

**EXPLORING THE INTERSECTION OF CLIMATE CHANGE AND SOCIAL POLICY IN
TÜRKİYE: CHALLENGES AND OPPORTUNITIES FOR A SUSTAINABLE FUTURE****Asst. Prof. Kübra YAVUZ (Ph.D.)** * **Asst. Prof. Abdulhalim ÇELİK (Ph.D.)** * **ABSTRACT**

In this article, we examine the current state of climate change and social policy in Türkiye. Türkiye is geographically located in one of the world's most vulnerable regions to the effects of climate change. However, it has been slow to implement concrete policy measures in response to climate change. Policies similar to international efforts to intervene in climate change have been adopted, and institutions have been established, particularly since the early 2000s. However, little consideration is given to the impact of this urgent problem on social policies and the role of social policies in addressing it. This article examines the difficulties Türkiye faces in addressing climate change, including political and economic barriers, as well as the various social and environmental effects of the problem on the population. Finally, the article concludes by discussing the responsibilities in the climate change action plan from a social policy standpoint.

Keywords: *Climate Change, Global Warming, Social Policy, Social Vulnerability, Welfare.*

Jel Codes: *L20, M10, M12.*

1. INTRODUCTION

Social policy is a field of practice as well as a theoretical discipline concerned with how states and societies respond to social, demographic, and economic changes and global challenges such as poverty and migration. In other words, social policy is the institutional method of addressing social problems that threaten society's well-being. In this context, social policy is concerned with how to address individual health and welfare issues. Some of society's social problems, such as unemployment, poverty, and disability, are universal and have always posed a threat to the social order. Societies are familiar with these traditional social vulnerabilities and can see their effects firsthand (Schaffrin, 2014).

On the other hand, new generation social risks, which were not previously regarded as a social policy issue but, in conjunction with social and economic developments, create new inequalities and

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conflict zones both between individuals and between societies, broaden the scope of social policy (Karakuş Kaçmaz and Özeydin, 2019). Climate change and the inequalities that result are two of the new generation's social policy concerns. Climate change is crucial to social policy and the welfare state because it has a growing impact on people's health, habitats, and livelihoods (Hvinden and Schoyen, 2022:236). Climate change projections indicate that the severity and frequency of extreme weather events will increase. Every year, more than 100 million people will be affected by the expected 1-2 degree increase in air temperature. Furthermore, as sea levels rise, low coastal settlements will be flooded and rendered uninhabitable. Drought and famine will worsen, and access to water will become a problem. People living in both arid regions and low-lying coastal cities will be forced to relocate (Bierman and Boas, 2008:10). All of these predictions indicate that people and societies will face major social issues.

Climate change is a multifaceted phenomenon that is influenced by cultural, economic, geographical, historical, and political factors, as well as physical events. Each of these factors helps to make sense of the effects of climate change while also complementing and presenting a holistic approach (Gough et al., 2008). This comprehensive approach demonstrates that there is a cyclical relationship between human behavior and global climate change. According to this viewpoint, climate change is caused by the economic activities of people and societies rather than natural processes (Kadioğlu, 2001). As a result, humans are both the cause and the target of climate change's negative consequences.

Despite the numerous intersections between climate change and social policy, the research agenda for the two fields' intersections is relatively new (Hvinden and Schoyen, 2022:236). On the other hand, until recently, the problem of climate change was discussed by focusing on greenhouse gases and their environmental effects, and the social dimensions of this phenomenon were not adequately addressed. Furthermore, the social dimension of climate change has been on the agenda for years, with magazine-worthy issues such as penguins and polar bears dominating rather than how global climate change will affect human welfare (Skoufias, 2012). Ulrich Beck's risk society: towards a new modernity" was the first study on the relationship between social policy and climate change (Beck, 1986). Beck described climate change as a social peril of a new generation brought on by industrialization. Anthony Giddens, who was influenced by Beck's work, focused on the causes and effects of contemporary hazards like global warming that prior generations were not exposed to (Giddens, 1991). Stern (2006) highlighted the possible impacts of climate change on water supplies, agricultural production, health, and the environment in another significant study addressing the social policy aspect of the issue. According to this study's findings, the advantages of acting decisively and quickly to combat climate change outweigh the drawbacks of doing nothing. The social implications of climate change, the impact of inequality on global warming, and how welfare policies may be modified to address this risk were all covered by Gough et al. (2008: 325). The connection between social policy and climate change has started to gain more and more attention as a result of these ground-breaking investigations.

The studies revealed a common theme: all disadvantaged groups, particularly the poor, are more vulnerable to climate change, and their ability to mitigate climate change is limited. According to demographic data, 29 percent of the world's population lives in climate-vulnerable arid and semi-arid regions. Furthermore, the poor, immigrants, and agricultural workers are overrepresented in these areas, making them particularly vulnerable to climate change. These vulnerable groups have fewer resources to cope with and adapt to both the slow-developing effects of climate change, such as sea level rise, agricultural land degradation, and drought, as well as natural disasters, epidemics, economic and political tensions, the frequency and severity of which are increasing as a result of climate change (Lankes et al., 2022). It is obvious that climate change will have a greater negative impact on this vulnerable population in the medium and long term (Carleton and Hsiang, 2016).

In terms of geography and demographics, Türkiye is a country with high climate risks. Climate change has the potential to have a significant impact on the country's economic, social, and cultural structures. As a result, it is critical for Türkiye and other similar countries to approach climate change and its social impacts with caution in order to prevent and mitigate future problems. This article defines social policies as a tool for combating climate change. In this context, the social risks posed by climate change are first identified, followed by an explanation of the historical evolution of climate change regulation in Türkiye. Thus, the problems were revealed first, followed by the general lines of solutions to these problems. Third, the current situation has been evaluated through the strategic targets and actions included in the National Climate Change Action Plan (NCCAP) by drawing the framework of how social policies can contribute to the fight against climate change in Türkiye.

2. THE RELATIONSHIP BETWEEN CLIMATE CHANGE AND SOCIAL POLICY

The negative effects of climate change on the well-being of people and societies, both now and in the future, compel states to implement climate change policies. States' efforts to reduce negative market externalities caused by climate change have revealed a new concept known as the ecostate or environmental state. The connection between the ecostate and the welfare state is complicated. That is, economic growth has a significant impact on the welfare state; in times of increased economic welfare, states can make more generous social expenditures; and in times of economic crisis, state budgets for social policies become contentious. In other words, the distribution of social benefits and services is determined by economic actors' ability to finance them. As a result, an important link between the sustainability of the welfare state and economic growth is established (Bonvin and Laruffa, 2022:484).

While economic growth in its current form is a driving force for the sustainability of social policies, it is not ideal in terms of environmental sustainability or ensuring intergenerational justice. Furthermore, the pursuit of economic growth under current conditions risks dividing the benefits of production and consumption equally between present and future generations. As a result, there is a fundamental contradiction between the welfare state and the ecostate. The ecostate believes that it is not

economic wealth that should be maximized. As a result, the search for a welfare state that is not dependent on economic growth distinguishes the ecostate from the welfare state (Bonvin and Laruffa, 2022; Bailey, 2015).

Another point of view establishes a parallelism between the welfare state and the ecostate, and it is claimed that the welfare state serves as a model for theorizing the ecostate. This viewpoint contends that the welfare state, which has been in existence for at least a century, serves as a model for more recent ecostates because both the welfare state and the ecostate encompass similar activities aimed at reducing the social and human costs of the market economy (Meadowcroft, 2005; Gough, 2016).

On the other hand, it is incorrect to draw a direct parallel between the ecostate and the welfare state, or between climate change policies and social policies. To begin with, it is obvious that accelerating global warming and the resulting natural disasters will force governments to take action to mitigate these negative consequences. It is highly likely that new taxes will be imposed and spending priorities will be reconsidered in this context. Climate change policies, on the other hand, have the potential to exacerbate existing social conflicts. Many environmentally effective ecostate practices, such as taxation on the use of fossil fuels in the context of combating global warming and climate change, create an unequal situation for the poorer people and feed new conflicts (Markkanen and Anger-Kravi, 2019; Elliot, 2018). For example, the French government's increase in fuel taxes to reduce carbon emissions disproportionately impacted low-income drivers, resulting in the long-discussed "yellow vest" protests. To eliminate potential areas of conflict between the welfare state and the ecostate and to harmonize these two policies, compensatory mechanisms such as redistribution of income from environmental taxes and cash transfers are required (Otto and Gugushvili, 2020).

The socioeconomic divide between those who adopt social policies and those who adopt environmental policies is one of the most significant differences between the two. High-income people tend to favor climate change policies over welfare policies for low-income groups. People with low incomes, on the other hand, are more indifferent to climate policies. Individuals with a higher income level may support climate change policies more strongly due to their education level. A high income level is also strongly associated with a higher level of education. People with a higher level of education are more aware of environmental hazards and are more committed to the common good (Poortingo et al., 2019).

Although the relationship between climate change and social policy is still being debated, meteorological disasters are one of the most significant events affecting people's health and well-being in the twenty-first century. It is both the source and the mediator of social problems, not only through direct effects but also through indirect effects such as poverty and global migration (Skoufias, 2012). Despite these obvious effects on human and community well-being, the relationship between climate

change and social policy has only recently been addressed. Furthermore, whether global climate change is a social policy issue is debatable.

Climate change is controversial in terms of social policy because its consequences are complex and uncertain when compared to traditional social risks. As previously stated, traditional social problems such as sickness, unemployment, and poverty are visible and easy to identify. However, the effects of climate change are indirect, and because some of them have not yet manifested, it is unknown whether they will affect societies in the future, and the magnitude of their potential effects cannot be estimated (Schaffrin, 2014). Today, even the public presentation of traditional social policies is debated; the necessity of taking action against a social phenomenon that will not affect this generation, as well as some of its effects, both sharply distinguishes climate change from traditional social problems and feeds the debate about addressing climate change as a social policy problem.

Rather than the structural differences between the welfare state and the ecostate, this study focuses on the social effects of climate change and the activities that can be undertaken within the scope of social policy to mitigate these effects. In doing so, it is based on Gough et al (2008)'s framework, which contends that there is a similarity between combating global climate change and social policy, or that social policies cover activities for the social effects of climate change. Two major points stand out here. First, as previously stated, the social risks of both policies are based on industrialization and modernization. So, the problem areas for which these policies will produce solutions are similar. Second, both policies necessitate the use of government resources and facilities.

Even when the future physical effects of climate change are only expressed in terms of average air temperature and sea level rise, a picture of disaster emerges. According to projections, the global average temperature will rise by 1.8 to 4 degrees Celsius by 2100. According to the new estimates, the sea level will rise by about 80 cm (Costello et al., 2009). Global climate change's these physical effects will have an economic, social, and cultural impact on all societies (Deacon and Mann, 1999). Meteorological disasters, forest fires, decreased agricultural productivity, and their indirect effects as a result of increasing droughts and changes in precipitation regimes will cause major issues that must be addressed in the future of social policy.

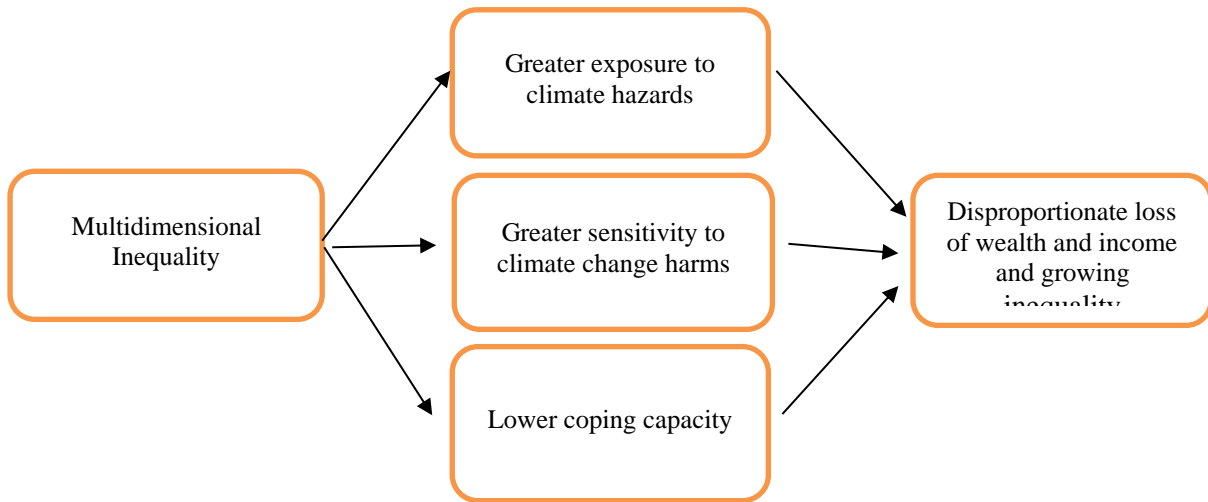
3. FUNDAMENTAL DIMENSIONS OF CLIMATE CHANGE IN SOCIAL POLICY

Climate change, in addition to being a phenomenon that directly threatens human life, causes widespread socioeconomic negativity in a number of industries. Indeed, the socioeconomic effects of climate change and global warming can be seen in a variety of fields, ranging from the health sector to water and food, sanitation to sewage, agricultural production to industrial production, tourism to animal husbandry, urbanization to migration, transportation to technological development, employment to labor supply, life expectancy to gender equality (Yavuz, 2022). We categorize these pervasive effects into three interconnected dimensions such as inequality, access to social policies, and climate refugees.

3.1. Inequality

The pursuit of ensuring that individuals living in society can benefit from social welfare services equally and fairly is at the heart of social policy. Opportunities such as health, education, housing, and social assistance cannot be shared equally by individuals and groups. This inequality may have existed from the start or may have emerged over time (Şenkal, 2005:43; Goodin, 1988). As a result, social policy encompasses all events that cause individuals to deal with social problems in an equal and unfair manner. As previously stated, climate change and the extraordinary natural events that accompany it endanger human health and well-being both directly and indirectly. However, not all societies are equally vulnerable to these dangers. So, new inequalities emerge between societies (Gough et al., 2008), among individuals within the same society (Islam and Winkel, 2017), and even between generations (Halsnaes et al., 2007:119).

Figure 1. The Cyclic Relationship Between Climate Change and Inequality



Source: Islam ve Winkel, 2017.

Approximately one-third of the world's population lives in arid areas that are vulnerable to climate change and global warming. The current risk will be exacerbated by the demographic distribution of these geographically risky regions. The majority of people living in arid areas belong to vulnerable groups to climate change, such as farmers, the poor, children, the elderly, immigrants, and refugees (Costello et al., 2009; Carleton and Hsiang, 2016). Not only do these vulnerable groups lack the technical and economic tools and capacity to mitigate climate change, but they also have limited access to welfare institutions to appeal against the negative consequences of climate change.

Climate change and inequality have a two-tiered relationship (see Figure 1). As can be seen, the inequalities that existed within or between societies had three fundamental consequences. First, those who have less access to existing social policies are more vulnerable to climate change. Second, these people are more socially vulnerable to danger related with climate change. Third, they are less capable

of dealing with dangers. All three factors exacerbate the initial inequalities and make society more vulnerable to climate change (Islam and Winkel, 2017:6).

The disparity between nations that contribute to global warming through their economic activities and nations that are geographically more vulnerable to climate change and more fragile due to a lack of technological capacity to mitigate climate damage is another issue that contributes to inequality (Diffenbaugh and Burke, 2019). In other words, despite using fewer fossil fuels and emitting fewer greenhouse gases, poorer nations are more vulnerable to climate change-related disasters (Gough et al., 2008).

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Although most discussions about climate change inequality focus on differences between countries, there may be significant differences in the vulnerability of people within countries as well as their capacity to combat climate change harms. These disparities can exist even between cities in the wealthiest countries. Furthermore, this inequality exists not only in terms of being affected by climate change's negative consequences, but also in terms of responsibility for causing climate change. It has been raised on occasion that taxation methods that do not account for the greenhouse gas emissions of individuals living in society contribute to inequality, but these discussions have not been sustained due to the difficulty of measuring this difference between individuals (Islam and Winkel, 2017).

3.2. Access to Social Policy

Another aspect of global warming and climate change that should be highlighted in terms of social policy is the difficulty in distributing economic and social resources between societies. Worldwide, 1-2 billion people lack access to safe drinking water, shelter, food, energy, and sanitation. Not only are social and economic resources unequally distributed among countries, but also within countries (Gupta and Lebel, 2010). People and societies are more vulnerable to climate change as a result of their lack of access to basic services.

For example, water supply access is expected to be reduced as a result of global warming. According to one estimate, the world's potable water supply will be reduced by up to 40% by 2050. (Mann, 2009). The reduction in water volume will worsen people's health and hygiene conditions by reducing individual access to water. On the other hand, it will have an indirect negative impact not only

because of individual water use, but also because it will cause a loss of efficiency in agricultural production where water is required.

It is critical to have adequate and easily accessible health care (Nishtar, 2021). Because climate change has immediate and long-term effects on human health and increases the demand for health-care services. For example, higher-than-normal temperatures increase the risk of heart and respiratory diseases (Carletan and Hsiang, 2016). Physical injuries occur as a result of climatological events such as floods, storms, and hurricanes, and people who cannot access adequate nutrients due to drought and deterioration in precipitation regimes experience a variety of health problems (Costello et al., 2009).

Paradoxically, access to healthcare is frequently worse for those who reside in the most at-risk places for climate change. Climate change will make it more difficult for people who already have trouble accessing health services to get them in emergency situations, which will put further strain on the already underdeveloped health systems. When people must choose between spending on health and preparing for climate change, they will prioritize health services (Yavuz, 2022).

Another point to emphasize is that it provides access to various types of information and equipment that will increase societies' capacity to combat climate change. Social policies aimed at combating climate change must include tools to strengthen societies' adaptive capacity. As a result, these policies should be informed by academic and technological knowledge (Mann, 2009). However, as previously stated, the countries most vulnerable, both geographically and demographically, are frequently the ones most deprived of such opportunities and resources. Furthermore, differences in resource and capacity between countries facing similar risks are decisive in terms of the devastating effects of climate change in those countries. At sea level, the Netherlands and Bangladesh, for example, face similar geographical risks. However, while the Netherlands is able to mitigate the effects of climate change due to technological and financial resources, Bangladesh faces the threat of 17% of its land being flooded and the displacement of half of its population due to a lack of these resources (Ahmed, 2018).

As a result, climate change and global warming social policies should address issues such as access to basic social and health services, clean and potable water resources, and basic energy resources. Furthermore, social policy must address societies' access to the resources and capacity required to mitigate the effects of climate change.

3.3. Climate Refugee

Another area where climate change and social policy intersect is migration. As a result of climate change, the number of people forced to migrate to other countries is currently limited. However, natural disasters and climate-induced sea level rise are expected to force approximately 200 million people to flee their homes by 2050. Climate refugees are a new problem as a result of this. Climate change is also expected to increase the normal number of refugees indirectly by causing internal conflicts and wars.

Because natural disasters such as drought and water scarcity exacerbate conflict between people and societies. When the world's conflict zones are examined, it is clear that they are generally places of high poverty and social inequality. Similarly, it is well known that more conflicts occur during famine periods when precipitation is low. A unit deviation in mean temperature caused by global warming raises the severity rate by approximately 11% (Carleton et al., 2016).

Forced displacement caused by climate change, on the other hand, is ultimately based on an estimate, despite some scientific determinations. When the discourse of forced displacement due to climate change was first advanced in the 1980s, no one had been identified as a climate refugee. Even today, it is difficult to speak of a clearly defined group of climate refugees. As a result, it is unclear how many people will be forced to migrate in the future as a result of climate change, and how they will interact with other displaced refugees. The processes that drive people to migrate are quite complex. As a result, it is extremely difficult to distinguish people for whom environmental factors are the sole motivator for migration motivations, both now and in the future (Baldwin et al., 2014).

However, there are some key distinctions between climate refugees and other refugees. Climate refugees migrate due to a loss of income, whereas refugees are forced to migrate due to persecution. Refugees are people who have been persecuted in their home country because of their gender, religion, race, or political beliefs and have been forced to flee. The primary motivation for migration among climate refugees is the loss of livelihoods in their home countries as a result of climatological disasters caused by global warming, such as drought, water scarcity, flood, and storm (Bierman and Boas, 2010).

Historically, fear has been at the root of the refugee crisis. Although the type of fear differs, climate refugees, like other refugees, migrate out of fear of not being able to live in prosperity. According to Ahmad (2018), being forced to migrate due to climate change should be viewed as a survival strategy against environmental injustices rather than a failure to adapt to local conditions. Because a person who is forced to flee his home due to flooding or sea-level rise may not have a home or neighborhood to return to one day (Miller, 2017:90).

Despite the fact that there is no decision or convention on the legal status of climate refugees, there is an incentive to recognize these people in international law and develop a contract for them. Delegates to the United Nations High Commissioner for Refugees meeting in the Maldives in 2006 proposed amending the 1951 Geneva Convention to include climate refugees. Even if this text is changed, it is unlikely that the agreement in question will provide a legal guarantee for climate refugees. Because the 1951 Geneva Convention only covers political asylum seekers fleeing persecution in their home country because of their gender, religion, race, or political beliefs. This convention requires reform in order to provide a legal basis for climate refugees. This reform should take into account the differences between the two refugee groups (Bierman and Boas, 2008).

4. CLIMATE CHANGE POLICY IN TÜRKİYE

Türkiye is located in the Mediterranean Basin, which is one of the most vulnerable regions to the negative effects of climate change. Even today, the effects of climate change are becoming apparent. According to the worst-case scenario in a report prepared by the Turkish Technology Development Foundation in 2002 on the possible effects of climate change in Türkiye, the average temperature in 2080 will rise by 3 degrees compared to the early 2000s. Forest fires are expected to become more frequent and have a larger impact area as temperatures and drought rise. Furthermore, precipitation trends are expected to decline, resulting in water stress in some areas and a decrease in agricultural productivity (Türkeş, 2002:19).

Environmental concerns in Türkiye began to rise in the 1980s, paralleling global discussions. During this time, Türkiye participated in some of the international intergovernmental conferences on environment and climate change, and even signed the ministerial declaration that emerged from the 1989 Nordwijk Conference. Despite this, during the early stages of the international public debate on climate change, Türkiye was unable to transform the fight against climate change into an active policy that could be integrated into its development processes. In this process, international meetings were accompanied by observer status (Turhan, 2016).

By the 1990s, the threats posed by climate change on the axis of environment and development had become more apparent, and intergovernmental efforts gained traction as a result. The United Nations Framework Convention on Climate Change was signed in Rio in 1992 in this context. This is the first intergovernmental agreement on climate change to be signed (Balaban and Balaban, 2015:10). This treaty requires governments to reduce greenhouse gas emissions in order to slow global warming. Türkiye has refused to sign both this convention and the 1997 Kyoto Protocol, which contains more binding provisions, because the exemptions it requested were not granted. Until 2001, Türkiye was hesitant to combat climate change by putting economic growth first. During this time, the European Union membership negotiations mediated the growing interest in climate change and environmental policies (Turhan, 2016). The expected exemption was granted at the 7th COP in 2001, and after three years of work, Türkiye became the 189th country to join the UNFCCC on May 24, 2004. Türkiye's climate change policies have begun to institutionalize as a result of its participation in the UNFCCC. The Kyoto Protocol was signed first in 2009, followed in 2010 by the Türkiye Climate Change Strategy (2010-2023).

Türkiye's development planning culture has been critical in the fight against climate change. The 8th Development Plan was the first to outline the direction of climate policies (covering 2001-2005). The subsequent 9th Development Plan (2007-2013) mandated the development of a national action plan. During this time, the Turkish National Strategy for Climate Change (2010-2020) was also developed and adopted, outlining the country's vision and goals. This strategy emphasizes the importance of

increasing energy efficiency, encouraging the use of clean and renewable energy sources, and fully integrating climate change goals into development policies. Despite the fact that this strategy document defines the broad contours of Türkiye's climate change policy, it lacks measurable concrete targets (Turhan et al., 2016).

The National Climate Change Action Plan (NCCAP) was created in 2011 to translate the strategy document's general targets into more concrete and measurable targets. In these documents, Türkiye's national vision for combating climate change is expressed as integrating climate change policies into development policies and providing a high level of welfare to all of its citizens. In terms of our topic, there are two major points that stand out in this strategy document. The first is the emphasis expressed as the principle of differentiated responsibilities, which states that the country's unique circumstances will be prioritized in the fight against climate change. Second, while it is stated that the efforts to combat climate change aim to increase the country's welfare level, it is not stated how to eliminate existing welfare inequalities or which welfare tools will be used to achieve this goal.

In 2016, the Paris Convention was signed. The Paris Agreement was ratified by the Turkish Grand National Assembly on October 6, 2021. Türkiye has agreed to reduce its greenhouse gas emissions to zero by 2050 as part of this agreement. The name of the "Ministry of Environment and Urbanization" was changed to "Ministry of Environment, Urbanization, and Climate Change" immediately after the Paris Agreement was approved, and climate change processes were handled at the ministerial level. The Climate Change Presidency, which is affiliated with this ministry, was established in 2022.

Following Türkiye's accession to the UN Framework Convention on Climate Change, various projects supported by international institutions and organizations were carried out to strengthen public and non-governmental organization participation in climate change adaptation studies, to establish a multi-sectoral governance network, and to raise public awareness. The "Project for Enhancing Civil Society Participation in Climate Change Policy Making Processes in Türkiye" (Climate Network) is one of these projects, which is being carried out by the Turkish Foundation for Combating Erosion, Afforestation, and Conservation of Natural Assets (TEMA) and the Wildlife Conservation Foundation (WWF-Türkiye). Climate Talks, a project aimed at creating a common language about climate change, Climate Adaptation, Climate Promise, and Hear Climate are all projects that can be counted as supporting joint efforts in the field of climate change. All of these projects aimed to raise the level of consciousness and awareness of public institutions, local governments, non-governmental organizations, and individuals involved in the fight against climate change (Çelik, 2021).

As can be seen, Türkiye has attained comparable standards to the rest of the world in terms of institutionalization and legal regulations. Basic institutions have been established, action plans have been prepared, and various networks covering all actors have been established, as in many countries that care about climate change and design their policies in response to this global problem. However, it is

not possible to claim that these studies, which are presented at the legal and institutional levels, have positive practical outcomes (Balaban and Balaban 2015). Despite all national efforts, there is a weakness in terms of both greenhouse gas emissions and reliance on fossil fuels, as well as the reduction of social vulnerability to climate change (Gedikli and Balaban, 2018).

It should also be noted that environmentally friendly practices are becoming more common in the country. Türkiye's installed renewable energy capacity has increased to 53,000 MW in the last 20 years, placing it fifth in Europe and 12th globally. The country has the potential to expand its resources, which include biomass, geothermal, hydroelectric, wind, solar, and nuclear energy. Wind and solar energy will become increasingly important in the coming years. Furthermore, initiatives such as zero waste movements, clean manufacturing methods, energy identity application, environmental labels, and bicycle transportation will reduce air pollution emissions and allow citizens to breathe cleaner air (Birpınar, 2022:32).

On the other hand, debates in the public and related circles have largely focused on climatological aspects, with little emphasis placed on the social consequences of this phenomenon. So, the role of social policies in combating climate change has received insufficient attention. On the one hand, preparations for potential social problems caused by climate change are not included in institutional and legal regulations related to social policy; on the other hand, social policies are not mentioned in climate change action plans. Based on these data, it can be said that social policies in Türkiye and efforts to mitigate climate change could not be integrated.

5. THE ROLE OF SOCIAL POLICIES IN CLIMATE CHANGE RESPONSE IN TÜRKİYE

As previously stated, climate change has radically altered people's interactions with nature as well as the production relations that emerged after the industrial revolution. As the social problems, risks, and unpredictability caused by climate change increase, so does the dimension of security and welfare gaps that may arise at the local, national, and international levels, as well as physical changes in natural rhythms (Özaydın and Kaçmaz, 2022: 6). Stern (2006) considers climate change and poverty to be the two main problems that people face in his well-known report on climate change. He states that failure in one of these two problems will mean failure in the other. Social policy can help to integrate the fight against these two megaproblems.

According to economic studies on climate change in Türkiye, changes in climatic conditions in the second half of this century will have significant social and economic consequences (Dudu and Çakmak, 2018; Ozcan and Strauss 2016). Droughts, excessive precipitation, floods, and natural disasters are expected to become more common in the country as a result of climate change. As a result, climate change in Türkiye will have negative consequences such as decreased water quantity and quality, increased water supply costs, damage to agricultural ecosystems and pastures, increased plant diseases

and pests, increased credit risks, increased unemployment, increased migration, and jeopardize sustainability (Bozoglu, 2019:101).

Dudu and Çakmak (2018) created a simulation by breaking down the potential economic consequences of climate change into three parts. According to the study's findings, while there was no significant impact or change in the first period until 2035, the welfare indicators were expected to worsen in the second period between 2035-2060 and the third period between 2060-2090. Furthermore, according to the findings of these studies, economic indicators will worsen in the second period due to extreme weather conditions and disasters, while they will worsen in the third period due to changes in agricultural production conditions. As a result, climate change will have a negative impact not only on natural disasters caused by climate events, but also on household welfare.

Climate change will not have an equal impact on economic and social well-being in Türkiye. To begin with, it is expected that there will be more people with fixed incomes who rely on their labor than those who work in agriculture. As a result, the impact of climate change on the level of welfare in the country's industrial cities will be more noticeable than in other regions (Durdu and Çakmak, 2018). Poor people, on the other hand, will be disproportionately affected. The reason for this is that poor people live in areas that are more vulnerable to natural disasters as a result of climate change, and their ability to adapt to climate change policies is limited. Climate change has the potential to stifle development and growth, increase vulnerability, endanger health, and push people back into poverty (Fankhauser and Stern, 2016).

Climate change's effects are already being felt all over the world. According to the IPCC's 2022 report, rising temperatures have left millions of people facing hunger, water scarcity, and health issues. Again, millions of people face displacement and migration as a result of climate-related disasters and conflicts (Lankes et al., 2022). These effects are expected to become more pronounced over time. Türkiye, on the other hand, is less affected by the effects of climate change. According to projections, the economic effects of climate change will emerge gradually until the end of the 2030s, after which more serious effects will emerge (Dudu and Çakmak, 2018). This situation presents an opportunity for Türkiye to shape general climate change policies as well as social policies as a tool for increasing adaptation and resilience to climate change.

The NCCAP was created in 2011 to help individuals, sectors, and institutions prepare for climate change, increase their adaptation capacity, and reduce climate damage in Türkiye. This action plan identifies seven different sectors for mitigation actions: energy, industry, transportation, building, waste, agriculture and land use, and forestry. Water resources management, agriculture and food security, ecosystem services, biodiversity and forestry, natural disaster risk management, and public health are the five main headings for climate change adaptation studies. There are 541 actions defined in total to achieve 107 goals within 49 main goals. When the action plan is examined, it is clear that the technical

and ecological aspects of the issue are prioritized, while the social policy dimension of climate change mitigation is not addressed holistically. In terms of social policy, the main topics of combating climate change can be grouped as ensuring economic justice, creating social safety nets to cover climate risks, raising education and awareness, creating sustainable structures, and taking climate refugee measures.

As previously stated, climate change disproportionately affects low-income and impoverished communities. To mitigate the effects of climate change and support people's adaptation to these impacts, social policy should focus on creating structures that protect economic justice. The expression of poverty is mentioned only once in the NCCAP, and it is intended to report differences in the poverty levels of those engaged in agriculture. However, achieving economic justice must take into account how the economic disparities between rich and poor will be affected by climate change or how this will affect climate change. Furthermore, economic justice necessitates encouraging households to abandon long-term livelihoods that are not based on climate change (Tenzing, 2020:3). As a means of ensuring economic justice, a wide range of applications are used, from the establishment of fair tax systems that will ensure the balanced distribution of economic power among all segments of society to the implementation of insurances for compensation of climate damages. However, as it stands, Türkiye's climate change strategy lacks the tools to ensure economic justice.

Climate change has the potential to have a significant impact on human health. Changes in temperature and precipitation patterns can increase the frequency and severity of heat waves, droughts, floods, and wildfires, causing physical injuries, loss of life, and population displacement. Food security and malnutrition rates can be affected by changes in agricultural productivity and water availability, particularly among vulnerable populations. Furthermore, climate change has the potential to exacerbate air pollution issues, leading to an increase in respiratory illnesses such as asthma and chronic obstructive pulmonary disease (COPD). Climate change can cause changes in vector-borne disease transmission patterns, such as malaria and dengue fever. To mitigate these health impacts, adaptation measures that improve public health infrastructure, promote sustainable water management and agriculture, and reduce greenhouse gas emissions are necessary (Turhan et al., 2016).

The National Action Plan for Reducing the Adverse Effects of Climate Change on Health has been developed in Türkiye to combat climate change. This program is part of Türkiye's national climate change policies and includes health-related measures. The program highlights the importance of the health sector in Türkiye's fight against climate change. The program's main goals are to develop policies and strategies to reduce health risks associated with climate change and to strengthen the health sector. A plan of action has also been developed to carry out the program. The action plan outlines how various stakeholders in the health sector can work together to achieve the program's goals. Measures such as these are included in the action plan. The action plan includes measures such as taking measures to reduce air pollution, preparing for health problems associated with rising temperatures, and being prepared for changes in water sources related to climate change (Olgun and Kantarlı, 2020).

Climate change-related disasters, diseases, and economic losses have a negative impact on people's quality of life. The goal of social policy is to create safe and long-term social safety nets for these situations. It is stated in the subheadings of the main objective of reviewing legislation on natural disasters caused by climate change and determining the implementation principles included in the NCCAP that studies will be conducted to expand private and public insurance mechanisms among all economic sectors and citizens. However, spreading climate change insurance does not constitute a complete social safety net because poor participation (Tenzing, 2020:6; Şenkal, 2022). Instead, social protection measures that are flexible and climate-sensitive should be strengthened, as should safety nets that are essential for households at risk from climate-related consequences or migration (Schwan and Yu, 2018: 46). A separate demand from Türkiye's current social policy practice is for climate-sensitive social safety networks. Because Türkiye's current social aid is typically compensatory in character. After the risk has materialized, these procedures seek to address the immediate requirements of the household. On the other hand, social protection networks that take climate change into account are preventative rather than compensating. These assistance programs are anticipated to improve households' capacity to withstand any climate hazards in the future (Özaydın and Kaçmaz, 2022:15).

Another fundamental task of social policy in dealing with climate change is to educate people about the causes and effects of climate change. People who are more aware of this issue are better able to adapt to environmental and economic changes. Education programs and raising awareness about climate change are prioritized in social policy. There are targets in the NCCAP for increasing general public knowledge and awareness of climate change, as well as for those working in sectors such as agriculture, industry, and tourism to understand and prepare for the effects of climate change in their respective sectors. Furthermore, it is intended to incorporate climate change adaptation and mitigation into university education programs, particularly engineering, law, international relations, economics, and natural sciences departments.

One of the basic topics addressed in the NCCAP is natural disaster risk management. Social policy aims to ensure that people live in safe and resilient environments by focusing on the development of long-term structures to reduce disasters and losses caused by climate change. Its goal is to create disaster, danger, and risk maps, such as floods and landslides, that will serve as the foundation for risk management processes against the effects of climate change, and to integrate these maps into land use plans. Besides that, local and national projects are being carried out in which sustainable urban criteria will be determined while taking Türkiye conditions into account, and sustainable urbanization, energy efficient buildings, and climate change issues will be addressed in an integrated manner (Tuğaç, 2018:1051).

Migration and displacement are another issue related to climate change in terms of social policy. Migration is discussed under the heading of health in the NCCAP. Within the scope of the plan, it was emphasized that the health risks that may arise as a result of population growth in regions that may be

affected by climate change and in regions affected by migration movements should be identified, and the capacity of the institutions in the region should be increased. However, simply increasing the capacity of health institutions is insufficient. Natural disasters and environmental crises caused by climate change are expected to result in mass migration. Türkiye is one of the countries with the most refugees in the world. As a result, it has extensive social policy experience with refugees. Those who migrate due to climate change, on the other hand, face a far more complicated process than those who migrate for political reasons. As a result, Türkiye's social policies must be revised to include both internal and external climate refugees.

6. CONCLUSION

This article examines the link between climate change and social policy in Türkiye. Climate change is widely acknowledged as one of the most significant social risks of the twenty-first century. The relationship between social policies, which are used to eliminate these social risks, and climate change has received little attention until recently. In Türkiye, the number of studies examining the relationship between these two concepts is even lower. This study looked at this relationship, which was lacking in the literature, from both a conceptual and an analytical standpoint.

Climate change and social policies are inextricably linked in a vicious circle. On the one hand, natural disasters caused by climate change exacerbate poverty by reducing people's income and welfare. On the other hand, the poor and other disadvantaged groups are disproportionately affected by the negative effects of climate change. These disadvantaged groups have fewer resources and capacity to both mitigate climate-related risks and return to normalcy after disasters. Therefore, breaking this cycle should be the goal of social policies in the fight against climate change. The development debate is one of the factors that feeds the vicious circle between social policy and climate change. To be able to make generous social expenditures, welfare states must grow economically. In terms of combating climate change, this approach is a contradiction. Because climate change policies seek to reduce or eliminate greenhouse gas emissions by restricting economic activity.

For many years, this dilemma has shaped Türkiye's climate change policy. Due to economic development concerns, the effort to join international structures in the fight against climate change, which began in the 1980s, did not materialize until the first half of the 2000s. As a result of the European Union accession negotiations in the preceding years, the IPCC first joined, and then participated in, the organizations and conventions that shape global climate change policies. When evaluated legally and institutionally, Türkiye's climate change policy is on par with that of modern countries. These climate change policies, however, could not be integrated with social policies. A holistic approach to breaking the vicious circle between climate change and social inequalities has not been adopted in the NCCAP that has been examined. On the other hand, Türkiye's social policy instruments are unprepared for climate change, which is one of the most pressing social issues of the present and future. Climate change,

on the other hand, differs from traditional social risks in many ways, and current social policies have limited capacity to eliminate climate-related harm.

Based on the study's findings, we recommend that policymakers revise the NCCAP and include a climate-sensitive social policy target. Climate-sensitive social policy should aim to break the vicious circle that exists between disadvantaged groups that are vulnerable to climate change and the effects of climate change. As a result, this policy should include preventive measures such as establishing a fair economic order, detecting and eliminating climate risks, increasing public knowledge and awareness, and compensatory practices such as climate-sensitive social protection practices, social assistance provided after disasters, and mitigating climate damage. In other words, a comprehensive social policy plan to combat climate change is required.

REFERENCES

- Ahmed, B. (2018) "Who Takes Responsibility For The Climate Refugees?", *International Journal of Climate Change Strategies and Management*, Vol. 10 No. 1, pp. 5-26. <https://doi.org/10.1108/IJCCSM-10-2016-014962/glep.2010.10.1.60>
- Bailey, D. (2015) "The Environmental Paradox of the Welfare State: The Dynamics of Sustainability", *New Political Economy*, 20:6, 793-811, DOI: 10.1080/13563467.2015.1079169
- Balaban, O. ve Balaban, M. S. (2015) "Adaptation To Climate Change: Barriers in The Turkish Local Context. Tema", *Journal of Land Use, Mobility and Environment*, 8 (Special Issue ECCA 2015), 7-22. doi: <http://dx.doi.org/10.6092/1970-9870/3650>
- Baldwin, A., Methmann, C., ve Rothe, D. (2014) "Securitizing 'Climate Refugees': The Futurology Of Climate-Induced Migration", *Critical Studies on Security*, 2:2, 121-130, DOI: 10.1080/21624887.2014.943570
- Beck, U. (1986) "Risikogesellschaft. Auf dem Weg in eine andere Moderne. Frankfurt am Main: Suhrkamp, English translation Risk society: towards a new modernity (1992). London Sage
- Biermann, F. ve Boas, I. (2008) "Protecting Climate Refugees: The Case for a Global Protocol", *Environment: Science and Policy for Sustainable Development*, 50:6, 8-17, DOI: 10.3200/ENVT.50.6.8-17
- Biermann, F. ve Boas, I. (2010) "Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees" *Global Environmental Politics*, 10(1), 60–88.
- Birpınar, M.E. (2022). "Küresel Sorun İklim Değişikliği: "Gelişimi, Uluslararası Müzakereler ve Türkiye"", *Çevre, Şehir ve İklim Dergisi*. Yıl: 1. Sayı: 1. ss. 20-36.

- Bonvin, J., ve Laruffa, F. (2022) “Towards a Capability-Oriented Eco-Social Policy: Elements of a Normative Framework”, *Social Policy and Society*, 21(3), 484-495. doi:10.1017/S1474746421000798
- Bozoglu, M., Başer, U., Alhas Eroglu, N. ve Kılıc Topuz, B. (2019) “Impacts of Climate Change on Turkish Agriculture”, *Journal of International Environmental Application and Science*, 14 (3), 97-103.
- Carleton, T.A. ve Hsiang, S.M. (2016) “Social and Economic Impacts of Climate”, *Science*, 353(6304), 13 aad9837, doi:10.1126/science.aad9837.
- Çelik, E. (2021) “Increasing the Knowledge and Awareness of the Municipalities on the Health Effects of Climate Change, Preparing a Chapter Writing Guide for the Inclusion of the Health Effects of Climate Change in Local Climate Change Planning”. Unpublished Specialization Thesis, Aydın Adnan Menderes University, (in Turkish).
- Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R., Friel, S., Groce, N., Johnson, A., M. Kett, M. Lee, C. Levy, M. Maslin, D. McCoy, B. McGuire, H. Montgomery, D. Napier, C. Pagel, J. Patel, J.A.P. de Oliveira, N. Redclift, H. Rees, D. Rogger, J. Scott, J. Stephenson, J. Twigg, J. Wolff ve C. Patterson (2009) “Managing the health effects of climate change”, *Lancet*, 10.1016/s0140-6736(09)60935-1
- Deacon, A., ve Mann, K. (1999) “Agency, Modernity and Social Policy”, *Journal of Social Policy*, 28(3), 413–435. doi:10.1017/s0047279499005644
- Diffenbaugh N. S. ve Burke M. (2019) “Global Warming Has Increased Global Economic Inequality”, *Proceedings of the National Academy of Sciences of the United States of America*, 116(20), 9808–9813. 10.1073/pnas.181602011631010922
- Dudu, H ve Çakmak, E. H. (2018) “Climate Change and Agriculture: An Integrated Approach to Evaluate Economy-Wide Effects for Türkiye”, *Climate and Development*, 10:3, 275-288, DOI: [10.1080/17565529.2017.1372259](https://doi.org/10.1080/17565529.2017.1372259)
- Elliott, R. (2018) “The Sociology of Climate Change as a Sociology of Loss”, *Eur. J. Sociol.* 59, 301–337.
- Fankhauser, S. ve Stern N. (2016) “Climate Change, Development, Poverty and Economics”, In: K Basu, D Rosenblatt, C Sepulveda, eds. *The State of Economics, the State of the World*. Cambridge, MA: MIT Press.
- Halsnæs, K., P. Shukla, D. Ahuja, G. Akumu, R. Beale, J. Edmonds, C. Gollier, A. Grubler, M. Ha Duong et al., (2007) “Framing Issues. In Climate Change 2007: Mitigation”, Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate

- Change [B. Metz, O. R. Davidson, P. R. Bosch, R. Dave, L. A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Hvinden, B. ve Schoyen M.A. (2022) “Social Policy Research and Climate Change”, in: Social Policy in Changing European Societies, Research Agendas for the 21st Century, eds. Nelson, K., Nieuwenhuis, R., Yerkes, M.A. Edward Elgar Publishing, pp. 236-250.
- Giddens A. (1991) “Modernity and Self-Identity”, Polity Press, Cambridge
- Goodin, R. E. (1988) “Reasons for Welfare: The Political Theory of the Welfare State”, New Jersey: Princeton University Press.
- Gough, I., Meadowcroft, J., Dryzek, J., Gerhards, J., Lengfeld, H., Markandya, A. ve Ortiz, R. (2008) “JESP Symposium: Climate Change and Social Policy”, Journal of European Social Policy, 18 (4), pp. 325-344. DOI: 10.1177/0958928708094890
- Gough, I. (2016) “Welfare States and Environmental States: A Comparative Analysis”, Environmental Politics, 25:1, 24-47, DOI: 10.1080/09644016.2015.1074382
- Gedikli, B. ve Balaban, O. (2018) “An Evaluation of Local Policies and Actions That Address Climate Change in Turkish Metropolitan Cities”, European Planning Studies, 26:3, 458-479, DOI: 10.1080/09654313.2017.1397107
- Gupta, J. ve Lebel, L. (2010) “Access And Allocation in Earth System Governance: Water and Climate Change Compared”, Int Environ Agreements 10, 377–395 <https://doi.org/10.1007/s10784-010-9139-1>
- Islam, S.N., ve J. Winkel. (2017) “Climate Change and Social Inequality.”, DESA Working Paper no. 152. https://www.un.org/esa/desa/papers/2017/wp152_2017.pdf.
- Kadioğlu, M. (2001) “The End of the Weather You Know Global Climate Change and Türkiye”, İstanbul: Güncel Pub. (in: Turkish).
- Karakuş Kaçmaz, F. ve Özyayın, M. (2019) “Global Climate Change in the Context of Social Policy Discipline”, Çalışma İlişkileri Dergisi , 10 (2) , 96-128 (in Turkish).
- Lankes HP. Soubeyran E. ve Stern N. (2022) “Acting On Climate And Poverty: If We Fail on One, We Fail on The Other”, London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy”, London School of Economics and Political Science.
- Mann, M. (2009) “Do Global Warming and Climate Change Represent a Serious Threat to Our Welfare and Environment?”, Social Philosophy and Policy, 26(2), 193-230. doi:10.1017/S0265052509090220

- Markkanen, S. ve Anger-Kraavi, A. (2019) “Social Impacts of Climate Change Mitigation Policies and Their Implications for Inequality”, *Clim. Policy*, 7, 827–844.
- Meadowcroft, J. (2005) “From Welfare State To Ecostate”, In: J. Barry and R. Eckersley, eds. *The State And The Global Ecological Crisis*. Cambridge, MA: MIT Press.
- Miller, D. S. (2017) “Climate Refugees and the Human Cost of Global Climate Change”, *Environmental Justice*, 10(4), 89–92. doi:10.1089/env.2017.29027.dm
- Nishtar, S. (2021) “Climate Policy is Social Policy”. <https://ekoik.com/2022/05/31/iklim-degisikligi-insan-haklarindan-yararlanma-onunde-engel-olusturuyor/> (e.t. 14.09.2022).
- Olgun, E. ve Kantarlı, S. (2020). “İklim Değişikliğinin Sağlık Üzerine Etkileri”, *Doğanın Sesi*, (5), 13-23 . Retrieved from <https://dergipark.org.tr/tr/pub/dosder/issue/57902/830890>
- Otto A. ve Gugushvili D. (2020) “Eco-Social Divides in Europe: Public Attitudes towards Welfare and Climate Change Policies”, *Sustainability*. 12(1):404. <https://doi.org/10.3390/su12010404>
- Ozaydın, M.M. ve Kaçmaz, F.K. (2022) “Social Policy Transformed by Global Climate Change and Suggestions for Türkiye”, in: *Climate Change and Social Policy* (ed. Abdulhalim Çelik), Bursa: Ekin Pub, s. 5-19. (in Turkish)
- Ozcan A. ve Strauss E. (2016) “An Overview of the Impacts of Global Climate Change on Farmland in Türkiye”, *Int J Environ Sci Dev* 7:458–463
- Poortinga, W., Whitmarsh, L., Steg, L., Böhm, G. ve Fisher, S. (2019) “Climate Change Perceptions and Their Individual-Level Determinants: A Cross-European Analysis”, *Glob. Environ. Chang.* 55, 25–35.
- Schaffrin, A. (2014) “The New Social Risk and Opportunities of Climate Change”, In: *International Handbook of Social Policy and Environment* [Tony Fitzpatrick (ed)]. pp. 3- 62. Edward Elgar Publishing Limited, Cheltenham, UK.
- Schwan, S. ve Yu, X. (2018) “Social Protection As A Strategy To Address Climate-Induced Migration”, *International Journal of Climate Change Strategies and Management*, 10(1), 43– 64.
- Skoufias, E. (2012) “The Poverty and Welfare Impacts of Climate Change: Quantifying the Effects, Identifying the Adaptation Strategies”, *World Bank Publications*, Washington DC.
- Stern, N. (2006) “Stern Review: The economics of climate change”.
- Şenkal, A. (2005) “Social Policy in the Process of Globalization”, İstanbul: Alfa Pub. (in Turkish).
- Şenkal, A. (2022) “Climate Change and Social Protection: New Pursuits in Social Protection”, in: *Climate Change and Social Policy* (ed. Abdulhalim Çelik), Bursa: Ekin Pub, s. 35-54. (in Turkish)

- Tenzing, J. (2020) “Integrating Social Protection and Climate Change Adaptation: a review”, WIREs Climate Change, Vol.11, No.2
- Tuğaç, Ç. (2018) “A Climate Change-Resistant Urban Planning Model Proposal for Türkiye: Eco-Compact Cities”, Trends in Business and Economics, 32(4), 1047-1068. Available at: <https://dergipark.org.tr/pub/atauniiibd/issue/39554/380647> (in Turkish).
- Turhan, E., Cerit Mazlum, S., Şahin, Ü., Şorman, A.H. ve Cem Gündoğan, A. (2016) “Beyond Special Circumstances: Climate Change Policy İn Türkiye 1992–2015”, WIREs Clim Change, 7: 448-460. <https://doi.org/10.1002/wcc.390>
- Türkeş, M. (2002) “Climate Change and Sustainable Development National Assessment Report” Türkiye Technology Development Foundation (in Turkish).
- Yavuz, K. (2022) “Social Inequality due to Climate Change and Social Policy”, in: Climate Change and Social Policy (ed. Abdulhalim Çelik), Bursa: Ekin Pub, s. 19-34. (in Turkish).

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