

Abdulsamet Ölçek\*

<https://orcid.org/0000-0002-9211-1570>

Hitit University, Çorum, Turkey

## Anti-HEPP initiatives in Turkey as an example of environmental movement

### Introduction

With the development of capitalist production relations, human-human and human-nature relations have also changed. The previous accumulation process, which Charles Marx called the “original sin” of capitalism, has begun. In this process, natural resources, notably land, have become a part of the capital, that is, they have been commodified. As a term of “*commodification*”, it refers to commodity. Commodity is defined as making things tradable, that is, turning them into a commercial element. Nature has become one of the main resources that capitalism exploits with the desire for capital to grow (Marx, 1996: 686-705). This exploitation passion of capitalism started to increase with the industrial revolution. By destroying nature’s self-renewal cycle, it has led to an increase in exploitation. It is an important point that this process accelerated with the emergence of globalization and consumer society. The environmental destruction and natural degradation have led to the formation of movements to protect the environment in the process. In this context, the first environmental movements emerged at the end of the 19<sup>th</sup> century and at the beginning of the 20<sup>th</sup> century. They were mostly aimed at protecting the environment and wildlife. In the middle of the 20<sup>th</sup> century, environmental movements became environmental activists and began to organize to protect the environment. Although these movements to protect the environment have emerged, the dependence of the capitalist system on nature has not decreased. The problem of the limited natural resources in the world and the inability of states to meet their energy needs have pushed them to find alternative options. Water, wind, solar, geothermal are the examples of natural resources. In this context, states wanted to solve their energy needs issue at a lower cost and faster. The increasing energy dependency of the states has necessitated the lower cost of production and use of sustainable energy. In this sense, one of the main alternative energy source that Turkey employs is Hydroelectric Power Plants (HEPPs). With the efficient use of the HEPPs, it is predicted to produce the needed energy and it is thought that the environmental damage will be less severe. However, as a result of wrong environmental policies implemented by Turkey, it has been ob-

---

\* Correspondence address: Hitit University, Political and Social Sciences, e-mail: solcek19@gmail.com.

served that the HEPPs cause many environmental damages. The commodification of water, restriction of access to water, damage to agriculture and ecosystem, and forced migration to new regions are just examples of those. As a result of these negative effects experienced due to the HEPPs, opposition against the HEPPs has emerged in Turkey.

### **HEPPs and their effects in Turkey**

The world population and the population of Turkey are increasing each passing day. With the increase in population, the need for energy also increases. Due to the limited natural resources in the world, it makes it difficult to meet the energy needs of the increasing population. With the increasing energy demand in the world, fossil fuels have started to be insufficient and their resources have started to deplete. For this reason, it is necessary to meet the energy needs of the increasing population, to cause less harm to the environment while producing energy, to reduce the carbon footprint, to reduce the consumption of fossil fuel resources, etc. For those reasons, some governments have turned to renewable energy sources. One of these renewable energy sources are the HEPPs built on the riversides that convert the power of flowing water into energy.

Turkey is one of the developing countries in the world. In this context, it wants to annihilate the factors that hinder its development and becoming a developed country. One of these obstacles is foreign dependence on energy. Turkey meets its energy needs with the energy it produces with its own assets and the energy it imports from other countries. In this sense, the state is not able to meet all its energy needs with its own resources. Moreover, Turkey is partially dependent on foreign energy. Turkey's increasing need for energy and its inability to meet it with its own resources constitute an economic problem. In order to prevent money loss through energy imports, Turkey seeks alternative ways to produce energy within the country with its own means. It has attached importance to the construction of the HEPPs and increased incentives in the private sector in order to reduce its dependence on foreign energy and to solve this problem by its own means. The reason for this is that Turkey is a country suitable for the HEPPs construction in terms of its geographical structure and river type. Other reasons for the construction of the HEPPs in Turkey are low greenhouse gas emissions, low-cost maintenance, and creation of new workplaces.

Revitalization of economic and social life in rural areas is desired by the government, and the HEPPs have an important role in this context. Small-scale HEPPs are an important factor in meeting the energy needs of these regions where transportation and government aid are not easily available. The HEPPs are an important factor in the development of the region and in increasing the welfare of the local community. Some of the energy produced in the regions where small-scale HEPPs are built is given to these regions. Thus, as a result the infrastructure system for energy transmission is brought to the region, which facilitates the development of the region. Thanks to the additional

energy supply small industrial facilities and handicrafts can flourish in these places, and also agriculture can benefit from it. Furthermore, Turkey is able to build micro-, mini-, and small HEPPs with its own means, meaning that the construction of the HEPPs can contribute to the economy by using domestic resources and contribute to the development of the subsidiary industry on a micro-scale. In order to provide the energy needed by Turkey from domestic uses as much as possible, great importance is attached to the production of energy by both public and private enterprises in a way that will provide maximum economic benefit.

In addition, developing new sources for energy production and putting them into operation as soon as possible is another important priority. In the energy sector in Turkey, privatization activities are also carried out under the Ministry of Energy in order to increase the profitability and efficiency of the existing facilities and to ensure the private sector's contribution to the construction of new ones. The policy currently followed in the energy sector is to meet the energy needs of the country in a timely, adequate, reliable, economic conditions and taking into account the environmental impact, in a way that supports and directs the targeted economic growth rate (Uyrun, 2020: 354-355).

Considering the country's interests, maximum profit and environmental impact, the HEPPs are a useful tool for energy production and their damage to the environment is minimal. Small-sized HEPPs cause less damage to the environment during construction compared to large-sized HEPPs. Due to these reasons, the government desire to spread the construction of the HEPPs, especially the small-sized ones, throughout in Turkey. The government considers the HEPPs being built by private companies in difficult-to-reach areas such as the Black Sea Region will have positive effects on the welfare of the people living in this region. The HEPPs built by the private sector will be operated with the build-operate-transfer model, thus they will provide energy to the people living in this region, there will be a minimum level of money outflow from the state coffers and clean energy will be produced. In addition, the Black Sea Region is a perfect space for the energy production by the HEPPs due to its geographical structure and climatic conditions. The reason for this is that the Black Sea region is rainy in all seasons and has a rough terrain. Due to the climatic and terrain conditions of the region, the flow rates of the rivers are high. Therefore, the HEPPs have more energy production potential there compared to other regions in Turkey.

Apart from the benefits of the HEPPs, there are also some disadvantages. The damages can be associated with the wrong environmental policies applied. The HEPPs built in Artvin, Tunceli and Gümüşhane in Turkey caused some damage to the environment due to the wrong environmental policy. Some of the HEPPs built in Turkey had damaged the nature while they were under construction and in operation. Some living areas are flooded due to the HEPP dams, and they cause also migration of local people, extinction of rare plant and animal species, commodification of water, deterioration of ecological balance, loss of income in agriculture due to changes in water flow and sub-

merged agriculture fields. Improperly applied HEPPs and environmental policies can have negative economic, psychological and social effects on people. In some regions of Turkey, the local community had to move to another region because of the construction of the HEPPs. As a result of this forced migration, people who migrated to another place were faced with some psychological, economic and sociological problems such as not being able to adapt to the place they migrated, unemployment, poverty, unplanned urbanization. In addition, the water use of the local community of the region is restricted due to the water retention of the HEPP dams, and accordingly, the people of the region, whose profession is agriculture and animal husbandry, suffer economically. Due to the HEPP dams, the water flow in the rivers decreases and the life of the creatures in these rivers becomes difficult. The retention of water in the HEPP dams causes commodification of water and limits the water use of the local people living here. Thus, the right of access to drinking water, which is one of the fundamental rights of people, is restricted.

Fundamentally, the HEPPs, which do not have a major negative impact on the environment, can cause great and irreversible damage to it as a result of wrong environmental policies implemented by governments. It will harm not only the local community of the region, but also the future generations living there. With the collection and commodification of water as a result of the HEPP constructions, the amount of water used by the people of the region before the HEPP and the amount of water used after the HEPP is built will not be the same. Thus, the river inherited from the ancestors will not be given to future generations in the same way. Instead, a river with a rickety stream of water, commodified for profit, will be passed on to the next generation. Therefore, it is quite possible that future generations who will live in this region will encounter water problems due to the exploitation of nature and the commodification of water.

### **Commodification of water and the HEPPs**

It is known that about 3/4 of the Earth is covered with water. 97% of the world's water is salt water, the remaining 3% is fresh water and is suitable for human consumption. However, 87% of the fresh water is inaccessible because it takes the form of aquifers or glaciers. For this reason, the rate of fresh water that people can use is very low and usable water resources are decreasing day after day due to consumption, global warming, environmental pollution, etc. Despite the scarcity of water that can be used, human beings waste it and contribute to its pollution, commodification and commercialization.

The commodification of water involves a process. This process includes the private ownership of water and the transformation of water into a commodity that can be bought and sold. Environmental problems of the world, the commodification of water being one of them, are escalating. As water is one of the basic life needs of human beings, the limited water resources and the depletion of these resources is a negative situ-

ation that affects not only people but all living creatures and harms the ecological structure (Türkey, 2013: 21-22).

It is understood from Mehmet Türkey's words that water resources in the world are negatively affected by the commodification of water under the influence of capitalism. It will not only impact human life at the moment, but also endanger the future of all living creatures. As a result, water problems and people's access to water will become more difficult in the oncoming years. The main purpose of those who commodify water is to make money. In this context, nature will be pushed on the side, and the importance of life and water resources is ignored by private companies. Thus, private companies that desire to produce more products will increase their water consumption in order to earn money, and the commodification of water will lead to faster depletion of water resources. Commodification of water means in general giving the right to use water to private individuals. The HEPPs can be given as an example of the commodification of water, because with their constructions, the water in the rivers can be collected, so the water held in the HEPP dam becomes a production tool. When the places where HEPPs are built in Turkey are examined, it is possible to see the negative effects on the life of the local community. Some of the provinces where HEPP grievances are experienced are Gümüşhane, Artvin, Trabzon, Rize, Ordu, Giresun, Tunceli.

In this sense, when looking at the international arena, the United Nations predict that water should be managed with a holistic approach and emphasize that water distribution should be improved and its quality should be increased (Kartal, 2006: 478-485).

International institutions and organizations such as the International Water Resources Association, International Monetary Fund, Organization for Economic Co-operation and Development, World Water Council have similar ideas when it comes to policies regarding water management. According to the UN's perspective on water, the impact of the HEPPs in Turkey on water is a negative phenomenon. The reason for this is that the HEPPs built in this country reduce the water quality in the places where they are built and the distribution of water is limited due to the decrease in the flow rate. Due to the HEPP constructions, resulting in wrong environmental policies and the water collection needs of the HEPPs, some of the rivers where the HEPPs are built are polluted, and the living life in the river is endangered. Due to the HEPP built in Tunceli, people living in Atatürk district and Cumhuriyet district have been subjected to forced migration and some agricultural areas have been flooded, so it can be seen as a textbook example of the damage caused by the HEPPs built in Turkey to the environment and people. In summary, an anti-HEPP group has emerged in Turkey as a result of the wrong environmental policies implemented by the government-supported HEPPs in order to reduce Turkey's dependence on foreign energy and to produce energy with renewable natural resources. This anti-HEPP group opposed the destruction of nature by the HEPPs. Thus, with the emergence of anti-HEPP group in Turkey, the support given to environ-

mental movements and opposition to HEPP increased, contributing to the formation of an environmentalist public opinion in the country.

### **Environmental social movements and HEPP opposition in Turkey**

Social movements are initiatives by huge groups of individuals aimed at changing the essential features or characteristics of society. The word social movements was coined in the 18<sup>th</sup> century in France. This word, which was first used to identify those that have lasted a long time or who oppose the existing situation, is now used to designate groups and organizations that are outside main body of the political system (Marshall, 2014: 742).

In this context, as the structure of society transformed from the 18<sup>th</sup> to the 20<sup>th</sup> centuries, so changed the requirements and expectations of society. As a consequence of the disappearance of class-based requirements in the 20<sup>th</sup> century, new social movements appeared. These movements are classified as new because they separate themselves from class-based movements rather than due to chronology of their formation. LGBT rights, civil rights, trade unionism, ecology, and feminist movements are examples of new social movements.

Social movements, according to Charles Tilly, should have three characteristic property:

1. Citizens met against the current power and authority should protest, assemble, or take some action;
2. The citizens who met for a reason should express unity, dedication, and continuati-on;
3. The citizens attempt to existing power or overthrow the government (Tilly, 2004: 124-125).

Thus, one can talk about social movements when people and organizations that are in minority in society unite around an idea. It can be said that social movements have a purpose such as defending the unprivileged groups and announcing the problems of these groups to the state and to other members of society. Additionally, environmental movements, one of the new social movements, are concerned with global warming, forest fires, destruction of natural resources, environmental pollution, etc. The understanding of the great destruction caused by industrialization to the environment has led to the emergence of environmental social movements. Social movements initiated by students in the late 1960s, whose aim was to stop the damage to the environment, contributed positively to the development of today's environmental values and in the movement framework – they formed the basis of today's environmental movements.

Environmental movements are ecological movements that take into account the holistic interests of all living things, including generations to come. They aim to protect nature and save the planet –to not only preserve the present, but also secure the future. In line with these purposes, environmental movements lead large mass movements.

In Turkey, environmental movements started in the early 1970s and were promoted by the government in the 1970s with regulations for environmental problems. Turkey

participated in the initiative prepared by UNEP in 1975 in order to protect the Mediterranean against environmental pollution by the countries that have a coast at the Mediterranean Sea (Cohen, 1999: 65-68).

In this sense, after 1970, environmental problems were officially included in Turkey's agenda and took on the direction set by the environmental movements that started in the USA in 1892. Social movements that started to affect the world before the 1980s were not commonly adapted on Turkish soil. The reason for this can be associated with the democratic structure and culture of the country. However, this does not mean that there are no social movements in Turkey. Starting with the 1970s, the social movements came to the fore in Turkey and their importance is increasing day after day. Gezi Park, environmental movements, LGBT, feminism, animal rights movements, anti-nuclear movements etc. are some of the important social movements that are in operation in Turkey today (Kılıç, 2002: 93-108).

In the 1980s, with the emergence of environmental awareness in Turkey, protests were organized by the public in the reaction to some factories and mineral explorations harmed the nature, and that the planned nuclear power plant would damage the natural environment. The emergence of such environmental initiatives was facilitated by the new, democratic approach of the government of that time. Social movements were adversely affected in result of the military coup against the government in 1980 that initiated political, social, economic and societal changes in Turkey. After the military coup, many new bans were introduced in the country, so the influence of social movements across the country decreased and they did not have much influence.

Bergama can be an example of the environmental movement functioning in Turkey after the coup. Cyanide mineral exploration activities carried out in Bergama were causing great harm to nature. The impact of this destruction of nature can be felt for decades. Contamination of soil and water with cyanide also negatively affects the people living in the region. In addition, there is the Cybele Sanctuary, which is on the UNESCO cultural heritage list, near Bergama, that might be endangered by the gold exploration works carried out nearby (Çımırın 2015: 311-314).

The environmental movement in Bergama protesting against the exploration did not succeed, and the cyanide used during the gold prospecting has destroyed local nature. As a result of the destruction, the river in the region was polluted, and agriculture, which is one of the livelihoods of the local people, came to an end due to the damage to the soil. Thus, the people of the region could not drink the water, and they could not eat the plant growing in their garden.

In order to better understand the social movements protesting against the HEPPs in particular, it is necessary to first pay attention to the development course of the HEPPs in Turkey. In the context of environmental movements in the late 1990s, the first HEPP opposition emerged as a result of the protests initiated by private companies against the HEPP intended to be built in the Firtına Valley in 1998. In the end, the construction of

the HEPP was cancelled. The reason why the protests in Firtına Valley are important is that it is the first anti-HEPP movement in Turkey. It can be said that these anti-HEPP protests, which resulted in the cancellation of the HEPP project, resulted positively in this period. In this context, this successful environmental movement organized in Firtına Valley would set an example for future anti-HEPP movements.

Since the HEPP constructions were not very common in Turkey before the 2000s, the damage of the HEPPs was not known to the public at first. The public did not react to the HEPPs built in the 2000s because they did not know what the consequences were. With the spread of the HEPPs throughout the country, the damages caused by them become more known to a larger audience.

The privatizations that started with the January 24 Decision in Turkey picked up the pace in the early 2000s. While the private sector was not mentioned much in the HEPP operations until 1984, domestic and foreign investors started to benefit from these privatizations. With the Law on the Use of Renewable Energy Resources in Electricity Generation, enacted in the early 2000s, an electricity purchase guarantee was given to the private sector as an incentive. With these state-based incentives, it has become easier for the private sector to invest in the HEPPs. Thus, the way for the HEPP constructions in Turkey to become widespread in the country after the 2000s was paved by the state.

One of the features that distinguish AKP, which was the government of the period after the 2000s in Turkey, from other governments is that it encouraged electricity production by the HEPPs. In the 2000s, the prime minister at that time, Recep Tayyip Erdoğan, stated that the necessary importance should be given to the construction of the HEPPs with the words “water flows, Turk makes”, not “water flows, Turk looks”. These words of Erdoğan have almost become a slogan in Turkey that supports the expansion of the HEPPs. Thus, the HEPPs construction by private sectors supported by the government was tried to be adopted by the public. According to the annual report published by DSI in 2020, there were 714 HEPPs in operation in Turkey (DSI, 2020). In 2006, the number of the HEPPs in operation in Turkey was 150, according to the number specified in the DSI 2006 annual report (DSI, 2006: 156-160). When the DSI reports published in 2006 and 2020 are examined, it is seen that the importance given to the HEPPs and the increase in the number of them can be observed in the post-AKP period in. This increase in the number of the HEPP constructions has brought with it environmental problems and anti-HEPP movements (Coban, 2009: 56-59).

In this context, one of the anti-HEPP movements that resonated throughout the country was the anti-HEPP demonstrations in Fındıklı. Arılı and Çağlayan valleys in Fındıklı covered mostly with fields and were to be turned into production areas by private companies. In this region, it was planned to put nature aside and remove it from the protected area and build 16 HEPPs in the region. The villagers, who heard about the news, started protests in the region, initiated legal action for the cancellation of the HEPPs, and established the Fındıklı Creeks Protection Platform. As a result of the pro-

tests and legal struggles of the people of the region, the HEPP companies tried to remove the valleys from the status of the protected areas, but they were not successful. As a result of these protests, with the understanding of the importance of associations and organizations in the struggle against the HEPPs in Turkey, DEKAP (Stream Brotherhood Platform), which has an important place in the movements against the HEPPs, was established after the actions against Fındıklı HEPPs.

“The streams are free and will remain free” says the slogan of DEKAP, reflecting the purpose of the initiative to prevent the sale and marketing of streams and the establishment of the HEPPs in the Black Sea. It is a platform formed by the merger of the anti-HEPP movements operating in the whole country. This way the activists expect to be more sustainable, easier to organize, and have a greater impact. As a result, these anti-HEPP demonstrations were planned not only to have an impact on a local basis but also to be a nationwide social movement (Şendeniz, 2012: 57-58).

## Conclusions

Consumption of natural resources within the capitalist system in the world, and consequently environmental destruction, has increased. The increasing energy needs of states have pushed them to seek new resources. These developments have followed a similar course in Turkey. In this context, the country has turned to renewable energy as an alternative source to meet its increasing energy needs. As shown in the study, one of the renewable energy-producing methods used in Turkey are HEPPs. However, although HEPPs are seen as a solution to meet the increasing energy needs, they have caused some environmental problems. This situation is due to the wrong environmental policies implemented by the government. The environmental problems created by these wrong environmental policies have led to reactions from the public, both locally and nationally. One of the main reasons for the public's reaction to the HEPPs is the destruction of the environment during the HEPP constructions. In order to prevent this environmental damage, anti-HEPP platforms and associations have been established locally and nationally. In this context, this study focuses on how the anti-HEPP movement has become a social movement. It emphasizes how people who are harmed economically, socially, and psychologically due to the HEPPs at the local level come together to form a social movement at the national level. In this sense, it is one of the important subjects of the study that a local movement transforms into a national one and shapes a public opinion at the national level.

## Bibliography

- Çımrın F.K. (2015), *Bergama Köylü Hareketinin Dünü ve Bugünü*, Elektronik Sosyal Bilimler Dergisi, 14(53).
- Coban B. (2009), *Yeni Toplumsal Hareketler Küreselleşme Çağında Toplumsal Muhalefet*, İstanbul.

- Cohen J. (1999), *Strateji ya da Kimlik: Yeni Teorik Paradigmalar ve Sosyal Hareketler*, [in:] *Yeni Sosyal Hareketler/Teorik Açılımlar*, edit. K Çayır, İstanbul, pp. 65-68.
- DSI (2006-2020), *The Activity Reports*, <https://www.dsi.gov.tr/Sayfa/Detay/759> [access on: 20.02.2022].
- Kartal F. (2006), *Suyun Metalaşması, Suya Erişim Hakkı ve Sosyal Adalet, Su Politakaları Kongresi*, Ankara.
- Kılıç S. (2002), *Çevreci Sosyal Hareketlerin Ortaya Çıkışı, Gelişimi ve Sona Ermesi Üzerine Bir İnceleme*, "Ankara Üniversitesi SBF Dergisi", No. 57(2), pp. 93-108, DOI: [https://doi.org/10.1501/SBFder\\_0000001747](https://doi.org/10.1501/SBFder_0000001747).
- Marshall G. (2014), *Dictionary of Sociology*, Oxford.
- Marx K. (1996), *Das Kapital*, Hamburg.
- Şendeniz Özlem (2012), *Toplumsal Hareketler Reperatuarının Dönüşümü: Fındıklı HES Muhalefeti Örneği*, Master's Degree, Karadeniz Teknik Üniversitesi, Sosyal Bilimler.
- Tilly C., Lesley J. (2004), *Social Movements 1768-2012*, Routledge.
- Türkay M. (2013), *Önsöz*, [in:] *Suyun Metalaşması: Kılığın Nedeni Kılığa Çare Olabilir Mi?*, edit. G. Yılmaz, İstanbul, pp. 21-22.
- Uyrun A. (2020), *Su Sporları Turizmi* [in:] *Gelecek Turizm Trendleri*, edit. Ö.Ü.S. Şahin, Ö.Ü.S. Meric, Çanakkale, pp. 351-373.

**Abstract:** As one of the developing countries, Turkey's demand for energy is increasing. This demand has led Turkey to the use of renewable energy sources after the 2000s. In this context, HEPPs (Hydroelectric Power Plants) have come to the fore in energy production. However, the widespread use of HEPPs has led to an increase in environmental problems. The problems experienced were protested by various social segments and created social opposition in the process. As a result of these protests and social opposition, an anti-HEPP social movement emerged in the context of environmentalism, which is a social movement in Turkey.

**Keywords:** environmental movements, HEPPs, opposition to HEPP, new social movements, commodification

Article submitted: 1.03.2022; article accepted: 10.04.2022.