2024).

Although Türkiye is surrounded by seas on three sides and has rich water resources, it lags behind many developed countries in per capita consumption of seafood. Various socio-economic, eating habits, access to seafood and cultural factors affect this. According to 2023 data, the per capita consumption of seafood in Türkiye is about 7 kg, which is less than one third of the European Union average of 24 kg per capita and the world average of 22 kg per capita. Türkiye is a net exporter in the seafood trade and according to 2024 data, Türkiye exported 1.7 billion dollars and imported 279 million dollars, with Russia having the largest share in exports, followed by Italy, the Netherlands and Greece. In terms of aquaculture, Türkiye has been supporting producers and breeders since 2003, and in this context, production, disease, hatchery, breeding and technical supports consist of production, disease, hatchery, breeding and technical supports (Ministry of Agriculture and Forestry, 2024).

When compared to other developed countries, it is understood that Türkiye does not benefit sufficiently from aquaculture production, aquaculture, fishing and its added value considering its existing resources. It is stated that cultural factors, access and eating habits are effective in the consumption of aquaculture products, as well as government support and health benefits are not effective enough. It is a fact that Türkiye has problems related to legislation, infrastructure, financing, management and organization in the field of aquaculture, and cooperatives, which offer a system of mutual aid and solidarity, are expected to be more effective in solving these problems (Arslan and Yıldız, 2021; Karademir and Arat, 2014; Mol and Ulusoy, 2010). In Türkiye, the Central Union of Fisheries Cooperatives, which was established in 2003 in Ankara, is considered a pioneering organization in this regard. Established according to the Cooperatives Law No. 1163, there are 594 Fisheries Cooperatives and 17 Regional Unions in Türkiye with 31 029 members. The Central Union of Fisheries Cooperatives (SÜR-KOOP) has 237 cooperatives and 17 Regional Unions. The ratio of the number of cooperatives that are partners of SÜR-KOOP to the total number of Fisheries Cooperatives is 39.89% and the average number of partners of Fisheries Cooperatives in Türkiye is calculated as 13.94. The Central Union of Fisheries Cooperatives is the largest organization in this field in Türkiye and continues its activities as an organization opened to the world within the World Fisheries Cooperatives Organization (ICFO) (Ministry of Agriculture and Forestry, 2025; SÜR-KOOP, 2025). In this study, it is aimed to emphasize the importance of Fisheries Cooperatives in solving the problems related to fisheries in Türkiye by taking into consideration Türkiye's fisheries potential, production, consumption and the added value it will create, and also to focus on the numerical data, problems and solution proposals of these cooperatives. In the study, a data infrastructure was created by considering the data of the Union of National Cooperatives of Türkiye (TÜRKİYE-COOP), SÜR-KOOP data and the data of the Ministry of Agriculture in an integrity.

#### 2. Materials and Methods

In the study, the infrastructure, framework and place of the research in scientific studies were tried to be determined by using the literature review method. In this direction, firstly, the research question and keywords were determined and basically the current situation of the fisheries sector in Türkiye, the problems and solution suggestions within the status of fisheries cooperatives, which is an important structure, was determined as the question of the research. In this direction, the words cooperative, fisheries, fisheries cooperatives and organization were selected as keywords and a literature review was made from online sources and other written sources. As a scanning tool, scientific-based search engines and academic journals and reports were taken into consideration. The obtained data were divided into subsections in line with the purpose of the research and in this direction, two main themes were determined as fisheries sector and fisheries cooperatives. The obtained data were taken from the agricultural organization table published by the Ministry of Agriculture and Forestry and their places in the total agricultural cooperatives were summarized by obtaining summary data and averages.

#### 3. Findings

The study consists of findings consisting of an in-depth literature review and summary of numerical data on fisheries cooperatives. These data are collected under the titles of Aquaculture Sector in The World and in Türkiye, Problems of Aquaculture Sector in Türkiye, Cooperatives and Its Importance in Economic and Social Life, Cooperatives in Türkiye, Aquaculture Cooperatives in The World and Aquaculture Cooperatives in Türkiye, in accordance with the purpose of the study. Summary tables on fisheries cooperatives are given under these titles.

# 3.1. Aquaculture Sector in the World and in Türkiye

Water is an indispensable resource for the life of all living things, which is found approximately 2/3 of the world and is the most important source of food and life for the maintenance of life. While 97.5% of the water in the earth consists of salty waters formed by the seas and oceans, the rest consists of fresh waters formed by lakes and rivers. Water resources, which have a large ecosystem, are an integral part of the natural balance with their living creatures. The common name given to all kinds of foodstuffs obtained from the sea or fresh waters is generally defined as seafood and constitutes the most important source of animal protein and omega 3 acids, which are very beneficial for human health (Karabulut and Yandı, 2006). It is also accepted that societies fed with seafood are healthier and this is an indicator of development. Such a vital benefit of seafood products has also caused these products to become a large 92 sector and is developing as an important economic resource of many countries (Garlock et al., 2024; Bueno, 2009).

In recent years, the amount of aquaculture production has been increasing while the amount of aquaculture 94 production has been decreasing proportionally. In 2018, 180.4 billion tons of aquaculture products were produced in the world, of which 97.9 billion tons were obtained by fishing and 82.5 billion tons by aquaculture. Aquaculture 96 production in the world was 178.9 billion tons in 2019, 178.4 billion tons in 2020, 183.8 billion tons in 2021 and 186.7 97 billion tons in 2022. The amount of production through fishing in the world was 93.8 billion tons in 2019, 90.7 billion 98 tons in 2020, 92.7 billion tons in 2021 and 92.3 billion tons in 2022. The amount of aquaculture products obtained through aquaculture was 85.1 billion tons in 2019, 87.7 billion tons in 2020, 91.1 billion tons in 2021 and 94.4 billion 100 tons in 2022. While the production of aquaculture products increased in the world between 2018 and 2022, the 101 amount of aquaculture products obtained through fishing decreased both in quantity and proportionally. Türkiye has 102 also experienced significant changes in aquaculture production between 2018 and 2022. In 2018, Türkiye produced 103 628.6 thousand tons of aquaculture products and this figure was 836.5 thousand tons in 2019, 785.8 thousand tons in 104 2020, 785.8 thousand tons in 2020, 799.8 thousand tons in 2021 and 849.8 thousand tons in 2022. During the same 105 periods, the aquaculture production in Türkiye was 314 thousand tons in 2018, 463.1 thousand tons in 2019, 364.4 106 thousand tons in 2020, 328.1 tons in 2021 and 335 thousand tons in 2022. During these periods, 314.5 thousand tons 107 of aquaculture products were obtained by fishing in Türkiye in 2018, 373.3 thousand tons in 2019, 421.4 thousand tons 108 in 2020, 471.6 thousand tons in 2021 and 335 thousand tons in 2022 (Ministry of Agriculture and Forestry, 2024). When the world and Türkiye's aquaculture production is compared for the period 2018-2022;

- 1. While aquaculture production increased by 3.5% in the world, it increased by 2.6% in Türkiye in the same period.
- 2. While the production of aquaculture products obtained by fishing decreased by 5.7% in the world, this production increased by 6.7% in Türkiye in the same period.
- 3. While aquaculture production in the world increased by 14.4%, this production in Türkiye increased by 114 63.6% in the same period.

- 4. In 2022, the world's aquaculture production accounted for 49.4% of total aquaculture production, while aquaculture production accounted for 50.6% of total aquaculture production. In the same year in Türkiye, these 117 ratios were realized as 39.4% for fisheries and 60.6% for aquaculture.
- 5. In 2022, the total amount of aquaculture products obtained in Türkiye accounted for about 0.4% of the world's 119 production. In the same year, these figures accounted for 0.3% of aquaculture production and 0.5% of aquaculture. China accounts for about 35% of the world's aquaculture production, India about 8%, Indonesia 7% and Vietnam 5%.

Consumption of seafood is considered as a kind of development indicator. From this point of view, the average consumption of aquaculture products in the world was 20.7 kg per capita per year in 2022. In EU countries, the per capita consumption of aquaculture products was realized as 25.1 kg. The countries with the highest per capita consumption in the world are South Korea (78.5 kg), Norway (66.6 kg), Portugal (61.5 kg), Myanmar (59.9 kg), Malaysia (58.6 kg), Japan (58 kg) and China (48.3 kg). Although the consumption of aquaculture products in Türkiye will increase to 7.3 kg per capita in 2022, it is still below the world average (Ministry of Agriculture and Forestry, 2024).

The volume and value of trade in seafood around the world is of global importance. Seafood produced in one country can be exported to another country for processing or direct consumption. Since the whole trade process consists of different stages, and these stages are related to different sector groups, the trade of seafood between countries provides income and employment to the economies of many countries. Globally, 52% of seafood imports are for direct human consumption. By 2031, OECD countries are projected to maintain their leading position in this area. EU members are the leading importers of fish for direct human consumption. With a share of 18%, they are the largest market area in this field. They are expected to be followed by the United States with 14% and China with 10%. According to FAO's data for 2021, China ranks first with 3.7 million tons of aquaculture exports in the world, followed by Norway with 3 billion tons, Peru with 1.9 million tons, Russia with 1.7 million tons and Vietnam with 1.7 billion tons. Similarly, China ranks first in imports with 5.4 million tons, followed by the USA with 3.2 million tons, Japan with 2.1 138 million tons and Thailand with 2 million tons. One of Türkiye's most important export sectors is aquaculture. The export value of the sector is increasing every year. When foreign trade data is analyzed, it is seen that Türkiye is an exporter 140 country. According to the data, between 2018 and 2023, the amount of exported products increased continuously and imports followed a fluctuating course. According to 2022 data, Türkiye's aquaculture exports were 251.4 thousand tons and the export value was 1.6 billion dollars, while the amount of imported aquaculture products in the same period was 115.1 thousand tons and the import value was 312.9 million dollars (Ministry of Industry and Technology, 2024).

# 3.2. Problems of Aquaculture Sector in Türkiye

There are approximately 32 thousand fishermen and 2 thousand 290 aguaculture enterprises working in the 148 aquaculture sector in our country. More than 30 thousand fishermen are organized under cooperatives and nearly 300 fishermen are organized under marine fisheries producer associations. While some of the breeders are also gathered under cooperatives, nearly 900 of them are organized under breeder producer unions. A total of 594 producer's organizations, 563 of which are cooperatives and 31 of which are producer associations, are active in the sector. Each organization has an upper organization within itself. A significant majority of cooperatives have formed their own regional unions, which in turn have formed the Central Union of Fishery Cooperatives. Among the producer associations, 12 of them dealing with aquaculture came together to form the Central Union of Aquaculture Producer Associations and 8 of them dealing with hunting came together to form the Central Union of Sea Hunters Producer Associations (Ministry of Industry and Trade, 2025; ElB, 2025). The problems of the aquaculture sector can generally be categorized under two main headings. These are problems related to the production of aquaculture products and problems related to the consumption of aquaculture products. First of all, Türkiye is surrounded by seas on three sides, has an inland sea such as the Marmara Sea, and has a rich aquaculture potential with its lakes and rivers (Saygı, 2024; Arslan and Yıldız, 2021). However, despite this potential, it is a fact that it is behind the advanced countries of the world in terms of production, trade and consumption. This is a problem in itself and is actually an undesirable consequence of the fact that it cannot benefit sufficiently from its existing potential. Again, a second problem in the aquaculture sector is the problem related to consumption and this situation is actually accepted as a kind of development indicator in itself. Healthy nutrition, eliminating the deficit of animal protein, taking omega 3 acids and in short, the general measure of a healthy life is the consumption of aquaculture products which are part of a rich protein menu. Another problem related to production and consumption in the aquaculture sector is the problems related to the trade of aquaculture products, which constitute the basic link of the production and consumption chain. Production in the seafood sector is carried out through hunting and aquacultures and the production problem of this sector is also gathered under these two headings. Thus, it would be a more accurate approach to present the problems related to production and the problems related to consumption in their basic

components. In addition to these, it is a fact that there are some basic problems such as legal problems, 172 organizations, management and organization problems in the aquaculture sector (Yılmaz, 2021; Mol & Ulusoy, 2010). Although it is a common belief that aquaculture resources are renewable, the correct and effective use of these resources is very important. Since aquaculture is a living resource, it is important to manage the resources effectively in order to make it sustainable, especially the protection of water skis, water pollution, excessive and wrong methods in fishing, and wrong practices in aquaculture seriously threaten these resources (Alçiçek, 2009; Aksungur and Firidin, 2008). One of the most important elements of the sector is to ensure that these resources are ecologically usable. However, it is a fact that the balance in the cost-income structure of the sector is also a serious problem. In terms of hunting, it is a fact that the most important inputs of the sector in Türkiye are fuel and labor. Providing these in a sustainable manner and the cost element being affordable closely affects the enterprises in this sector through fishing (Köse et al. 2010). Considering that 36% of the total expenditures of the vessels engaged in sea fishing consist of fuel oil and 30% of labor payments on average, it is an important factor that the sector does not get into a bottleneck over these two inputs. Similarly, feed expenses constitute the most important cost element in the enterprises that produce through aquaculture in the sector. The most important issue in terms of aquaculture is that the source of fish meal and oil used in fish feed is provided by the products obtained through fishing. Since 70% of the production obtained through fishing in Türkiye is offered directly to human consumption and naturally cannot meet the needs in terms of aquacultures, the sector has caused the search for different alternatives. The need to import basic raw materials such as fish meal and oil has also created a new cost factor. If the current need is to be met by increasing fishing, the negative consequences of overfishing will make the import process inevitable again, as it means more risk for the sustainability of fishing. The fact that most of the fishing vessels in Türkiye are under 12 meters in length seriously reduces the amount of catch and it is understood that there are serious problems in the economic situation of the enterprises using these vessels. Similarly, the fact that the annual production capacity of aquaculture enterprises is less than 50 tons' may threaten the economic life of the enterprises that produce in this way. In other words, just as the input-cost and income 7 balance of small family enterprises in agriculture negatively affects the sector, it shows that the entry costs of smallscale enterprises in the aquaculture sector will increase and thus their economic life will be limited (Yavuzcan et al. 2010; Yılmaz et al., 2009). The presence of brokers in the marketing channels between production and consumption in the seafood sector and the inaccuracies in the timing and methods of price determination are among the important problems of the sector. Fresh consumption of seafood products reveals the important fact in terms of food safety. Therefore, it is also a fact that serious problems can be experienced in the transportation, shipment and storage of these products between production and consumption points. Thus, problems such as planning distribution channels and product preservation are also among the important problems of the sector. In many countries of the world, organizational methods are used as an important tool to strengthen the sector. These can be achieved through producer unions, associations, cooperatives and other forms of organization. In Türkiye, 594 Fisheries Cooperatives have 31 029 partners and there is also one central union of Fisheries Cooperatives in this sector. In addition, there are 33 aquaculture producer associations and 1 243 producers under the roof of these associations (Şakıma and Çevrimli, 2021). Regarding the problems of the sector, in the Aquaculture Sector Policy Document 2019-2023 report prepared by TAGEM, the current situation of the sector in general was presented in various aspects and the problem areas of the aquaculture sector were grouped under headings such as aquaculture, aquaculture, insufficiency of aquaculture resources, and organizations, and solution suggestions were developed (TAGEM, 2023). In order to support the aquaculture sector in Türkiye, the Ministry of Agriculture and Forestry realizes this through the list prepared by the Ministry of Agriculture and Forestry. With the Presidential Decree dated 25/07/2024 and numbered 8760, Communiqué No. 2024/28, which regulates the procedures and principles regarding the product supports to be given to those engaged in aquaculture, was published in the Official Gazette dated 17/09/2024 and numbered 32 665 and entered into force. The Communiqué states that "In accordance with the Presidential Decree No. 8760, the maximum amount that an enterprise can benefit 216 from the support is limited to 30,000 kg/year for producers engaged in small-scale fish farming in earthen ponds and 217 350,000 kg/year for others. However, breeders with an annual project capacity of 50 tons or less will be able to receive 218 additional support payments in amounts ranging from 0.60-0.99 lira, those who make closedcircuit production 2.40-6 219 lira, those who are members of producer unions 0.04-0.12 lira, and those who are members of first-degree agricultural purpose organizations 0.02-0.06 lira". Accordingly, producers who have aquaculture certificates and are engaged in intensive aquacultures will benefit from the support (Official Gazette, 2025). In order to support the aquaculture sector in Türkiye, a list prepared by the Ministry of Agriculture and Forestry is used. With the Presidential Decree dated 223 25/07/2024 and numbered 8 760, Communiqué No. 2024/28, which regulates the procedures and principles regarding 224 the product supports to be given to aquaculture producers, was published in the Official Gazette dated 17/09/2024 225 and numbered 32665 and entered into force. The Communiqué states that "In accordance with the Presidential Decree 226 No. 8760, the maximum amount that an enterprise can benefit from the support is limited to 30,000 kg/year for 227 producers engaged in small-scale fish farming in earthen ponds and 350,000 kg/year for others. However, breeders 228 with an annual project capacity of 50 tons or less will be able to receive additional support payments in amounts 229 ranging from 0.60-0.99 lira, those who make closed-circuit production 2.40-6 lira, those who are members of producer 230 unions 0.04-0.12 lira, and

those who are members of first-degree agricultural purpose organizations 0.02-0.06 lira". Accordingly, producers who have aquaculture certificates and are engaged in intensive aquaculture will benefit from the support (Official Gazette, 2025). In this context; subsidies between 1.5 TL and 60 TL per kg are made from public resources under the titles of Trout, New Species, Closed System Production, Trout Production Over Kilogram, Mussel, Carp, Fish Farming in Soil Reservoirs (DKİB, 2025).

# 3.3. Cooperatives and Its Importance in Economic and Social Life

The development of humanity has largely depended on their ability to fulfill the necessity of living together since their existence. The idea of cooperatives, which is a cooperative structure based on mutual aid, solidarity and functioning, dates back to ancient times. In ancient Egypt, Greece, China, Mesopotamia, Anatolia and many other parts of the world, people have carried out various activities based on doing business together. The word "cooperation" is a combination of the Latin words "co" and "operation", and although it is spelled differently in different languages, its meaning is similar. In short, cooperatives are a type of mutual aid, solidarity and cooperation that prioritizes social solidarities as well as commercial partnership. In the world, modern cooperatives are a type of consumer cooperative founded by Robert Owen in 1844 in the town of Rochdale, England by workers from his own textile workshop, also known as the Rochdale Pioneers. The development of cooperatives in a short period of time first manifested itself in Western Europe, and while this movement was popular in France in the agricultural field, it was more popular in Germany in the financial field and spread all over the world in a short time. The International Cooperative Organization (ICA), founded in 1895, played a major role in the universalization of cooperatives as a people-centered movement 250 (Güreşci, 2024; Alagöz and Paksoy, 2024; Irmakoğlu and Irk, 2022; Altman, 2009; Ortman and King, 2009). Today, cooperative membership, which accounts for about 12% of the world's population, is becoming more widespread all over the world, with about 3 million cooperatives. The importance of cooperatives, which have an economy of 2.4 trillion dollars, has become more clearly understood, especially during the covid 19 pandemic, and the fact that the global crisis, disruptions in the supply chain and global concerns about foodstuffs can be overcome through cooperatives has become even more evident (Güreşci, 2022). Indeed, the declaration of 2025 as the International Year of Cooperatives provides the basis for this reality to be communicated on a global scale. Cooperatives, which have become increasingly important in the global economy, are widely known to have developed in many sectors, particularly in agriculture. Here are some statistical data on the 300 largest cooperatives in the world based on their annual turnover. The sectoral breakdown of 300 large cooperatives is given in Table 1 below:

 Table 1: Breakdown of 300 large cooperatives by sector

Sector	Number of Cooperatives	%
Agriculture and Food Industry (including Fisheries)	105	35.00
Insurance	96	32.00
Wholesale and Retail	57	19.00
Finance	27	9.00
Industry and Auxiliary sectors	9	3.00
Education, health and social work	3	1.00
Other services (including accommodation)	3	1.00
Total	300	100.00

Source: ICA, (2025).

As can be seen in Table 1, of the 300 largest cooperatives with the highest turnover, about 35% are in the agriculture and food industry, including the fisheries sector, with a turnover of about \$2.4 billion. The increasing importance of cooperatives in economic and social life is an indisputable reality. Cooperatives are of great importance in terms of bringing together millions of small producers who are unable to solve their problems on their own in cooperation, solidarity and cooperation and minimizing the impact of competition (Nakayiso, and Andrew, 2023; Yalçın, 2022; Güreşci and Gönç, 2017). The importance of cooperatives in economic and social life is an issue that should be evaluated in two main fish, and the importance of cooperatives in economic life is summarized as follows; it ensures the spread of capital to the base, enables small producers to come together and increase their competitiveness, enables consumers to obtain the most suitable goods in the most appropriate amount and price, minimizes the input costs of producers, contributes to production and has a positive impact on social welfare with the added value it creates, contributes to employment, supports the formation of a fair income distribution and enables the utilization of idle resources. The contribution of cooperatives to economic life was particularly evident during the COVID-19 pandemic, creating a social dynamic in solving the global economic crisis, food crisis and energy crisis, and providing social support in controlling a global pandemic (Billiet *et al.*, 2021). As important as cooperatives are in economic life, they also play an important role in social life. These are listed as follows: it ensures

the formation of a democratic society; it establishes the relationship between production-education and social life in terms of giving importance to education; it ensures the development of cooperation, solidarity and cooperation in society; it increases social welfare; it strengthens social organizations and ensures the development of similar structures. In short, cooperatives can ensure the multifaceted development of humanity through the establishment of a democratic, human-centered organization with a high level of welfare in a society in a country.

# 3.3. Cooperatives in Türkiye

It is a historical reality that Turks, who have a rich culture, have a deep-rooted history. It is accepted that Turks, who have demonstrated the necessity of living together with various organizational structures in the geography where they live, are an advanced nation in cooperation, solidarity and cooperation. They have been able to implement a structure that is still appreciated today as a model in the organization of tradesmen, especially with the imece culture and the Ahilik Organization they established in the 13th century. There have been studies on the connection between the Ahi Organization and modern cooperatives in various periods, but it was very effective for the British cooperative Ed Mayo to turn his concrete information on this subject into a book and publish it (Alagöz and Paksoy, 2024; Güreşci, 2024). In short, it is a scientific fact that some valuable organizations of Turkish culture, such as the Ahilik and imece, have contributed to modern cooperatives. The first example of cooperatives in Türkiye in the western sense is considered to be the Homeland Funds established by Mithat Pasha in 1863. Although the Hometown Funds were of course far from a modern cooperative, it can be said that they were a kind of agricultural credit cooperative organization. The activities of the Hometown Funds could not be carried out due to various economic and political reasons, and they were replaced by the Menafi Funds and then by the Ziraat Bank, which transferred its capital to today's Ziraat Bank 10 with the Ziraat Bank Regulation issued in 1889 (Güngör, 2017). It is an accepted fact that the turning point of Turkish cooperatives in the western and modern sense is the idea of the republic. It is therefore quite natural to make a distinction between pre-republican and post-republican times when describing the historical process of cooperatives in Türkiye. With the proclamation of the Republic, Turkish cooperatives have become increasingly important and have undergone a serious development process with the laws enacted and new cooperatives established. Atatürk, Celal Bayar, Ahmet Cevat Emre, Mahmut Esat Bozkurt and Celal Bayar were particularly important in Turkish cooperatives and the foundations of modern Turkish cooperatives were laid in this period. The 1961 Constitution's inclusion of cooperatives and its reiteration in the 1982 Constitution show that cooperative development in Türkiye is a constitutional process. There is a close relationship between the development of cooperatives and the development of the economic and social system in Türkiye, and the development of Turkish cooperatives has been part of this process (Ministry of Trade, 2025; Irmakoğlu and Irk, 2022). Turkish cooperatives are generally categorized according to their field or type of activity. Thus, cooperatives continue to operate under the supervision and oversight of the relevant ministries in various fields of activity and sectors. Currently, there are 43 types of cooperatives, 33 under the Ministry of Trade, 5 under the Ministry of Agriculture and Forestry, and 5 under the Ministry of Environment, Urbanization and Climate Change. In Türkiye, there are 48 640 315 active and inactive cooperatives, 324 unions, 14 central unions and 1 TÜRKİYE-COOP. Currently, the number of cooperative members registered in the Cooperative Information System (KOOPBIS) in Türkiye is 4 170 086. Of these cooperatives, 11% are under the Ministry of Environment, Urbanization and Climate Change, 11% under the Ministry of Agriculture and Forestry and 78% under the Ministry of Trade. Some data on agricultural organizations in Türkiye, including fisheries cooperatives, are given in Table 2 below (Cooperative Bulletin, 2024).

Table 2: Distribution of cooperatives by type in Türkiye

Relevance Law	Type	Number	%	N.P.	%	Resp. Ministry
	•	of				
1163 Low No.	Agricultural Development	6 597	56.34	731 195	19.91	MAF
1163 Low No.	Irrigation	2 484	21.21	319 761	8.70	MAF
1163 Low No.	Seafood	594	5.07	31 029	0.84	MAF
1163 Low No.	Beet Planters	31	0.26	1 399	38.10	MAF
				339		
Subtotal		9 706	82.88	2 481	67.55	
				324		
1581. Low No.	Agriculture Credit	1 618	13.81	853 869	23.25	MAF
Subtotal	-	11 324	96.69	3 335	90.80	
				193		
4572 Low	Agriculture Sales	338	2.88	332 925	9.08	Ministry of Trade
1196 Low	Tobacco Agricultural Sales	18	0.18	939	0.04	Ministry of Trade
1163 Low No.	Fresh Fruits and Vegetables	29	0.25	2 953	0.08	Ministry of Trade
Subtotal		385	3.31	336 817	9.20	
General Total		11 709	100.00	3 672	100.00	
				010		

Source: Cooperative Bulletin, (2024).

Note: Percentage calculations are based on the grand total.

MAF: Ministry of Agriculture and Forestry

N.P.: Number of Partners

Resp.Ministry: Responsible Ministry

According to the data in Table 2, the following conclusions can be drawn:

- 1. In Türkiye, a total of 4 170 086 people are members of a cooperative, of which 88.5%, or 3 672 010, are members of an agricultural cooperative.
- 2. There are a total of 48 640 cooperatives in Türkiye, of which approximately 24.07%, or 11 709, are agricultural 329 cooperatives.
- 3. In Türkiye, the average number of members per cooperative unit is 91.36, compared to 313.60 for agricultural 331 cooperatives.
- 4. In Türkiye, 56.34% of agricultural cooperatives are members of Agricultural Development Cooperatives, followed by 333 irrigation cooperatives with 21.21%.
- 5. In Türkiye, the largest number of members of agricultural cooperatives is the Beet Planters Cooperative with 335 38.10%, followed by agricultural credit cooperatives with 23.25%.
- 6. In Türkiye, the Beet Planters Cooperative ranks first with 45 139 members per cooperative, followed by Agricultural Credit Cooperatives with 527.73 members per cooperative. Both averages are above the average for Türkiye. The number of members per cooperative is given in Table 3 below.

**Table 3:** Average Number of Members of Agricultural Cooperatives

Cooperative	Number of members per cooperative
Agricultural Development	110.83
Irrigation	128.72
Seafood	52.23
Beet Planters	45 139.96
Agriculture Credit	527.73
Agriculture Sales	984.98
Tobacco Agricultural Sales	52.16
Fresh Fruit and Vegetable Mar.	101.82
Average	313.60

Source: Ministry of Agriculture and Forestry, (2024).

As can be seen in Table 3, the average number of members per agricultural cooperative in Türkiye is 331.60 members per unit cooperative, and this number is above the average in Beet Planters, Agricultural Credit and Agricultural Sales Cooperatives. The average number of members per cooperative in Türkiye is 91.36, and except for the Fisheries Cooperatives and Tobacco Agricultural Sales Cooperatives, all other cooperatives have a number of members above the average in Türkiye.

#### 3.4. Fishering Cooperatives in The World

In the world, fisheries cooperatives are organized under the names of fishery or fishermen's cooperative or fishing co-op, seafood cooperative, and fisheries cooperatives. These cooperatives are a type of cooperative formed by people operating in the fisheries sector by pooling their resources in specific activities such as fish farming, fishing, distribution and marketing. Around the world, fisheries cooperatives are sometimes established as marketing cooperatives that pool resources for the sale of seafood caught by individual fishers, or as supply cooperatives that produce fish eggs and supply them to farms (Panigrahy and Nayak, 2023; Wasave et al. 2015; Johnson and van Densen, 2007). There is also an international organization in the field of fisheries and more broadly in the field of aquaculture, the 357 International Cooperative Fisheries Organization (ICFO) was established within the ICA in 1976. ICFO today has 20 358 fisheries cooperatives from 19 different countries as members. ICFO assists fisheries development by providing fisheries information to fisheries cooperatives around the world and encourages the exchange of expertise and 12 experience between them through training, symposia, seminars and other means. ICFO has strongly promoted the development of global fisheries and contributed to the development of the aquaculture sector by establishing World Fisheries Cooperative Day, the first of ICA's eight sectoral organizations (SUHYUP, 2025). It is emphasized that Fisheries Cooperatives have a significant power in solving the economic problems of the sector 364 and developing the sector, especially in developed countries and in many societies that make their living from fisheries, as well as in reducing the negative effects of environmental factors that threaten fisheries and other aquaculture products (Ovando et al. 2013). From this perspective, it is understood that Fisheries Cooperatives are closely related 367 to environmental values as well as economic aspects. These values are explained as components of global warming, which is a global problem, the deterioration of ecological balance and

its negative impact directly on the aquaculture population (Garcia et al. 2021). When some examples of Fisheries Cooperatives in the world are examined, it is understood that they have different practices from each other. This situation is influenced by the existence and potential of aquaculture products in that country, the level of development of the country and the democratic structure of the society. When the practices related to aquaculture cooperatives in some countries are examined, it is understood that cooperatives are effective and prominent in many countries. It is also understood that in countries such as the USA, Norway, Japan, India and the UK, cooperatives in this field have an accumulation based on the past (Wikipedia, 2025).

A general assessment of global fisheries cooperatives and a comparison with Turkey reveals that such cooperatives have developed in countries bordering oceans and seas, such as Japan, the United States, and Norway. Considering this aspect, Türkiye, surrounded by sea on three sides, demonstrates a proliferation of such cooperatives, particularly in fishing regions. It is also understood that there is a significant effort by fishing cooperatives worldwide to simultaneously utilize both the catch and the resulting seafood. However, in Türkiye, these cooperatives appear to have an impact only on offshore fishing operations. The failure to address the relationship between fisheries policy and healthy nutrition in Türkiye through these cooperatives is also seen as a shortcoming.

# 3.5 Fishering Cooperatives in Türkiye

The first development related to aquaculture in Türkiye started in 1942 under the leadership of the People's Bank and gained a legal infrastructure with the Cooperatives Law No. 1163 enacted in 1969. Established within the framework of Law No. 1163 and continuing their activities within this framework, Fisheries Cooperatives entered a new process with the incentives and supports provided by the Fisheries Law No. 1380 to the fisheries sector and cooperatives, and cooperatives, a new organizational structure, developed in this sector (Doğan, 2017). Cooperatives established in this sector have been able to continue their activities for common purposes under the name of aquaculture or fisheries cooperatives. In Türkiye, Fisheries Cooperatives are established on the basis of Article 88 of the Articles of Association of the Cooperatives Law No. 1163 on Limited Responsibility Fisheries Cooperatives prepared by the Ministry of Agriculture and Forestry and can continue their activities according to this Articles of Association (Ministry of Agriculture and Forestry, 2025). Developments related to Fisheries Cooperatives in Türkiye are analyzed under two main headings: before and after the Fisheries Law No. 1380 enacted in 1971. Situation of Fisheries Cooperatives before Fisheries Law No. 1380 392 393 Starting in 1863 with the Hometown Chests, the Turkish cooperative movement gained a more westernized appearance with the proclamation of the republic and started to spread rapidly. However, it is a fact that there was no serious cooperative movement in the field of fisheries or aquaculture until the 1940s. Although there were no cooperatives in the field of aquaculture in this period, it is known that there were some fishermen's organizations. The first of these was an association called "Dersaadet Balıkçı Esnafı Cemiyeti" established by Sarıyer fishermen in 1923 in order to resolve the disputes arising among fishermen and to ensure solidarity among them, and it operated in this field and in the following years this association continued under the name of "İstanbul Balıkçılar Cemiyeti". In the development of Turkish cooperatives, just like the cooperative in which Atatürk himself participated as a partner, the first cooperative was established in 1943 under the name "Istanbul Fishermen's Credit and Sales Cooperative" and its first partner was İsmet İnönü, the President of the period (Doğan, 2017; Ünal and Yercan, 2006). In late 1942, a work program was prepared under the leadership of the People's Bank in cooperation with the Ministry of Commerce, and the necessary facilities were increased for fishermen to be organized as cooperatives in production, credit and sales transactions for the development of the sector. The construction of cold storages for the storage of fish, the continuous delivery of fish to the market by means of refrigerated vehicles and the establishment of a fish industry were allocated to Türkiye Halk Bankası AS. With the assignment of the People's Bank to the development of 408 fisheries, there were some concrete developments in the establishment of a cooperative in this field. As a matter of facts, the "Istanbul Fish Hunters Production and Credit Sales Cooperative" was established in 1943 with the decision of the Council of Ministers. The purpose of this cooperative, apart from the organization of fishermen, was determined as taking measures against the negative consequences of World War II in the face of feeding and foreign exchange difficulties and the development of Turkish fisheries (Ak and Balık, 2020; Yurtoğlu, 2017). In the following years, the Ministry of Economy and Trade, which was the ministry responsible for fisheries at the time, tried to improve the organization of fishermen in the form of cooperatives with new measures. As a result of the state's emphasis on cooperatives and its efforts in the establishment of cooperatives, the establishment of Fisheries Cooperatives gained momentum especially in the 1950s, and the establishment of Fisheries Cooperatives, which started under the leadership of the People's Bank, has continued to increase continuously over the years (Doğan, 2017). In short, the importance of Halk Bank in the development of Fisheries Cooperatives in Türkiye is very important and some of the Fisheries Cooperatives established in those years are given in Table 4 below:

Table 4: Some of the first fisheries cooperatives established in Türkiye

Cooperative name	Province	Foundation date
Istanbul Fishermen Production and Credit Sales Cooperative	İstanbul	03.03.1943
Istanbul Fish Producers Cooperative	İstanbul	25.10.1949
Sinop Fishermen Production, Credit, Business and Sales Cooperative	Sinop	26.12.1949
Hatay Iskenderun Mediterranean Fishermen Fish Production and Sales Cooperative	Hatay	10.06.1950
Rize Çayeli Fish Oil Production and Sales Cooperative	Rize	27.10.1950
Trabzon Akçaabat Mersin Village Fish Production and Sales Cooperative	Trabzon	29.12.1950
Balıkesir Bandırma Fish Production, Credit Business and Sales Cooperative	Balıkesir	05.05.1951
Muğla Bodrum Sponge Production and Sales Cooperative	Muğla	29.02.1952
Bartin Amasra Fish Production and Sales Cooperative	Bartin	09.10.1953
Isparta Eğridir Yeşilada Neighborhood Fish Hunters Production and Sales Cooperative	Isparta	20.03.1954
Samsun Gümenuz (Yakakent) Fish Production and Sales Cooperative	Samsun	14.04.1955
Balıkesir Ayvalık Samsun Gümenuz (Yakakent) Fish Production and Sales Cooperative	Balıkesir	14.09.1956

Source: Doğan, (2017).

Çanakkale, Antalya, Hatay, Rize, Giresun, Ordu, Ankara, Balıkesir, Samsun and Trabzon until 1956. From one in 1943, the number of Fisheries Cooperatives reached 36 in 1965, 56 in 1968, 88 in 1969 and 112 in 1970. With the enactment of the Fisheries Law No. 1380, the number of cooperatives increased significantly. Accordingly, the number of Fisheries Cooperatives increased from 133 in 1973 to 552 in 2016, the number of members increased from 5 600 to 30 845, and the number of cooperative regional associations increased from 4 to 16 in the same period. Fisheries Cooperatives after Fisheries Law No. 1380 The importance of cooperatives for the improvement of the fisheries sector and for the full utilization of resources and for the sustainability of fisheries in an environmentally sensitive manner has become even clearer with this law. The Law No. 1380 on Fisheries entered into force in 1971 and consists of 9 chapters and 39 articles, and with the positive effect and supportive provisions of this law, the establishment of Fisheries Cooperatives in Türkiye has started to increase gradually (Mevzuat, 2025). Article 15 of the relevant law states that " Producers of fishery products may establish cooperatives and unions in accordance with the Law No. 2834 on Agricultural Sales Cooperatives and Unions, Agricultural Credit Cooperatives No. 2836 and Agricultural Credit Cooperatives No. 1163 and cooperatives and unions in accordance with the characteristics of the profession. These cooperatives and unions shall be named as "Fisheries Exploitation Cooperatives", "Fisheries Sales Cooperatives", "Union of Fisheries Sales Cooperatives and Fisheries Credit Cooperatives". Thus, the relevant law states that aquaculture cooperatives in Türkiye can be established as Agricultural Credit Cooperatives, cooperatives and unions bearing the characteristics of the profession within the scope of the Cooperatives Law No. 1163. The law emphasizes that aquaculture cooperatives in Türkiye can be established under three names. These are; Fisheries Exploitation Cooperatives, Fisheries Sales Cooperatives, Fisheries Credit Cooperatives. In the same article of the relevant law, in relation to Fisheries Cooperatives, it is stated: ".......The main contract formulas of cooperatives and unions are prepared jointly by the General Directorate of Ziraat Bank and the relevant department of the Ministry of Commerce. T. C. Ziraat Bank will open loans to cooperatives and individuals who produce aquaculture products and sell the production themselves, all tools and equipment used in production and marketing will be used as collateral according to the Credit Maritime system (the principle of showing similar tools and equipment used in fish production such as boats, engines, nets, etc. against the loan provided that they are insured), as well as production, storage and marketing facilities are used as collateral on the basis of title deeds or lease agreements. The Maritime Bank may also extend credit on the same basis." This statement underlines that the Ministry of Trade and the Agricultural Bank are effective in the provision and utilization of credit and that the Maritime Bank will also be 455 effective in the lending of these cooperatives. Article 17 of the Law states producers. The right to benefit from fishing harbors and their superstructure facilities is leased by the Ministry of Agriculture and Forestry, with the opinion of the General Directorate of National Real Estate, to cooperatives or cooperative unions or producer unions related to aquacultures for a period of not more than ten years by negotiation, without being subject to the provisions of the State Tender Law No. 2886. If there is no demand from cooperatives or cooperative unions or producer associations within the announced thirty-day period, it shall be given by the Ministry of Agriculture and Forestry to real or legal persons by 15 tender in accordance with the State Tender Law No. 2886." Thus, the law emphasizes that aquaculture cooperatives can benefit from these areas and places as a priority without being subject to the provisions of the tender law in their activities in this field. In addition, in Article 4 of the law, the leasing procedures for aquaculture investments to be made in the seas and inland waters under the ownership of the Treasury or the General Directorate of State Hydraulic Works or in the aquaculture production facilities to be built on land by taking water from these places or in aquaculture investments to be made based on the project by rehabilitating these areas are determined. In the leasing of these places, Article 4 states: ".....The right to harvest through hunting in the areas determined by the Ministry of Agriculture and Forestry, provided that it is not transferred to others, may be leased by the Ministry of Agriculture and Forestry primarily to aquaculture cooperatives or unions established in the place where the harvesting will be carried out, whose members reside in the production area for not less than five years, exclusively engaged in the harvesting or marketing of aquaculture products, and if

they do not lease it, to real or legal persons. With this provision, a priority has been set for aquaculture cooperatives. Current status and problems of fisheries cooperatives in Türkiye Established according to the Cooperatives Law No. 1163, Fisheries Cooperatives are also considered as a form of agricultural organization. In 476 Türkiye, agricultural organizations are organized in various forms such as cooperatives, producer unions, chambers, foundations and associations. In Türkiye, organizations related to aquaculture are organized only in the form of Aquaculture Cooperatives and Aquaculture Producer Associations (Ministry of Agriculture, 2024). As can be seen in Table 5, the following findings can be summarized about Fisheries Cooperatives within the agricultural organization in Türkiye:

Table 5: Agricultural cooperatives and fisheries cooperatives in Türkiye

Findings	Türkiye	Agricultural cooperatives	Fisheries Cooperative
Number of Cooperatives	48 640	11 709	594
Number of Partners	4 170 086	3 672 010	31 029
Number of members per cooperative	91.36	313.60	52.23

Source: Ministry of Agriculture and Forestry, (2024).

If the data in Table 5 are summarized, the following information is obtained:

- 1. The total number of agricultural cooperatives in Türkiye is 11 709, of which 594, or 5.07%, are fisheries cooperatives.
- 2. The total number of members of agricultural cooperatives in Türkiye is 3 672 010, of which 31 029, or 0. 84%, are members of Fisheries Cooperatives.
- 3. While the average number of members per agricultural cooperative in Türkiye is 313.60, this number is 52.23 in 489 fisheries cooperatives.

As can be seen from Table 6, Aquaculture Cooperatives make up a very low 0.012% of the total number of cooperatives in Türkiye and an even lower 0.007% of the total number of members. Similarly, in terms of the number of members per cooperative, Aquaculture Cooperatives are at a much lower level than both Türkiye and agricultural cooperatives. The number of Regional Unions of Fisheries Cooperatives in Türkiye is 17 and 232 Fisheries Cooperatives are partners of these regional unions and the total number of their partners is 14 304. In addition to these data, there is 1 central union of Fisheries Cooperatives in Türkiye and 17 Regional Unions are partners of this central union and the number of cooperatives affiliated to them is 199 and the number of partners is recorded as 11 403. The central union of Fisheries Cooperatives in Türkiye continues its activities under the name of SÜR-KOOP. SÜR-KOOP was established at the end of 2003 by the Regional Unions of Eastern Black Sea, Istanbul, Çanakkale, Balıkesir, İzmir, Muğla and Mersin Fisheries Cooperatives under the 1163 Cooperatives Law (SÜR KOOP, 2025). The Unions affiliated to SÜR-KOOP are summarized 500 in Table 6 below:

Table 6: Regional unions affiliated to SÜR-KOOP

Name	Center	Region	Field type	Num.Coop
Adana Fisheries Cooperatives Regional Union	Adana	Akdeniz	Deniz	8
Antalya Fisheries Cooperatives Regional Union	Antalya	Akdeniz	Deniz	10
Artvin-Rize Fisheries Cooperatives Regional Union	Rize	Karadenizz	Deniz	10
Çanakkale Fisheries Cooperatives Regional Union	Çanakkale	Marmara	Deniz	22
Eastern Black Sea Fisheries Coop.Regional Union	Trabzon	Karadeniz	Deniz	22
Hatay Fisheries Coop. Regional Union	İskenderun/Hatay	Akdeniz	Deniz	7
İçel Fisheries Cooperatives Regional Union	Mersin	Akdeniz	Deniz	9
İstanbul Fisheries Cooperatives Regional Union	İstanbul	Marmara	Deniz	38
İzmir Fisheries Cooperatives Regional Union	İzmir	Ege	Deniz	20
Kocaeli Fisheries Cooperatives Regional Union	Kocaeli	Marmara	Deniz	10
Muğla Fisheries Cooperatives Regional Union	Bodrum/Muğla	Ege	Deniz	14
Sinop Fisheries Cooperatives Regional Union	Sinop	Karadeniz	Deniz	8
Tekirdağ Fisheries Cooperatives Regional Union	Şarköy/Tekirdağ	Marmara	Deniz	8
Aydın Region Fisheries Coop.Regional Union	Söke/Aydın	Ege	Balıkçılık	12
Balıkesir Fisheries Cooperatives Regional Union	Bandırma/Balıkesir	Marmara	Deniz	14
Bursa Region Fisheries Coop.Regional Union	Gemlik/Bursa	Marmara	Deniz	12
Samsun Region Fisheries Coop.Regional Union	Samsun	Karadeniz	Balıkçılık	13
Total			-	237

Source: SÜR-KOOP, (2025).

Num. Coop.: Number of affiliated cooperatives.

According to the data in Table 6, the following data can be obtained about the fisheries cooperatives affiliated to SÜR-KOOP in Türkiye:

- 1. The total number of Fisheries Cooperatives in Türkiye is, of which 237, or 39.89%, are SÜR KOOP partners.
- 2. The average number of cooperatives per regional union affiliated to SÜR-KOOP is 13.94 and the number of cooperatives affiliated to Çanakkale, Eastern Black Sea, Istanbul, Izmir, Muğla and Balıkesir Fisheries

Cooperatives Regional Unions is above this average.

3. Among the cooperatives affiliated to SÜR-KOOP, the highest number of cooperatives is Istanbul Aquaculture Cooperative Regional Union with 38, i.e. 16.03%, and the lowest number is Hatay Aquaculture Cooperative Regional Union with 7, i.e. 2.95%. The distribution of cooperatives affiliated to SÜR-KOOP by region is given in Table 7 below:

**Table 7:** The distribution of cooperatives affiliated to SÜR-KOOP.

Region	Number of Cooperatives	%
Marmara	104	43.88
Black Sea	53	22.36
Aegean	46	19.40
Mediterranean	34	14.36
Total	237	100.00

Source: SÜR-KOOP, (2025).

As can be seen in Table 7, the highest proportion of Fisheries Cooperatives in Türkiye is in the Marmara Region with 43.88% and the lowest in the Mediterranean Region with 14.36%. All of the Fisheries Cooperatives are located in the coastal region and almost all of them are composed of producers engaged in marine fisheries. According to the data of 2023 in Türkiye, 32% of the seafood production in the seas is realized in Muğla. The highest production in the seas 522 is realized in the Mediterranean, Aegean and Black Sea coasts, respectively. At the provincial level, Muğla ranks first in marine aquacultures with 38.2%, followed by İzmir with 26.8%, Mersin with 7.2%, Sinop with 6.4%, Aydın with 5.1%, Trabzon with 4.4% and Artvin with 2.4%. These data show that there is not a complete linearity between Fisheries Cooperatives in Türkiye and the provinces and regions with the highest number of fisheries in the seas. Because, although Marmara Region as a region and Istanbul as a province are the regions and provinces with the highest number of fishery cooperatives, the Aegean Region and Muğla as a province are in the first place in terms of production. When Fisheries Cooperatives in Türkiye are considered within the framework of Fisheries Law No. 13380 and Cooperatives Law No. 1163, their working areas are listed as follows (Ünal and Yercan, 2006).

- 1. To organize and manage the production, breeding and hunting activities of fish and other aquatic products of the partners,
- 2. Classifying various aquatic products into standard classes according to their type and condition, packaging them according to health conditions and market demands,
- 3. To ensure the preparation, preservation and transportation of seafood products in accordance with the desired and required requirements in the shipment to the market,
- 4. To acquire movable and immovable properties, to have them built or to sell them when necessary, to take over businesses, to establish and operate all kinds of facilities when necessary in line with its objectives,
- 5. To supply all kinds of needs of the partners and to carry out and have carried out export and import transactions related to the evaluation and marketing of the aquatic products obtained,
- 6. To mortgage movable and immovable properties belonging to the legal entity of the cooperative to the banks, 541 institutions and organizations from which loans are obtained and to provide guarantees on behalf of its members.
  - 7. Engaging in rural tourism activities,
  - 8. To address the needs of partners in social, cultural and transportation issues,
  - 9. Carrying out activities for environmental protection,
  - 10. To establish companies related to its fields of activity and to participate in already established companies,
- 11. To publish newspapers, magazines, books and to carry out all kinds of publishing activities and to organize meetings such as seminars, symposiums, panels and conferences when necessary. Although the mandate of Fisheries Cooperatives in Türkiye is quite broad, it is acknowledged that they also have problems in terms of organization, policymaking, access to financial instruments and other legal, economic and environmental constraints.

# 4. Conclusion and Recommendations

Although the importance of a healthy life is increasing day by day, it has various components. Especially the relationship between nutrition and healthy life is an indisputable fact. Air, water, minerals, carbohydrates, minerals, carbohydrates and protein needed for the maintenance of life must be taken regularly and in moderation. In many developed countries, protein is very important in nutrition habits and they attach great importance to the consumption of animal protein. In this case, it is accepted as a kind of development indicator and it is emphasized that the omega 3 acid in animal protein should be taken into the body and the consumption of seafood, which is a great source of this acid, should be consumed. Consumption of seafood, which is a rich source of protein, is accepted as an indicator

of 18 both human health and a kind of development. Data on production, consumption, foreign trade and consumption of seafood products are very important and binding in determining the course of this sector. These data are used in the comparison of Türkiye, which is in a good situation in terms of natural water resources such as rivers, ponds and natural water resources in the world and trilateral sea and inland water resources, in terms of the sectoral structure of aquaculture products. Especially in this comparison, it is accepted as a correct approach to express these data as a criterion in the evaluation of the aquaculture sector as a development indicator. Both in the world and in Türkiye, there has been a significant increase in the production of aquaculture products in recent years, but the share of aquaculture products obtained through aquaculture has gradually increased. This situation causes a proportional decrease in the amount obtained by fishing and causes the use of factors such as labor, capital, organization, expertise and input use in the sector such as aquaculture. In parallel with the increase in the amount of aquaculture products obtained by aquacultures in Türkiye's aquaculture sector, the share of aquaculture products in foreign trade in terms of both value and quantity is increasing. One of the important indicators of the aquaculture sector is the consumption of aquaculture products and it should not be forgotten that this issue is also accepted as an indicator of development. When we look at the data on the consumption of aquaculture products in Türkiye, it is seen that it is well below that of developed countries and the EU. This situation is closely related to the transportation of aquaculture products to consumption and eating habits. Many researches have been conducted on the problems of the aquaculture sector and the problems of the sector are generally gathered under the headings of aquaculture, aquaculture, insufficiency of aquaculture resources and organization. Aquaculture as a sector is a part of the agriculture sector and its problems are largely a component of this sector. However, in the aquaculture sector, there are different problem areas for the activity obtained through fishing and the activity obtained through aquaculture. However, it is known that both areas have similar problems in obtaining products, landing, processing and consumption. At the beginning of these, problems such as input supply, product development in accordance with the needs of the processing industry, consumption course, fish houses, fishermen's shelters are among the priority problems of the sector. The relationship between all these problems and organization is very important not only for the aquaculture sector but also for other agricultural sectors. Although there are various forms of organization in the agricultural sector, the importance of cooperatives, which offer mutual assistance, solidarity and cooperation within a commercial partnership system, is of course even greater. In Türkiye, modern Turkish cooperatives, which started in 1863 with the Homeland Chests, gained a new momentum with the republic. Especially in the agricultural sector, the food chain, consumption and economic characteristics of cooperatives have become more prominent. In the aquaculture sector, cooperatives are generally categorized under two headings: before and after the Fisheries Law No. 1380 enacted in 1971. In 1943, the first cooperative established in the sector was named "Istanbul Fish Hunters' Credit and Sales Cooperative" and in the following years, steps were taken to solve the problems of the sector in various fields with the Ministry of Commerce under the leadership of Halk Bank. With the enactment of the Law No. 1380 on Fisheries, cooperatives gained a new momentum in the field of aquacultures. Especially the prioritization of Fisheries Cooperatives in the leasing of public resources in streams, rivers, lakes and ponds based on this law has given a new power to cooperatives in this field. There are Fisheries Cooperatives in Türkiye and these cooperatives have a total of 31 029 members. The number of members per cooperatives in these cooperatives is 52.23, which is below the number of cooperative members both in Türkiye and in the agricultural sector. In short, it is understood that there is not enough cooperative organization in the field of fisheries. The most important top organization of fishery cooperatives in Türkiye is SÜR-KOOP, which is the Central Union of Fishery Cooperatives, and only 39.89% of fishery cooperatives are partners of this union, which is understood to be quite low. SÜR-KOOP is a partner. In short, it is understood that Fishery Cooperatives in Türkiye is not at an adequate level in terms of both organization and top organization, which is reflected in Fishery Cooperatives. The development of Fisheries Cooperatives will be a very important step in solving the problems of the sector and Türkiye will feel more secure both economically and in terms of raising healthy generations. In this regard, it is necessary to develop more and more effective special areas for these cooperatives, especially in the Fisheries Law No. 1380 and the Cooperatives Law No. 1163, in the areas of input supply, foreign trade, processing industry, development of fishing shelters, and meeting the basic fuel expenses in the field of catching and breeding, which are the priority areas for the cooperatives of the sector. In addition to the legal regulations related to fisheries cooperatives, the development of training and extension activities in coordination with them will add excitement to the sector. The first step toward developing fisheries cooperatives in Türkiye is to incorporate this issue into Türkiye's fisheries policies. Because fisheries cooperatives are structures with economic and social objectives, they should not be considered independently of these policies. It would be beneficial to address legal gaps regarding fisheries cooperatives and, in particular, to revise the Fisheries Law to address this issue.

# 5. Etik Standartlara Uygunluk (Compliance with Ethical Standard)

#### a) Author Contributions

Ertugrul Guresci: Conceptualization, process, software, verification, formal analysis, research, materials,

composing the first draft, composing the review, and editing,

# b) Conflict of Interests

There is no conflict of interest, according to the authors.

#### c) Statement on the Welfare of Animals

Not relevant

### d) Statement of Human Rights

There are no human subjects in this study.

# e) Funding

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#### 6. References

- Ak, İ., ve Balık, İ. (2020). Cumhuriyetin İlanından 2020 Yılına Türkiye'nin Su Ürünleri Üzerine Kamu Örgütlenmeleri ve Desteklemeleri. Turkish Journal of Maritime and Marine Sciences, 6(2), 144-157.
- Aksungur, N., ve Firidin, Ş. (2008). Su Kaynaklarının Kullanımı ve Sürdürülebilirlik. Aquaculture Studies, 2008(2), 9-11.
- Alagöz, M., & Paksoy, H. (2024). Ahilik ve Modern Kooperatifçiliğin Kooperatif İlkeleri Açısından Değerlendirilmesi. Journal Of Social, Humanities and Administrative Sciences (Joshas), 9(67), 3295-3301.
- Alçiçek, Z. (2009). Su ürünleri sektöründe sürdürülebilirlik. Biyoloji Bilimleri Araştırma Dergisi, 2(2), 35-40.
- Altman, M. (2009). History and theory of cooperatives. International Encyclopedia of Civil Society, Helmut Anheier, Stefan Toepler, eds., Springer.
- Arslan, G., & Yıldız, P. O. (2021). Türkiye su ürünleri sektörüne genel bakış. Menba Kastamonu Üniversitesi Su Ürünleri Fakültesi Dergisi, 7(1), 46-57.
- Atar, H. H., & Alçiçek, Z. (2009). Su ürünleri tüketimi ve sağlık. TAF Preventive Medicine Bulletin, 8(2).
- Billiet, A., Dufays, F., Friedel, S., & Staessens, M. (2021). The resilience of the cooperative model: How do cooperatives deal with the COVID-19 crisis? Strategic Change, 30(2), 99-108.
- Bueno, P. B. (2009). Indicators of sustainable small-scale aquaculture development. Measuring the contribution of small-scale aquaculture: an assessment. FAO Fisheries and Aquaculture Technical Paper, 534, 145-160.
- CLTCOOP; (2025). https://www.cltcoop.com/17624383/fishery-cooperatives (25.04.2025).
- Çalışkan, Ş. (2010). Türkiye'de beşeri sermaye harcamaları ve insani gelişmişlik. ISGUC The Journal of Industrial Relations and Human Resources, 12(1), 7-28.
- Doğan, K. (2017). Su Ürünleri Kooperatiflerinin Türkiye'deki Dünü, Bugünü ve Geleceği. Turkish Journal of Aquatic Sciences, 32(1), 21-34.
- Doğan, K. (2017). Su Ürünleri Kooperatiflerinin Türkiye'deki Dünü, Bugünü ve Geleceği. Turkish Journal of Aquatic Sciences, 32(1), 21-34.
- EİB, (2025). https://www.eib.org.tr/Sayfa.Asp?SI Id=5A02DF31AF&HID=D414FB43E (27.04.2025).
- FAO, (2025). https://www.fao.org/statistics/data-collection/fishery-and-aquaculture/en (26.04.2025).
- Garcia-Lorenzo, I., Ahsan, D., & Varela-Lafuente, M. (2021). Community-based fisheries organisations and sustainable development: Lessons learned from a comparison between European and Asian countries. Marine Policy, 132, 104672.
- Garlock, T. M., Asche, F., Anderson, J. L., Eggert, H., Anderson, T. M., Che, B., & Tveteras, R. (2024). Environmental, economic, and social sustainability in aquaculture: the aquaculture performance indicators. Nature Communications, 15(1), 5274.
- Güngör, F. (2017). Türkiye'de Millî Bankacılığın Doğuşunda Memleket Sandıklarının Yeri Ve Önemi. Turan-Sam, 9(36), 645-654.
- Güreşci, E (2024). Kooperatifçilikte Ahiliğin İzleri, VII. Uluslararası Ahilik Sempozyumu, 27-29 Eylül 2004, Kırşehir.

- Güreşci, E., & Çakır, T. (2024). Dünyada Ve Türkiye'de Sağlık Hizmetleri Kooperatifleri Ve Türk Kooperatifçiliği İçin Yeni Arayışlar: Sağlık Hizmetleri Kooperatifçiliği Üzerine Bir Değerlendirme. The Journal of Academic Social Science, 134(134), 64-84.
- Güreşci, E., & Gönç, M. (2017). Türkiye'de kooperatiflerin temel sorunları ve çözüm önerileri üzerine düşünceler. Üçüncü Sektör Sosyo Ekonomi, 52 (4), 219-229.
- https://dkib.org.tr/tr/faaliyetler-sirkuler-2024188-su-urunleri-yetistiricilerine-verilecek-destekler-belirlendi-
- ICA, (2025). https://ica.coop/en/newsroom/news/world-cooperative-monitor-2023-top-300-ranking-released-focus-cooperative-member
- Irmaklıoğlu, T., & Irk, E. (2022). Türkiye'de kooperatifçiliğin tarihsel gelişimi. Yönetim ve Örgüt Tarihi Dergisi, 1(2), 102-115.
- Johnson, T. R., & van Densen, W. L. (2007). Benefits and organization of cooperative research for fisheries management. ICES Journal of Marine Science, 64(4), 834-840.
- Johnston, F. E. (1980). Nutrition and growth. In Human Physical Growth and Maturation: Methodologies and Factors (pp. 291-301). Boston, MA: Springer US.
- Karabulut, H. A., & Yandı, İ. (2006). Su Ürünlerindeki Omega-3 Yağ Asitlerinin Önemi ve Sağlık Üzerine Etkisi. Ege Journal of Fisheries and Aquatic Sciences, 23(3), 339-342.
- Karademir, M., & Arat, M. E. (2014). Su Ürünleri Kooperatiflerinde Karşılaşılan Sorunlar Ve Çözüm Önerileri: İstanbul İli Örneği-The Problems Faced in Fishery Cooperatives and Solution Suggestions: The Case Of Istanbul. Öneri Dergisi, 11(41), 133-156.
- Kooperatif Bülteni, (2024). https://esnafkoop.ticaret.gov.tr/data/670cc06f13b876dc68d9 (27.04.2025).
- Köse, S. G., Tokay, N. M., Baygar, S., Özer, T., Çolakoğlu, N. P. A., & Alçiçek, Z. (2010). Türkiye'deki su ürünleri işleme sektörünün durumu sorunları ve çözüm önerileri. Türkiye Ziraat Mühendisliği VII. Teknik Kongresi, 11, 15.
- Maciel, E. D. S., Sonati, J. G., Galvao, J. A., & Oetterer, M. (2019). Fish consumption and lifestyle: a cross-sectional study. Food Science and Technology, 39, 141-145.
- Mevzuat, (2025). https://mevzuat.gov.tr/mevzuat?MevzuatNo=1380&MevzuatTur=1&MevzuatTertip=5 (29.04.2025).
- Ministry of Agriculture and Forestry, (2024). Su Ürünleri Raporu 2024, https://arastirma.tarimorman.gov.tr/tepge/Belgeler/PDF (26.04.2025).
- Ministry of Agriculture and Forestry, (2025). https://www.tarimorman.gov.tr/TAnasozlesmesi.pdf (27.04.2025).
- Mol, S., & Ulusoy, S. (2010). Türkiye'de su ürünleri işleme sektörünün sorunları ve çözüm önerileri. Journal of Fisheries, 4(2), 152.
- Nakayiso, E., & Andrew, N. (2023). A historical review on the global evolution, benefits, challenges and performance of cooperatives. Journal of Humanities and Social Sciences, 8(1), 51-75.
- Ortmann, G. F., & King, R. P. (2007). Agricultural cooperatives I: History, theory and problems. Agrekon, 46(1), 40-68.
- Ovando, D. A., Deacon, R. T., Lester, S. E., Costello, C., Van Leuvan, T., McIlwain, K., ... & Uchida, H. (2013). Conservation incentives and collective choices in cooperative fisheries. Marine Policy, 37, 132-140.
- Panigrahy, S. R., & Nayak, A. K. (2023). Fishery Cooperatives as a Catalyst for Sustainability. In Cooperatives as a Catalyst for Sustainability: Lessons Learned from Asian Models (pp. 227-245).
- Resmi Gazete, (2025). https://resmigazete.gov.tr/eskiler/2024/07/20240726-4.pdf (26.04.2025).
- Sanayi ve Ticaret Bakanlığı, (2024). ttps://izka.org.tr/wp-content/uploads/2024/11/D.pdf (18.04.2025).
- Saygı, H. E. (2024). Türkiye'de balıkçılık ve su ürünleri yetiştiriciliği sektörünün mavi ekonomi bağlamında büyüme beklentileri. Menba Kastamonu Üniversitesi Su Ürünleri Fakültesi Dergisi, 10(3), 187-200.
- SOSYOEKONOMİ, (2025). https://sosyalekonomi.org/hindistanda-kooperatifcilik/ (20.04.2025).
- Strauss, J., & Thomas, D. (1998). Health, nutrition, and economic development. Journal of Economic Literature, 36(2), 766-817.
- SUHYUP, (2025). https://www.suhyup.co.kr/suhyup-en/771/subview.do (23.04.2025).
- SÜR-KOOP, (2025). https://www.sur.coop/hakkimizda/
- Şakıma, İ. Ve Çevrimli, M. B. (2021). Türkiye su ürünleri sektöründe mevcut durum, sorunlar ve çözüm önerileri. Veteriner Hekimler Derneği Dergisi, 92(2), 198-218.
- TAGEM, (2023). https://arastirma.tarimorman.gov.tr/tepge/Belgeler/PDF%20%C3%9Cr%C3%BCn% (01.05.2025).

- Ticaret Bakanlığı, (2025). https://ticaret.gov.tr/kooperatifcilik/bilgi-bankasi/kooperatifler-hakkinda/turkiyede-kooperatifcilik (27.04.2025).
- Ünal, V., & Yercan, M. (2006). Türkiye'de Su Ürünleri Kooperatifleri ve Balıkçılar İçin Önemi. Ege Journal of Fisheries and Aquatic Sciences, 23(1), 221-227.
- Wasave, S., Sharma, A., & Wasave, S. (2015). A glance of fishermen's cooperative societies of various countries around the globe. Journal of Extension Systems, 31(1), 63-76.
- WIKIPEDIA, (2025). https://en.wikipedia.org/wiki/Fishery\_cooperative (27.04.2025).
- Yalçın, A. Z. (2022). Yerel kalkınma bağlamında kooperatifler ve belediye etkileşimi. Maliye Araştırmaları Dergisi, 8(1), 1-20.
- Yavuzcan, H., Pulatsü, S., Demir, N., Kırkağaç, M., Bekcan, S., Topçu, A., ve Başçınar, N. (2010). Türkiye'de sürdürülebilir su ürünleri yetiştiriciliği. TMMOB Ziraat Mühendisliği VII. Teknik Kongresi, Bildiriler Kitabı-2, 767-789.
- Yılmaz, Ö. T. (2021). Türkiye'de sürdürülebilir mavi ekonomi için balıkçılık desteklerinin değerlendirilmesi. Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 14(3), 906-923.
- Yılmaz, S., Erdilal, R., & Kebapçıoğlu, T. (2009). Su ürünleri sektöründeki ekonomik organizasyonlardan üretici birlikleri. Akdeniz University Journal of the Faculty of Agriculture, 22(2), 223-232.
- Yurtoğlu, N. (2017). Erken Cumhuriyet dönemi ve sonrasında Türkiye'de balıkçılık faaliyetleri (1923-1960). Tarih İncelemeleri Dergisi, 32(1), 233-263.