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EXAMINATION OF THE STATUS OF ENERGY COOPERATIVES IN THE SOCIAL ENTREPRENEURSHIP ECOSYSTEM*

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Summary

Social entrepreneurship and the basic principles of cooperatives, which develop to create a solution to a social problem and add value, require using these concepts together. The increase in energy demand with the increasing population increases the initiatives for energy production. However, the energy cooperative model, in which the needs of the community economy and energy production are met locally, and the local benefit is enlarged, has not become widespread enough yet. It is necessary to adopt the social enterprise model by providing the energy production of the cooperatives and to develop the necessary policies in this regard. In this study, the research method was determined as follows: First of all, international publications on the subject and reports and publications made by the Ministry and its affiliated institutions on a national scale were examined in order to evaluate the secondary data. In addition, academic researches published scientifically and researches made up to date were examined with literature review. This research was carried out in order to evaluate the energy cooperatives in Turkey in the context of social entrepreneurship and to guide the growth of social benefit by realizing successful investments.

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SOSYAL GİRİŞİMCİLİK EKOSİSTEMİNDE ENERJİ KOOPERATİFLERİNİN DURUMUNUN İNCELENMESİ

Özet

Girişimciliğin hız kazandığı 21. Yüzyılda sosyal girişimcilik yeni bir kavram olarak karşımıza çıkmaktadır. Toplumsal bir soruna çare üretmek ve değer katmak üzere gelişen sosyal girişimcilik kavramı ile kooperatifçiliğin temel ilkeleri, bu kavramları beraber kullanmayı gerektirmektedir. Ülkeler için hayati bir kavram olan enerji özellikle sürdürülebilir kalkınma odakları çerçevesinde büyük önem taşımaktadır. Artan nüfusla beraber enerji talebinin büyümesi, enerji üretimine olan girişimleri arttırmaktadır. Ancak topluluk ekonomisi ile enerji üretiminin sağlandığı ihtiyaçların yerelde karşılanarak yerel faydanın büyütüldüğü enerji kooperatifçiliği modeli henüz yeterince yaygınlaşmamıştır. Türkiye'de yenilenebilir enerji kooperatifleri 2010'lu yıllardan sonra gündeme gelmiş olup, 1163 sayılı Kooperatifçilik Kanunu kapsamında değerlendirilmektedir. Kooperatiflerin enerji üretimini sağlayarak sosyal girişim modelinin benimsenmesi ve bu hususta gerekli politikaların geliştirilmesi gerekmektedir. Bu alanda bu sorunlara çözüm getirmek üzere dünyadaki sosyal girişim modelleri ve enerji kooperatiflerinin durumları incelenmiştir. Yürütülen bu araştırmada araştırma yöntemi şöyle belirlenmiştir: Öncelikli olarak ikincil verileri değerlendirmek üzere konu ile ilgili uluslararası yayınlar ve ulusal ölçekte Bakanlık ve bağlı kurumlarınca yapılmış rapor ve yayınlar incelenmiştir. Ayrıca literatür taraması yapılarak bilimsel olarak yayınlanmış akademik araştırmalar ile günümüze kadar yapılan araştırmalar incelenmiştir. Türkiye ölçeğinde enerji kooperatiflerinin sosyal girişimcilik bağlamında değerlendirilmesi ve başarılı yatırımların hayata geçmesi ile sosyal faydanın büyütülmesine yol göstermek üzere bu araştırma yürütülmüştür.

Anahtar Kelimeler: Sosyal Girişim, Enerji, Kooperatif, Sürdürülebilir, Yenilenebilir Enerji, Enerji Kooperatifleri

Introduction

Social entrepreneurship is a structure that is organized and financed by individuals or communities to provide social benefits. In recent years, waiting for the increasing social needs to be met only by the state has rapidly increased the concepts such as social responsibility and social entrepreneurship with the awareness of citizenship and increasing awareness. Cooperatives can find a place among these concepts as legal entities established to develop a solution to a thematic problem. The establishment of cooperatives in order to find a solution to a common problem with solidarity among their members is an example of a social enterprise in this context. Although the history of social entrepreneurship in the world dates back to the 1970s, it is still a new concept in Turkey. Social

entrepreneurship first appeared as a concept in 1953 in the book "Social Responsibilities of Businessman" written by H. Bowen. The first examples in the history of social entrepreneurship; Florence Nightingale, who revolutionized the hospital structure and founded a nursing school, the activities of John Durand, who started working with people with mental disabilities, and Horace Mann, the reformer of public education, are considered to be the first social entrepreneurship activities. The whole world recognized the concept of social entrepreneurship with Ashoka, which was founded by Bill Drayton in 1980 (Gül and Paksoy, 2019). The model developed by the Foundation for the Support of Women's Work in Turkey and its working groups in other regions for a need-based women's organization has been cooperatives with the beginning of the organized movement of women under the roof of the cooperative, the number of women's cooperatives established in Turkey by expanding rapidly until 2009 exceeded 60.

However, there are also non-profit companies with social missions in Turkey, such as Greenpeace Turkey, Youth Services Center and Flying Broom. These initiatives are again examples of social entrepreneurship (Third Sector Foundation of Turkey, 2010).

When we look at the subject in terms of energy, the need for energy is increasing day by day all over the world. However, energy creates a serious challenge for end users with increasing generation, transmission and distribution costs, and access to energy is getting harder day by day. Both households and industry or public institutions have difficulties in producing goods/services with these increasing costs. In this regard, energy cooperatives, as a social enterprise are a new model that dates back to the 1930s in the world, but emerged in the 2010s in Turkey.

1. Literature Research

In this section, a compilation has been made from researches on social entrepreneurship and energy cooperatives.

2. Social Entrepreneurship

Before examining the concept of social entrepreneurship, the concept of entrepreneurship should be examined. Entrepreneurship is a structure established to meet a need by making use of existing or emerging opportunities in the market by producing a good or service economically. Entrepreneurship, first defined by the economist Richard, is defined as a person who buys and produces production inputs and services to sell at an undetermined price. On the other hand, Jean Baptiste Say mentioned that the entrepreneur should have the ability to organize and manage production inputs as well as to take risks. Joseph A. Schumpeter, who brought forward the innovative and dynamic feature of the entrepreneur as one of the basic building blocks of human resources in economic development. According to him, the entrepreneur is defined as the people and institutions that will create change in the society (Doğan, 2015).

Entrepreneurship, which is the engine of economic development and growth, is a set of activities that increase employment, expressed as the process of creating something valuable and different by taking risks and spending the necessary time and effort However, the most classical definition of entrepreneurship; is to introduce new products that have never been produced before by taking advantage of technological developments. In addition, entrepreneurship can also be defined as perceiving the changing demands of customers early and responding to these expectations quickly, going beyond the routine in marketing and distribution processes (Gül and Paksoy, 2019).

In this context, social entrepreneurship is the entrepreneur's carrying out activities that will add added value to the society by investing in an area needed by the society The social entrepreneur, who takes a step in providing the needed socio-economic development, acts as a locomotive in social transformation. It strengthens the bond between work and social responsibility.

In the research conducted by Dees (2001) on social entrepreneurship, it was stated that social entrepreneurs play a role as social agents in society with the following factors (Dees, 2001):

1.Adopting a mission to create a social value and ensure its sustainability,

2. To constantly pursue new opportunities to realize this mission,

3.To be involved in the continuous innovation, adaptation and learning process,

4.Acting boldly without being limited by the resources currently available

5.To show a sense of increasing responsibility towards society.

The term social entrepreneurship is conceptually included in the book “Social Responsibilities of Businessmen” by H. Bowen, which was first published in 1953With the establishment of Ashoka by Bill Drayton in 1980, social entrepreneurship was coordinated in the world. Beneficial initiatives have been provided in many countries with the support given by Ashoka. Contributing to the reduction of 70-80% of electricity costs in rural areas in Brazil with Ashoka, providing electricity to 1 million people, Jeroo Billimoria is a social entrepreneur who provides direct assistance to more than 26 thousand street children in Mumbai through Childline foundation (Koçak and Kavi, 2015).

Bank Grameen (Bank for the Poor), one of the best examples in the field of social entrepreneurship, was founded in Bangladesh in 1983 by Prof. Dr. Muhammed Yunus and he was awarded the Nobel Peace Prize in 2006.

In the Social Enterprises and Turkey Needs Analysis Report conducted by the Third Sector Foundation of Turkey in 2010, it was emphasized that one of the important factors of change in society is social entrepreneurs. Social entrepreneurs seize on unevaluated opportunities and create solutions by mentioned social problems. They implement solutions on a large scale in society with their innovative perspectives (Social Initiatives and Turkey Needs Analysis Report, Third Sector Foundation of Turkey, 2010).

Social entrepreneurship as a concept has been evaluated in different ways in the literature. A group of researchers considered social entrepreneurship as a type of non-profit venture in project/plan management to explore alternative financing strategies or create social value. A second group of researchers considered social entrepreneurship as social responsibility practices of commercial enterprises engaged in cross-sector cooperation. According to a third group of researchers, social entrepreneurship is the promotion of social change and the reduction of social problems. In other words, social entrepreneurship can be seen as a set of activities carried out by non-profit enterprises to provide financing or to create social benefits. At the same time, it can be considered as the social responsibility practices of profit-oriented businesses and trying to solve the social problems of the society (Özdevecioğlu and Cingöz, 2009).

3. Social Entrepreneurship Models

Social entrepreneurship models in the world differ from country to country. Various models have been formed with the political, economic, sociological and cultural conditions. Social enterprises, numbering 62,000 in the UK, employ 800,000 people. It is seen that they are active in many different fields such as energy, recycling and transportation, as well as the health (33%) and education (15%) sectors where they are most active.

In another geography, India, cooperative models have created a field in social entrepreneurship. Amul Dairy Producers Cooperative, which started the White Revolution movement in 1946, created employment for 2.8 million milk producers. With this model, India has become the world's largest producer of milk and dairy products.

On the other hand, North America developed the social entrepreneurship model with an individual focus and provided the formation of the necessary infrastructure for social entrepreneurship. In Africa, this process is more development-oriented and progresses with the steps taken towards democratization. These steps are mostly taken in areas such as education, health, environmental protection, conflict management. (Social Initiatives and Turkey Needs Analysis Report, Third Sector Foundation of Turkey, 2010).

The ways of social entrepreneurship have been specified with the studies carried out by Third Sector Foundation of Turkey in 2014. These are:

-Social Enterprises: They use the income obtained from the goods/services produced in the free economy in areas where social benefits will be provided.

-Social Cooperatives: They are established to create jobs for disadvantaged groups and to carry out activities that will generate income. In this way, they aim to strengthen disadvantaged groups or individuals.

-Micro-credit applications: It is ensured that those in need with a business idea are given life-sustaining capital. It is a successful method for those in need to get out of poverty by establishing their own businesses (https://www.sosyalkooperatif.com/sosyal-girisim-modelleri).

In addition to this modeling, another modeling made by Abdou and friends (2010):

- Participation-based non-profit organization; They are non-profit organizations operating in various fields with the support of their stakeholders.

-Entrepreneurial non-profit organization; It is a model that generates income to finance itself to ensure the sustainability of the organization.

-Hybrid businesses; It is a model of commercial and non-commercial businesses, their qualifications and legal infrastructure, transformed into a profit-oriented structure to support social activities through an innovative legal regulation.

Social enterprises: These are the institutions that provide service with the priority of social benefit while providing service by using the financial performance and high competitiveness in the market to do the same job (Zaki, 2013).

4. Energy Cooperatives

Renewable energy production is encouraged in many different countries of the world through energy cooperatives. In the 1970s, there were many changes in energy policies with the oil crisis. Afterwards, the health problems caused by environmental pollution and the increase in energy prices caused nature-friendly people to come together and establish cooperatives. In this way, they paved the way for energy cooperatives by making them both environmentally friendly and cheaper to access energy.

Developed countries supported this process by providing incentives such as Feed in Tariff (Tariff Guarantee System). England, Germany, Denmark, Canada, USA and Australia have made their way in energy cooperatives with these and similar incentives.

In the energy market of Germany and Denmark, more than 50% of renewable energy facilities are established in the form of cooperatives in order to increase the participation of the society in the economy. In this way, while increasing the awareness of solidarity in the society, the way for local needs to be met by the local is opened and there is a demand for gaining energy independence. Cooperatives have survived to the present day without giving up their ethical criteria and they have been provided to serve in different sectors. It has been ensured that cooperative partners should take social responsibility as entrepreneurs and engage in activities in this way. With these policies implemented, renewable energy cooperatives have emerged (www.ticaret.gov.tr).

"Regulation on Unlicensed Electricity Production in the Electricity Market" was published in the Official Gazette numbered 28783 in 2 October 2013 in Turkey. In this regulation, the establishment of a renewable energy cooperative was made possible by Article 5.

On 23.03.2016, additions were made to this regulation. With the additions, had given the right to establish a facility to produce 1 MW electricity for cooperatives with up to 100 members, 2 MW electricity for cooperatives with 101 to 500 members, 3 MW electricity for cooperatives with 501 to 1000 members, 5 MW electricity for cooperatives with more than 1000 members (Energy Cooperatives Handbook). With the new regulations made afterwards, the right was granted for unlicensed electricity generation up to 1 MW.

Energy Cooperatives in Turkey are working on generating electricity with the use of renewable energy sources. The first renewable energy cooperative established in our country was established in Denizli as the Aegean Electricity Energy Production Cooperative. Then, Karaman Craftsmen Electricity Energy Production Cooperative was established. Çorum Renewable Energy Cooperative and Amasya Renewable Energy Cooperative were established in 2016. Founded in İzmir, İzmir Renewable Energy Cooperative came to life with 10 founding members. It is currently working to increase the number of its members. There are currently two renewable energy cooperatives established with the support of local governments in Turkey. Nilüfer Renewable Energy Cooperative was established with 7 founding members in the first stage and rapidly increased the number of members. The other local government-supported initiative is Seferihisar Renewable Energy Cooperative. The main purpose of the cooperative, which was established with 7 founding partners, is to produce the energy needs of public areas from renewable resources. Currently, there are more than 40 energy cooperatives established in Turkey, of which only Kayseri Energy Cooperative has started to produce electricity by creating 5 MW solar power plant.

5. Method and Extent of the Research

In this study, one of the qualitative research methods, documentary source scanning method was used. The situation was determined with the data and findings obtained from documentary sources, and the qualities, social positions and socioeconomy of social entrepreneurship and energy cooperatives were evaluated.

The research was conducted online over the internet. The research is a literature review, and successful case studies in the fields of social entrepreneurship and energy cooperatives have been searched in the literature. As a result of this research, energy cooperatives were evaluated in the social entrepreneurship ecosystem. In the literature research, especially the reports and research results published by the Ministries of Turkey, Turkey's laws and regulations in force on entrepreneurship and cooperatives, the studies of Development Agencies, ILO Reports, ICA Reports, successful examples of social entrepreneurship and energy cooperatives in the world and academic articles and

researches were used. In the last part of the research, opinions and suggestions about energy cooperatives within the framework of social enterprise are included.

6. FINDINGS

In this part of the research, the relationship between social entrepreneurship and energy cooperatives was evaluated as a result of the literature review. In addition to this relationship, the local socio-economic contributions of energy cooperatives have been demonstrated through exemplary practices.

In addition, in order to correctly evaluate the examples of social entrepreneurship that have become widespread recently, the legal differences between the Company and cooperatives are explained. In the last part, as a result of the literature research, examples of successful energy cooperatives in the world are given by associating social entrepreneurship with energy cooperatives.

6.1. The Relationship Between Energy Cooperatives and Social Entrepreneurship

After the effects of climate change have been felt rapidly in recent years, a changing perspective has emerged towards economic investments The results of global warming, such as the decrease in access to drinking water as a result of the rapid destruction of the environment, the pollution of the soil, the problems encountered in agriculture, and the increased health problems as a result of air pollution, have made the concept of sustainability more popular among entrepreneurs. Environmental attrition brought the natural resource economy to the agenda and increased awareness projects and local development strategies both on an academic and sectoral basis. At this point, entrepreneurs who can foresee the current needs or promising sectors and turn them into opportunities bring green investments to the agenda more. Green economic investments take care to carry the social benefit nature of social entrepreneurship. These social entrepreneurs who try to take part in the green economy are also called green entrepreneurs, which is a new term. The reason why Energy Cooperatives have increased their efforts towards the use of renewable energy by creating a community economy is that while preventing this environmental destruction, they can provide solutions to issues such as establishing a local solidarity economy, obtaining energy at lower prices and creating employment. For this reason, energy cooperatives – especially renewable energy cooperatives – have an important place in the field of social entrepreneurship.

The concept of social entrepreneurship and green economy are directly related to each other. According to the information included in the 3rd Turkey Environmental Performance Review conducted by the OECD, Turkey is among the countries with the highest increase in energy needs in terms of population growth and economic growth among OECD countries. According to this study, Turkey is the country that has increased its greenhouse gas emissions the most among OECD countries in the last 10 years. In order to reduce foreign dependency in energy, the capacities of coal power plants have been increased. The use of fossil fuels come up to 88% of the total energy supply

in the country. This rate is above the OECD average of 80%. This trend in energy use has led to an increase in greenhouse gas emissions in OECD countries over the last 10 years.

In addition to this; Turkey is among the countries with the highest installed capacity in the field of renewable energy resources (such as wind, solar, hydroelectric and geothermal).

Turkey certified the 2009 Kyoto Protocol and the Paris Agreement in 2021. Turkey has prioritized innovations in the field of clean technology and provided 12 funds to entrepreneurs in the field of clean technology, primarily with the Scientific and Technological Research Council of Turkey (Status of Social Enterprises in Turkey, British Council, 2019).

The support given to energy cooperatives in the world varies from country to country. Denmark and Germany are among the countries with the most successful examples in this field.

The source of the success achieved by these countries is the Tariff Guaranteed Program –Feed in Tariff-, which is a successful incentive system (www.ticaret.gov.tr).

The energy cooperatives established to ensure the establishment of energy democracy with the donations provided constitute more than 50 percent of the renewable energy facilities in Denmark and Germany. It is seen that the services provided by the energy cooperatives are no different from the energy companies serving in the private sector and even the services provide social benefits. Local needs can be met by the local with clean energy resources in these countries, which act without being dependent on foreign energy, by creating a solidarity economy and acting with social awareness. This clearly shows that energy cooperatives are social enterprises.

6.2. Socioeconomic Contribution of Energy Cooperatives

The socio-economic contribution of energy cooperatives with installed power in the world varies from country to country. Variations in this area create differences in line with the internal dynamics of the countries. Energy policies, social and cultural textures, economic conditions, human life levels, and the processes of cooperativeization fundamentally affect.

Although the establishments of energy cooperatives differ legale, the constant issue is that they emerge in line with a need. Energy cooperatives were established by switching to solidarity economy due to the policy of breaking away from foreign dependency in energy in some countries, unemployment in some countries, and the goal of obtaining their own energy in cities where access to electricity is difficult in some countries. This information is given in the next section.

According to the Report of Cooperatives in Access to Clean Energy and Energy published by the ILO (International Labor Organization) in 2013, cooperatives have various advantages in the energy sector. Cooperatives are organizations that serve locally. For this reason, they serve with the understanding of democratic management at the local level. However, they have achieved success with the rural electrification they provide in regions where there is no access to electricity, and the renewable resources, which are decentralized locally, are used in the most efficient way (ILO, 2013).

Basically, when we look at the advantages of energy cooperatives, the direct benefit and economic contribution draws attention. It has taken place as a development supporter as an energy provider with rural electrification service in places where electricity transmission and distribution cannot be done (as in the examples of Bangladesh PBS/Coastal Electrification in the United States with the "New Deal" published after the Great Depression). By creating an alternative structure to energy companies in the current order, energy cooperatives act as cheaper energy providers. At this point, keeping the principles of cooperatives in the foreground, cooperative members play a role as green investors in reducing costs and increasing the number of members and in sustainable development for a sustainable environment. Energy cooperatives, which have an organized attitude, have important effects on the formation of energy policies. By increasing the power of the green economy among the incentives provided in local development, it operates not only in energy production but also in subsidiary sectors, creating important areas of action in the economy in terms of both production and employment. Contrary to traditional energy providers, ensuring that energy is produced at local levels and being able to meet with the end consumer reveals the difference of the management approach of energy cooperatives from private sector investments, and they also show successful examples in research and development studies – as in the example of the Danish Wind Tribunes.

According to the information provided in the "Cooperative Practices in Developed Countries-2013" Report prepared by the Ministry of Customs and Trade of the Republic of Turkey, which includes the sectoral analysis of American cooperatives, the energy needs of more than 15 million cooperative partners in the USA are met by renewable energy cooperatives. The energy production capacity of energy cooperatives in the USA has exceeded 900MW. According to the WÜKM Report, electricity distribution cooperatives in the USA; It meets 10% of the country's electricity needs every year. It serves 12% (42 million) of electricity users in the country. Energy cooperatives hold 42% of the national electricity distribution line and provide electricity services to 47 states covering 75% of the country's surface area. It is estimated that the total turnover of 920 active cooperatives is more than 45 billion dollars, and they also provide employment for approximately 130,000 people (GTB, 2013).

An important reason why energy cooperatives are economically accepted by the society is that they can be met by sharing all income-expenditure and responsibilities among the partners in an area where individuals cannot invest on their own.

Common returns from energy cooperatives are provided by generating electricity or heat.

Studies have shown that the economic returns of cooperatives are as follows;

-Energy sales revenue of the generated energy to the grid; by providing a revenue stream obtained by selling the electricity produced in the market,

- Consumption of the energy produced by the members; by providing both the electricity and heat needs of the settlement simultaneously,

-The composition of the consumption of the energy produced by the members and the sale of the surplus; by providing its members with the opportunity to generate income and save money simultaneously with energy sales and local consumption.,

- Creating additional economic opportunities: by providing additional income to its members. (For example, besides the consumption of electricity and heat for local consumption, agricultural renewable energy cooperatives have purchased manure, livestock and other biological species from farmers for energy production in Germany, Austria, Finland and Sweden, thus providing their members with additional income) (Şenöz, 2019).

6.3 The Difference of Capital Company and Cooperatives

Although the laws that the cooperatives are subject to differ between countries, the common point about cooperatives is that the capital of the cooperative increases with the increase in the number of partners, the responsibilities are shared and the cooperative has responsibilities towards the members in order to meet the common needs of the cooperative members at the least cost.

Working in the field of cooperatives, the International Cooperative Union organized the 31st International Cooperative Union Congress in Manchester in 1995 and 7 principles that are still valid were approved at the congress on cooperatives. These principles are voluntary and free entry, democratic management of the partner, economic participation of the partner, autonomy and independence, education, training and information, cooperation between cooperatives, social responsibility (https://izmir.csb.gov.tr/kooperatif-ve-kooperatifciligin-tanimi-i-1529).

The history of cooperatives in Turkey goes back a long way, and the regulation was included in the Law No. 6762, which was published in 1957 (which was repealed). According to Law 6762, in Article 485, a cooperative company is a company with variable capital established under a trade name in order to provide and protect the economic interests of its members and in particular their professional or livelihood needs through mutual assistance and surety (Official Gazette of the Republic of Turkey, 09.07.1956).

On 24.04.1969, the Cooperatives Law No. 1163 was enacted and the provisions of the old Turkish Commercial Code were repealed with the new Turkish Commercial Code, Law No. 6102, no other regulation has been added, stating that cooperatives are a trading company (Uyar, 2016).

In the Cooperatives Law No. 1163, cooperatives are defined as structures established by real or legal entities with variable and variable capital partners by protecting their values by mutual assistance to provide the interests of the partners and the needs for their livelihoods.

Although cooperatives are commercial legal entities under the law, one of the most important differences between being a company and being a cooperative is that no profit is distributed according

to the capital share and no voting rights are granted. This is the important point where cooperatives gain a democratic character. The votes of each partner are the same, whichever partner has more capital does not grant any privilege to the capital owners.

A shareholder, who owns 51% of the shares in a joint stock company, has the right to speak in the general assembly of the company as shareholder owns the majority share, and receives the largest share when the company's dividend is distributed. If this company had been a cooperative, the person who owns 51% of the partnership shares votes 1 vote in the general assembly of the cooperative, like all other partners, and receives risturn in the ratio of the commercial transactions made with the cooperative (in the ratio of the contribution made to the production of the cooperative) not in the share of capital in the distribution of risturn.

In capital companies, profit is a priority. For this reason, staff salaries, service or goods purchases are tried to be met with the lowest expense. The situation is completely different in cooperatives; the working principles of cooperatives are rights-oriented as well as commercial gain. Each partner jointly assumed all the responsibilities of the cooperative. At the point of profit distribution, sharing is done by preserving the balance of the purchases made by the cooperative members with the cooperative, or profit sharing is not made with the General Assembly Decisions and Decisions taken. The reason for this is that it was established to provide economic benefit, not to make a profit for those with large shares. Partnership notes cannot be traded on the stock exchange in cooperatives. The partnership can be transferred only with the permission of the cooperative. Again, unlike the company, cooperatives demand special considerations for partnership. Persons/institutions with common points such as being in a certain sector, residing in a certain province, showing a certain occupation or a basic need can become partners of cooperatives. This aspect ensures that the cooperative members are a strong structure that comes together for the same purpose and whose sensitivities increase under that purpose. With this strong structure, it sets itself apart from companies by acting with the principle of social responsibility. Since the main purpose of the companies is to increase the capital and profit share, they avoid special criteria. In addition, the share of partnership in cooperatives is not unlimited as in companies. This share is limited in the law and in the articles of association of the cooperative. In this way, monopolization of shares is prevented.

The difference between Cooperatives and Capital Companies is summarized in the Vision of Bursa Cooperatives Panel and Workshop Report as follows:

Capital Companies

- Profit maximization
- Dividend distribution
- Profit share by capital share

- Stocks are traded on the Exchange
- Unlimited shares in company partners
- The company management is dominated by capital, capital in the first place, partner in the second place
- The social purpose is a very secondary purpose.

Cooperatives:

- Price maximization
- Risturn distribution
- Risturn by shopping rate
- Partnership bonds can only be sold to the cooperative and to someone else with the consent of the cooperative
- Limited partnership in cooperatives
- Regardless of the partnership share, each partner has a share and the partner is in the first place
- The social purpose is a very secondary purpose
- One of the important elements of the organization

6.4. Energy Cooperatives by Social Entrepreneurship Examples in The World

Energy cooperatives are initiatives implemented in many developed and developing countries in the world. This process, which started in the 1930s, has developed in many different models over the years.

During the Great Depression, which started in the United States of America in 1929, electricity could not be brought to rural areas. With the "New Deal" published by the United States of America to get out of the Depression, in order to provide electricity to the rural areas to solve this problem, the people living in the rural areas were allowed to establish energy cooperatives and the region was provided with electricity.

The process of energy cooperatives, which started with the New Deal in the USA, has brought electricity services to almost 12 percent of the total population today (Ayanoğlu, 2014).

While the Great Depression was going on, Europe was still experiencing the effects of World War I in another corner of the world. One of the most important effects of the war was the damage to the infrastructure. In order to re-establish the damaged electricity infrastructure in the 1920s, local governments and citizens started cooperatives (Gündergi, No. 12).

The energy cooperatives process came to the fore later in the UK. Passing to electricity generation through cooperatives took the 1990s.

The UK passed to energy cooperatives in the 1990s. Baywind Energy Cooperative started the process by generating electricity with wind turbines in the city of Cumbria (Willis R. and Willis J., 2012). The cooperative, which has 1300 members, has provided its members with an income of 7-8.2% since 1996. With the cooperative, the local people became shareholders in a local wind energy farm, and the value of wind energy was increased with the awareness of the public (ILO, 2013).

Germany, on the other hand, has taken a later step in this regard, but has created a sustainable system by making the legal ground very strong. The incentive provided by the use of affordable electricity in exchange for the use of energy obtained from renewable sources has been effective. In 2011, 170 energy cooperatives were established in Germany and more than 500 energy cooperatives were reached with approximately 80,000 shareholders. The investment amount of energy cooperatives has exceeded 800 million euros (Ayanoğlu, 2014). Germany shows successful examples of the sustainable system it has established. A few of them are:

In 2011, the Großbardorf Solar Energy Roof Project was implemented by Friedrich-Wilhelm Raiffeisen (FWR) Energy Cooperatives on the roof over the plant of agricultural and animal waste stored for use in biogas. With the project, the electricity need of the waste storage facility is provided. The facility was commissioned with a capacity of 96kW at a cost of 190,000 Euro (www. koop.gtb.gov.tr). In 2009, the Öecumenical Energy Cooperative was founded in Baden-Württemberg with 34 citizens. First of all, the cooperative, which was established to produce and use the energy of church vehicles, aimed to evaluate the church roof by using solar cells and to expand the use of solar energy. The number of partners reached 110 in 2010. The only requirement for a cooperative partnership is residence in Baden-Württemberg. The minimum capital for the partnership is 100 euro and the maximum each partner can buy 100 shares. In 2010, the amount of partnership shares was increased to 181,000 Euro. In addition, he can receive € 41,500 from the Renewable Energy Development Fund of the German State Reconstruction Credit Institution (ILO, 2013).

In Germany, the WeilerWärme Cooperative is working on a central heating system with biomass. It is in production for the independence of energy and supplies energy to the citizens at affordable prices.

The Bioenergy Village initiative in Jühnde, Germany, switched to the cooperative model in 2004 and succeeded to become the Jühnde Bioenergy Village. Between 2000 and 2004, it secured government subsidies for investments by planning bioenergy systems and district heating networks. In this way, the energy system in the village is completely run by the cooperative. Together with the cooperative, an understanding of decision making, problem solving and commitment has been formed by acting in common goals in the village. More than 70% of the inhabitants of the village have paid at least 1500 euros to own shares in the cooperative. Greenpeace Energy Cooperative, on the other hand, is Germany's largest cooperative and serves with 20,000 partners and around

100,000 customers. Greenpeace is an independent body of non-governmental organization. However, this non-governmental organization has 5 partnership shares (1 share = 55 Euro) of the cooperative. It produces 100% renewables using wind, solar and hydroelectric resources. Energy cooperatives have been producing affordable energy for many years and providing energy needs (ILO, 2013).

After the 1986 Chernobyl Explosion, families initiative for a nuclear-free future was established in Germany. This initiative advocated nuclear-free energy consumption in their living spaces, establishing the company in 1991 and the EWS eG/Electrizitats Werke Schönau Cooperative in 2009. They work on the distribution of renewable energy sources and operate systems with solar, wind, biomass, hydro and cogeneration. Cooperatives with 2000 partners serve approximately 150,000 people with an energy distribution network (Energy Cooperatives Handbook, 2017).

Established in Belgium in 199 with 47 founding partners, Ecopower was established by generating electricity through a water mill. By 2012, it had 43,000 partners. The cooperative operating in Eokle has 3 wind farms and provides the electricity needs of the entire region (Energy Cooperatives Handbook, 2017).

The success of renewable energy cooperatives in Ontario, Canada has been driven by the government-implemented Tariff Guaranteed Programme. The country has implemented more than 200 multi-partner joint energy projects after 2012. More than 70 of more than 200 projects have been done by cooperatives. Almost 26 percent of these cooperatives produce biofuels. 68 percent of them are farmers engaged in agricultural production. In Canada, 22 percent of energy cooperatives are wind energy and 13 percent are solar energy cooperatives. The main task of 60 percent is to generate electricity. The most active place is the Ontario Province with a population of 13 million, with 1300 cooperatives and 1.5 million cooperative partners. This corresponds to 10 percent of the total population. The remaining cooperatives produce goods/services used in the renewable energy sector (Ayanoğlu, 2013). WindShear Cooperative, established in Toronto, Canada, has established a 750 KW wind power plant. It has a 50 percent partnership with the local electricity supply company. It is North America's first city-based wind project and has 600 stakeholders. After Wind Share, the Solar Share Cooperative was established in 2010 within the TREC-Toronto Renewable Energy Cooperative. It has 300 partners. 10 percent income is obtained from the energy produced by installing solar energy on the properties of 17 land owners. The minimum investment cost of a link is 1000 CAD (Tutar, 2019).

Combrailles Durables, located in France, is a 170-member cooperative founded in 2010. There are Solar Energy Systems belonging to the cooperative. Wind Energy Systems are under installation (Energy Cooperatives Handbook, 2017).

Bangladesh is one of the most successful countries within the scope of energy cooperatives. Established in Bangladesh, PBS/Coastal Electrification and Women's Development Cooperative has been serving in the field of rural electrification since 1977. PalliBidyutSamities (PBSs) established with the presence of approximately 70 rural energy cooperatives, the system was established by the Rural Electrification Board. It operates in rural areas for PBSs working for electricity generation and distribution. In 2007, 16,000 jobs were created. In the successful operation of PBSs, the electricity distribution cables of 47,650 settlements laid by cooperatives are more than 219,000 km. In addition, more than 170,000 irrigation pump stations in the countryside have been supplied to electricity, and a total of 30 million people have received electricity service with these projects. This successful process has reached 1.4 billion dollars with 20 donors (ILO, 2013), (Tutar, 2019).

Denmark, which has made a name for itself especially in the field of wind energy, is also successful in the field of energy cooperatives. In 1997, Middelgrunden Energy Cooperatives and Samso Energy Cooperatives were established with half municipality partnership. These cooperatives provide the electricity of nearly 50,000 households from wind energy with a capacity of 40,000 kW. It also owns 11 offshore turbines of 1000 kW and 10 offshore turbines of 2300 kW (www.koop.gov.tr).

The Bolivian Rural Electrification Cooperative (R.E.C.), founded in Bolivia in 1965 and distributing electricity to more than 300,000 consumers-partners, is one of the largest rural electricity cooperatives in the world. It is also the 3rd among electricity distribution companies in the country. It started its activities with the support of the USA International Development Agency. Cooperative funding sources include the National Association of Rural Electric Cooperatives (NRECA), the US Agency for International Development (USAID), and the US Department of Agriculture. It continued to serve by providing electricity with the support it received from these financing sources (ILO, 2013).

In Cambodia, energy cooperatives started in 2005 by electrification and electricity distribution. In 2006, “Local Energy Cooperative Improves Small Businesses and Livelihoods Project” was implemented in Anlong Tamey Town. More than 290 households in the town do not have electricity, and the project has been accepted by the local people to create new income sources and increase the capacity for new financing models. Although the project ended in 2007, the model continued to work efficiently (ILO, 2013).

Costa Rican energy cooperatives are working on rural electrification and the rural electrification rate in the country is more than 98 percent. Cooperatives play an important role in this area as well. In the cooperative process that started in the 1960s, 4 large cooperatives Coopelesca, Coope Alfaro Ruiz, Coope Guanacaste and Coopesantos operate. With its electricity distribution network, it serves more than 7000 km and has almost 150,000 customers. The supply provided by the 4 large cooperatives corresponds to 22 percent of Costa Rica. However, 34 percent of the total demand

can be provided. In addition, Coopelesca, Coope Guanacaste and Coope¬santos Cooperatives have established a joint wind power plant with a tripartite venture (ILO, 2013). Energy cooperatives in the country were founded in 1989 by Conelectricas R.L. By establishing the federation, it provides services to cooperatives in administrative and technical processes (www.nrecainternational.coop).

Energy cooperatives started to be established in India in the 1950s, and they handled rural electrification together with water services. In this way, it has increased the benefit by addressing the needs of the region from 2 different branches. Another example from the country is the Pravaranagar Sugar Cooperative. One of the by-products of the cooperative working on sugar is energy. It is active in 44 towns in the State of Maharashtra. By-products such as ethanol and biogas obtained from sugar cane are used to provide the needs of the cooperative and the rural population. The wastes of the cooperative biogas facility are sold as organic fertilizers (ILO, 2013).

Uganda has put forward the energy cooperative model in regions where electricity service cannot be provided. This process developed after the establishment of the Rural Electrification Agency by the Government in Uganda. The aim of the agency is to end inequalities in access to electricity in the Rural Electrification Strategy and Plan and to act on the realization of welfare-enhancing projects. For this reason, the Agency supports the energy cooperatives process. Pilot projects have started in Uganda's Bundibugyi, Pader and Abim (Bundibugyo Electric Cooperative Partnership) and Pader-Abim Partnership (Multi-Purpose Electricity Cooperative Partnership; Pacmecs). A total of 36 filling centers, 17 in Bundibugyo and 19 in Pader and Abim, are designed for the initial phase.

In South Africa, the Highflats Power Plant is operated in partnership with 13 local cooperatives. With this cooperation, it provides electricity distribution in Ubuhlebezwe (ILO, 2013).

South Sudan started its energy cooperative business with the pilot electrification in Yei with the support of the South Sudan Rural Electrification Program run by the American Agency for International Development. Before the pilot project, only three cities in South Sudan had electricity. The project is within the scope of the Infrastructure Services Project in Sudan, and the power plant has been established. By establishing a street lighting circuit, capacity development programs were organized to establish and operate locally. With the established Yei Electricity Cooperative, more than 16.000 people benefit and serve more than 325 subscribers (Tutar, 2019).

Energy cooperatives in Brazil are working on biodiesel. The first established biodiesel cooperative is the COOPERBIO Cooperative. The cooperative engages in biomass collection, biodiesel and ethanol production. The birth of the cooperative was in 2005 with the organization of small producers and landless workers in the country. Cooperative uses castor oil plant, jatropha, sunflower and other plants for biodiesel production (ILO, 2013).

The Eno Energy Cooperative, which was established in Finland, was also established for multi-purposes. The cooperative working on biomass has 3 plants. The production of wood chips used in these facilities is also done by the cooperative. ENO, which has 52 cooperative partners, uses waste materials from forestry in its biomass heating plant. The resulting heat is sold to the public, households and businesses with 15-year agreements, and plant ashes are used as artificial fertilizers in forests. (ILO, 2013).

Denmark has come a long way in the energy cooperative model. Legal practices and incentives in the country direct citizens to cooperatives. The Middelgrunden Cooperative is the world's largest in wind energy and wind co-operatives. These 20 stands, 10 are of the Cooperative and the remaining 10 are the local electricity company, which has an alternate agreement with the Copenhagen Municipality. 4 percent of the electricity consumed in Copenhagen is distributed by the cooperative. The feasibility of wind energy and off-shore wind farm was made with the working group established by Copenhagen Environment and Energy Office in 1996. This study included citizens as well. As a result of the study, it enabled the citizens to become cooperative in 1997. In order to develop in this field, Denmark enacted a law in 2009 and made the provision that at least 20 percent of the new wind investments to be made belong to the local people. Thus, the attractiveness of establishing an energy cooperative has been increased. (ILO, 2013).

In Argentina, cooperatives were established in 1933 to oppose the monopoly in electricity production through a public organization. Sociedad Cooperativa Popular Limitada (SCPL) was established by obtaining licenses for the establishment of cooperatives and electricity distribution by 87 entrepreneurs, consisting of activists. In the following years, the cooperative succeeded in adding the establishment of distribution grids, telephone service, drinking water supply and sterilization service, internet access service to its portfolio in order to ensure development in Chubut. Besides these services, SCPL owns Argentina's largest wind power park. SCPL currently employs 600 people. In 1938, all energy cooperatives or organizations in the country were gathered under the federation (Federación Argentina de Cooperativas de Electricidad y Otros Servicios Públicos Limitada-FACE). 375 joint energy cooperatives belong to this federation. FACE has introduced the Sistema Autónomo de Generación de Energía Renovable (SAER) service by establishing a system that generates electricity specific to the use of renewable energy for domestic use in rural areas (ILO, 2013).

Together with these examples, each of the existing energy cooperatives was established with the sensitivity of climate change and turned into energy-specific service providers in order to find solutions to other social problems as well. It is seen that energy cooperatives, which have achieved a sustainable structure with both social benefit and economic gain, have important ties with social entrepreneurs established for social benefit.

Conclusıon and Polıcy Implıcatıons

The concept of social responsibility has recently become a concept that can be encountered in all areas of life. This concept, which is frequently encountered in public, private sector and non-governmental organizations, has now become one of the focal points of entrepreneurs. Many social entrepreneurs, who believe that profit maximization will follow by putting social benefit at the center of their service, are now people/institutions who realize that social problems cannot be solved only by the state. The solution of social problems is possible with the contribution of all parties from every field. Social entrepreneurs, who provide both social and economic benefits with the contribution, appear as different legal entities.

Social enterprises are not tied to a single model in the European Union. Most of the startups are registered in the private sector, while others are categorized in different fields. These are non-governmental organizations such as social unions, associations, voluntary organizations, charities, cooperative companies and even non-judgmental structures. The concept of social economy, which has been used in France since the 19th century, has become widespread in the European Union countries and more than 160,000 cooperative companies have been established. With this model, which provides employment to approximately 5.4 million people, 1 million companies and employment areas for 100 million people have been created in the world (Sönmez ve Arıker, 2016).

They are structures that develop and preserve their qualities with the values and ethical criteria of cooperatives. The awareness of social responsibility brought by entrepreneurship and the understanding of cooperatives enabled them to create new policies in their fields and to operate in these areas. As a result of these developed policies, renewable energy cooperatives have emerged. With the emergence of cooperatives as a result of these political processes, an alternative entrepreneurship model has been created. Thanks to the cooperatives, it is necessary to ensure that the local renewable energy resources are evaluated with this model by the local people (www.ticaret.gov.tr).

The United Nations declared 2012 as the International Year of Sustainable Energy. With the announcement of the Sustainable Energy Year, the concepts of energy and cooperatives have been used together. In addition, energy cooperatives have increased in the world as a result of increasing awareness about energy. Support mechanisms provided for increasing cooperatives and the use of renewable energy resources by cooperatives have been effective (Cebeci, 2018).

According to the International Cooperative Association (ICA), cooperatives are a collaborative model, unlike companies (www.sosyalekonomi.org).

Cooperatives, which prioritize certain values in international norms, operate in order to create a better world with cooperation, not only profit. Cooperatives, whose foundation is based on equality,

operate fairly. They take care of increasing welfare and economic development, improving life and nature through sustainable cooperation (www.ica.coop).

According to the research, the economic benefit obtained from the energy cooperative investments made by the local people has provided 5 times more positive impact and externality than the investments made by the state or private sector, and social sensitivity has increased in the members involved in the projects (Şenöz, 2019).

In line with this information, the increase of energy cooperatives working as social entrepreneurs who do business with social benefit will strengthen the social entrepreneurship ecosystem. Along with this, a development model emerges that can realize some transformations in society both socially and economically. Democratization of energy can be envisaged by turning to renewable energy sources to the community economy as an energy-dependent country in response to the increasing energy demand. In order to accelerate the growth of the social benefit locally, the local economy will be strengthened by producing and selling the energy locally by the cooperative, and even by obtaining the transmission and distribution rights, providing the same service as traditional electricity providers. Increasing the service and service quality in the energy sector, increasing local employment, increasing awareness of renewable energy, expanding the focus of sustainable development in the society with the sub-industry and sub-service purchases; positive progress of economic, cultural and social change will be ensured, and cooperation will be increased by developing organized life policies.

References

Ayanoğlu, (2013). Social Responsibility Principle in Cooperatives and Renewable Energy Cooperatives -Kooperatiflerde Toplumsal Sorumluluk İlkesi ve Yenilenebilir Enerji Kooperatifleri. T.C. Ministry of Trade, Cooperatives General Directorate, Master Thesis, Ankara.

Ayanoğlu, (2014). Renewable Energy Cooperatives with World Examples-Dünya Örnekleri ile Yenilenebilir Enerji Kooperatifleri. Association of Energy Experts- Enerji Uzmanları Derneği, *Energy Market Bulletin- Enerji Piyasası Bülteni*, February 2014, No:31, 2-5.

British Council, Turkey, (2019). The State of Social Enterprise in Turkey. https://www.britishcouncil.org.tr/programmes/education/social-enterprise-research, [accessed 10.12.2021].

Bursa Eskişehir Bilecik Development Agency (BEBKA), (2016). The Vision of Bursa Cooperatives Panel and Workshop-Bursa Kooperatifçiliğinin Vizyonu Panel Ve Çalıştayı. https://www.kalkinmakutuphanesi.gov.tr/assets/upload/dosyalar/koopvizyonpanelirapor-1568975388.pdf, [accessed 10.12.2021].

Cebeci, A. N. (2018). Renewable Energy Cooperatives in the World, the Natural Miracle in Turkey on the Requirement of Solar Energy Cooperatives. *Journal of Strategic Research in Social Science*, 4 (2), 1-22.

Dees, (2001). The Meaning of Social Entrepreneurship. https://centers.fuqua.duke.edu/case/knowledge_items/the-meaning-of-social-entrepreneurship/, [accessed 10.11.2021].

Erkan, (2019). File: A Local Enterprise Model: Renewable Energy Cooperatives -Dosya: Yerel Bir Girişim Modeli: Yenilenebilir Enerji Kooperatifleri. *Gündergi Magazine*, November 2018-April 2019, No:12, https://www.gunder.org.tr/wp-content/uploads/gundergi-sayi-12-d.pdf, [accessed 10.12.2021].

Gül, Paksoy, (2019). A Theoretical Research On Social Entrepreneurship. *International Social Mentality and Researcher Thinkers Journal*, (Issn:2630-631X) 5(26): 1911-1928 [accessed Nov 09 2021].

http://auzefkitap.istanbul.edu.tr/kitap/kok/girisimcilikau219.pdf, [accessed Nov 10 2021].

https://koopdestek.org.tr/, [accessed 10.12.2021].

https://socialnomics.net/2012/07/03/the-10-greatest-social-entrepreneurs-of-all-time/, [accessed 10.12.2021].

https://sosyalekonomi.org/kooperatiflerin-sirketlerden-farki/, [accessed 10.12.2021].

https://ticaret.gov.tr/data/5d4c0d1b13b876180c773f8f/brosur-yeuk.pdf, [accessed 10.12.2021].

https://ticaret.gov.tr/kooperatifcilik/bilgi-bankasi/kooperatifler-hakkinda/yenilenebilir-enerji-kooperatifleri, [accessed 10.12.2021].

https://ticaret.gov.tr/kooperatifcilik/bilgi-bankasi/kooperatifler-hakkinda/yenilenebilir-enerji-kooperatifleri, [accessed 10.12.2021].

https://www.ica.coop/en/what-co-operative-0, [accessed 10.12.2021].

https://www.sosyalkooperatif.com/sosyal-girisim-modelleri, [accessed 10.12.2021].

ILO (International Labour Office), (2013). Providing Clean Energy And Energy Access Through Cooperatives. https://enerji.mmo.org.tr/wp-content/uploads/2018/11/ILO-ENERJ%C4%B0-KOOPERAT%C4%B0FLER%C4%B0-RAPORU.pdf, [accessed 10.12.2021].

Kaya, (2017). *Handbook Of Energy Cooperatives / Community-Based Energy Production*. Green Thought Association, Troy Environmental Association, https://www.yenkoop.com/wp-content/uploads/2020/01/enerji-kooperatifleri-el-kitabi.pdf, [accessed 10.12.2021].

Koçak, Kavi (2015). Social Entrepereneur Municipality As A Social Policy Actor. *HAK-IS International Journal of Labor and Society*, 3 (6), 26-49, https://dergipark.org.tr/tr/pub/hakisderg/issue/7580/99509, [accessed 10.12.2021].

Kötek, (2014). Renewable Energy Cooperatives Should Be Set On The Road- Yenilenebilir Enerji Kooperatifleri İçin Yola Koyulmalı. http://enerjigunlugu.net/yenilenebilir-enerji-kooperatifleri-icinyola-koyu_7924.html#.VPyF1fmsUsA, [accessed 10.12.2021].

NRECA International, http://www.nrecainternational.coop., [accessed 10.12.2021].

Özdevecioğlu, Cingöz, (2009). Social Entrepreneurship And Social Entrepreneurs: Theoretical Framework. *Erciyes University Journal of Economics and Administrative Sciences (ERUFEAS)*, No: 32, January-June 2009, pg. 81-95, https://dergipark.org.tr/en/download/article-file/66531, [accessed 10.12.2021].

Şensöz, (2019). Renewable Energy Cooperative System And It's Effects. *Turkish Water Foundation, Climate Change and Environment-İklim Değişikliği ve Çevre*, 4, (2) 10–22, https://dergipark.org.tr/en/download/article-file/838679, [accessed 10.12.2021].

Sönmez, Arıker, Toksoy, (2016). Development of Social Entrepreneurship in the World And Turkey. *Journal Of Socıal Scıences And Humanıtıes Researches*, Bahar/Spring 2016-Cilt/Volume 17-Sayı/Issue 37.

T.C. Cooperative Law, No: 1163, (15.05.1969), https://www.mevzuat.gov.tr/MevzuatMetin/1.5.1163.pdf, [accessed 10.12.2021].

T.C. Ministry Of Environment, Urbanization And Climate Change, https://izmir.csb.gov.tr/kooperatif-ve-kooperatifciligin-tanimi-i-1529, [accessed 10.12.2021].

T.C. Ministry of Trade, (2013). https://ticaret.gov.tr/data/5d4c10d213b876180c773ff8/GUKU-SON.pdf, [accessed 10.12.2021].

Turkish Trade Law, Law No:6762, 09.07.1956, Official Newspaper -Resmi Gazete, No:9353, https://www.resmigazete.gov.tr/arsiv/9353.pdf, [accessed 10.12.2021].

TUSEV (Third Sector Foundation of Turkey) Publications, No: 50, (2010). *Social Enterprises and Turkey Needs Analysis Report*- Sosyal Girişimler ve Türkiye İhtiyaç Analizi Raporu. http://sosyalgirisim.org/userfiles/document/Sosyal%20Girisimler%20ve%20Turkiyeweb.pdf , [accessed Nov 09 2021].

Tutar, F.K. (2019). A New Evolution For Cooperatives In Turkey: Energy Cooperatives. *Journal Of Social And Humanities Sciences Research (Jshsr),* Vol:6 Issue:33 Pp:400-416 (Issn:2459-1149)

Uyar, (2016). In Cooperative Companies and Ordinary Companies; Scope of the Right to Follow the "Company" and/or "Company Partner" of Third Parties who are Creditors from the "Company" and/or "Company Partner-Kooperatif Şirketler ile Adi Şirketlerde; "Şirket"ten ve/veya "Şirket Ortağı"ndan Alacaklı Olan Üçüncü Kişilerin "Şirket"i ve/veya "Şirket Ortağı"nı Takip Hakkının Kapsamı. *Ankara Bar Association Magazines*, 2016/1, https://dergipark.org.tr/tr/download/article-file/398511, [accessed 10.12.2021].

Willis, Willis, (2012). Cooperative Renewable Energy in the UK; a Guide to This Growing Sector. https://www.uk.coop/sites/default/files/uploads/attachments/renewableenergy_0_0_0.pdf, [accessed 10.12.2021].

Zaki, (2012). An Overview of Social Entrepreneurship. AUC Research Conference, Entrepreneurship & Innovation: Shaping the Future of Egypt, https://www.researchgate.net/publication/322640782_An_overview_of_social_entreprenurship, [accessed 10.12.2021].