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**THE ROLE OF SOCIAL IDENTITY PERCEPTION IN THE
ENVIRONMENTAL JUSTICE MOVEMENTS: CASE OF THE USA**

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ABSTRACT

THE ROLE OF SOCIAL IDENTITY PERCEPTION IN THE ENVIRONMENTAL JUSTICE MOVEMENTS: CASE OF THE USA

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This thesis seeks to illustrate the justice issues claimed by environmental defenders. Many traditional distribution justice scholars see the injustice issues based on inequality or the distribution of environmental diseases and benefits. According to recent research, the inequality of distribution is insufficient to comprehend environmental movements' demands in practice. Distribution, recognition, participation, and capability approaches are examined to comprehensively understand environmental defenders' justice demands on environmental diseases and benefits in the thesis. The study mostly emphasizes the matter of recognition of different groups in environmental issues. Lack of recognition may influence an injustice problem because of not being accepted group differences in society. The study seeks to illustrate why some societies are more advantaged or disadvantaged than other communities. Moreover, it tries to demonstrate the social-psychological effects of non-recognition and misrecognition over communities. Along with highlighting the recognition justice approach, its social-psychological influence is examined with the Social Identity Theory, a social-psychological theory for explaining relations between person-person, person-society, and society-society. The intergroup relations in ecological movements can appear as a conflict in a non-violent or violent way. The study's aim is that even though the underlying motivations concerning many environmental movements seem to rely upon environmental loss and risks, identity groups of activists can be one of the other trigger reasons and determine the level of conflict of environmental actions. To achieve this, it tries to provide a comparative analysis of environmental justice conflicts occurring in South and North Carolina, Florida, and Michigan.

Keywords: Environmental Justice, Environmental Defenders, Intergroup Relations, Lack of Recognition, Social Identity Theory



OZ

ÇEVRESEL ADALET HAREKETLERİNDE SOSYAL KİMLİK ALGISININ ROLÜ: ABD ÖRNEĞİ

Seda GUNES

Bu çalışma çevre savunucularının iddia ettiği adalet sorunlarını açıklamaya çalışmaktadır. Pek çok geleneksel adalet teorisyeni, adaletsizlik sorunlarının merkezinde çevre sorunlarının dağılımındaki eşitsizlik olduğunu savunmaktadır. Son araştırmalara göre, dağıtım eşitsizliği, gerçekte çevresel hareketlerin taleplerini anlamak için yetersiz kalmaktadır. Bu çalışmada, çevre sorunları etrafında bir araya gelen çevre savunucularının adalet taleplerini daha kapsamlı bir şekilde anlamak için dağıtım, tanıma, katılım ve kapasite yaklaşımları gibi adalet teorileri incelenmektedir. Çalışma, çevre sorunlarına daha fazla maruz kalan toplulukların tanınması konusuna vurgu yapmaktadır. Toplum içerisinde farklı grup kimliklerini tanınmaması adaletsizlik sorunu yaratabilmektedir. Çalışma, bazı toplumların neden diğer topluluklardan daha avantajlı veya dezavantajlı olduğunu göstermeye ve tanınmamanın ve yanlış tanınmanın topluluklar üzerindeki sosyal-psikolojik etkilerini göstermeye çalışmaktadır. Tanıma adaleti yaklaşımının vurgulanmasının yanı sıra, tanınmamanın sosyal-psikolojik etkisi, kişi-kişi, kişi-toplum ve toplum-toplum arasındaki ilişkileri açıklamaya yönelik sosyal-psikolojik bir teori olan Sosyal Kimlik Teorisi ile incelenmektedir. Ekolojik hareketlerdeki gruplar arası ilişkiler genellikle şiddet içermeyen veya şiddet içeren bir çatışma olarak ortaya çıkabilmektedir. Bu çalışmada ulaşılmaya çalışan amaç, pek çok çevresel hareketin altında yatan motivasyonların çevresel kayıp ve risklere dayandığı görünse de çevre savunucuların kimlik grupları, çevre hareketleri için diğer tetikleyici nedenlerden biri olabileceğini ve çevresel eylemlerin çatışma seviyesini belirleyebileceğini açıklamaya çalışmaktır. Bunun için Güney ve Kuzey Kalorine, Florida ve Michigan da meydana gelen çevre adaleti çatışmalarının karşılaştırmalı bir analizi sunmaktadır.

Anahtar Kelimeler: Çevre Adaleti, Çevre Savunucuları, Gruplar arası İlişkiler, Tanınmama, Sosyal Kimlik Teorisi



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In many newspapers and news on websites, we can see many highlights about fires in forests, loss of freshwater resources, extreme weather issues, accidents of oil ships in seas and ocean, or the massive loss of some species in the world and more. Even if humanity sees all these, they do not try to change their behaviors for recovering the Earth. What is worst, we keep using greenhouse gases more in our daily life and turn our planet into a hot-house. I grew up in Gonen, Balikesir, Turkey, and I witnessed by my own eyes how nature could be destroyed; factories, deforestation, building construction on fertile agricultural land, pollution of freshwater resources, natural gas infrastructure works, air pollution by produced agriculture medicines and more. I never understand why people destroy their resources which give necessities to them for surviving. Following my town observations, I attended a student exchange program in Ohio, the United States. I could not believe how people consume plastic, fossil fuels, freshwater resources, and electricity without thinking. I got the second shock of my life, and it was my turning point to focus on climate change. During my observation in Ohio, I realized the other thing: not every person is affected by environmental bads equally. Some people are influenced more by extreme weather consequences, air pollution, poverty, lack of freshwater, plastic waste, and health issues more than others in society. Then, I found an overlap between these more vulnerable people and their identities. They face more than others because they lack recognition of their identities in society in terms of social, economic, and juridical. As a result, I started working on identities and environmental justice issues. Thanks to Environmental Justice Atlas, I realized that this does not happen in only the United States; it is a problem worldwide in many environmental justice issues.

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LIST OF ABBREVIATION

AGGI	: The Annual Greenhouse Gas Index
AR5	: The Fifth Assessment Report
COP	: The Conference of the Parties
EJ	: Environmental Justice
EJA	: The Environmental Justice Atlas
EJOs	: Environmental Justice Organizations
EJM	: Environmental Justice Movement
EPA	: The Environmental Protection Agency
GCP	: The Global Carbon Project
GCRI	: The Global Climate Risk Index
GHGs	: Greenhouse Gases
IEA	: The International Energy Agency
INC	: The International Negotiating Committee
IPCC	: The International Panel on Climate Change
NASA	: The National Aeronautics and Atmospheric Administration
NOAA	: The National Oceanic and Atmospheric Administration
UN	: The United Nations
UNEP	: The United Nations Environmental Programme
UNFCCC	: The United Nations Framework Convention on Climate Change
WMO	: The World Meteorological Organization

INTRODUCTION

Climate change has a different level of influence over human nature and non-human nature under the same umbrella (IPCC, 2014c). Along with problems based on human activities such as nuclear, mineral ores, building materials, extraction, waste management, fossil fuels, and tourism recreation, humanity has to struggle with more extreme weather events such as tropical storms, winter storms, severe weather, hail, tornados, storm surges, river floods, landslide, wildfires, droughts because of climate change (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019). The study exhibits the comparison approaches about who is most responsible and who more vulnerable to climate change. Besides, injustice matters created by climate change are emphasized in four chapters, and environmental justice matter sets the center of the study.

This thesis seeks to examine the justice demands of environmental justice movements regarding the socio-psychological impacts of recognition over environmental defenders. The study will explore the emergence of environmental justice movements and justice demands based on environment bads and goods, accepting the pluralist aspect toward justice demands during the examination. It is expected to find that justice problems do not only arise from distribution-based reasons, but they also emerge from recognition-based reasons, emphasizing the linkage of recognition with distribution, participation, and capabilities approach. It is essential to take injustice issues based on recognition under the question of why some people and communities get more than others.

Some traditional justice scholars believe that justice concerns are appeared because of equality or the distribution of environmental diseases and benefits. Unlike the scholars' thoughts, activists, societies, and non-governmental organizations require much more from

distribution. The inequality of distribution is insufficient to realize the requirements of environmental movements. The demands for global environmental justice are taken as three dimensional. Besides, the capacity approach allows for explanations of reasons to be further enhanced. Justice issues in ecological movements require to be seen as multi-reason. In this process, instead of substituting the distribution theory with a new idea, the study is based on a broader approach towards a link between the approaches to distribution, recognition, participation, and capacity to recognize environmental justice movements' demands (Schlosberg D. , 2004).

Although many traditional distributive justice theorists do not accept recognition as a justice problem, the requirements of environmental activities in both the United States and around the world highlight more than the difficulty of unfair distribution in practices (Schlosberg D. , 2013). Therefore, in the thesis, the conception of recognition is taken independently than other justice approaches, and it should be considered in more detail. This thesis argues that the injustice affairs and the reason for unjust distribution arise from a lack of recognition of group differences. There are social group differences, and that some groups are privileged. Other groups in any society demand the right to speak to various cultural, political, and structural situations produced by cultural degradation, political pressure, and lack of political access. What causes them to demand the speech right is their disenfranchisement due to mal or misrecognition (Fraser, 1997).

This study will examine the psychological effects of non-recognition and misrecognition over communities based on environmental movements' underlying causes. It is highlighted by Charles Taylor and Axel Honneth, people require reciprocal and intersubjective recognition because of their human dignity and integrity. The lack of recognition and misrecognition can damage a person's positive understanding of self-evaluation about himself/herself. Thus, recognition is a fundamental human necessity (Schlosberg D. , 2007). The study focuses on self-realization and the institutional limits are

the demand by social movements. Along with highlighting the recognition justice approach, the social-psychological effect is examined with the Social Identity theory.

Social Identity theory, a social-psychological theory to examine relations among parties, will be addressed for an explanation of the social psychology-based reasons for environmental defenders. Identities of individuals and communities have been formed by recognition or misrecognition; therefore, people or communities can face real harm from distortion when they are under the circumstance of restricting or contemptible picture of themselves. For this reason, the recognition issues can injure an individuals' positive understanding of self-evaluation about themselves (Honneth, 1992). This study seeks to examine whether this positive self-evaluation and negative self-evaluation have a vital role in group motivation in terms of environmental justice demands. The study is expected to demonstrate that individuals' social identities (such as age, race, ethnic, economic, gender, or religion) have been connected with environmental justice movements, focusing on the negative social identity perception.

Moreover, this thesis argues that group relations in environmental actions usually appear as intergroup conflict forms based on negative identity perception. Conflict is described as a fight between two or more individuals or groups for scarce resources, power, status, and values. The absence of violence does not automatically mean that there is no conflict. Efforts to obtain conflicting interests can be continued even without using violence (Yılmaz, 2006). Therefore, conflicts are observed in environmental actions because defenders and other actors have conflicting interests around environmental bads or goods (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019). This study is expected to discuss that non-violent conflicts may instantly reach a severe level when problems occur from existence and identity elements. It should be emphasized that even if the cause of many environmental movements seems like environmental destruction and risks, the identity features of defenders may determine the level of conflict in environmental

movements. Neglecting the group differences in any community has caused profound psychological influence over individuals and groups (Taylor, 1994).

Furthermore, the thesis will give some environmental justice cases examples in Subanons are in the Philippines, Indigenous in the United States, Catalans in Spain to demonstrate its argument in practice. As main cases to apply the comparative method are from the United States: North and South Carolina, Florida, and Michigan. Eventually, this study will examine whether negative social identity perception may be a source of motivation for environmental movements; also, whether it may influence the forms of mobilization. However, in the study, the intergroup conflict reasons are taken only in identities based. Therefore, it should be emphasized that social conflicts have often been multi-reason; they need to be explained with a comprehensive approach based on economic, structural, social, cultural, political, and health reasons at the same time.

This research has started after conversations and interviews with American citizens in the United States of America. As a result of interviews with these citizens, it arose because they made more psychological comments about the environmental problems they faced. Their comments on this subject have directed to focus on some socio-psychological theories. For this reason, the theories of justice and socio-psychology theories have been handled together in the study. An attempt has been made to bring a different explanation to environmental justice studies. In order to illustrate the connection attempted to establish, case studies different from the United States of America have been studied. However, it is not possible to claim this theoretical connection clearly. Extensive sampling is needed to establish a clear connection. Since the research coincided with the Covid-19 period, it was not possible to create a substantial sample. Therefore, this thesis is a basis for establishing a connection with more theoretical explanations

This study consists of three main chapters. The first chapter covers an analysis of the global climate change problem and gives a scientific explanation. Besides, the reactions in the political arena towards the problem are examined. As a critical point of the study,

the impacts of climate change are mentioned. Some studies are compared to understand who is most responsible and more vulnerable to climate change. Lastly, the chapter briefly explains environmental justice and movement. Along with defining environmental justice, the chapter analyses how environmental justice movements emerged historically. In the second chapter, what activists and communities demand from justice around environmental issues is examined, using different justice approaches. It has been evaluated whether justice issues have occurred because of only distribution injustice or more than this. It tries to describe recognition justice issues around environmental movements.

This chapter mentions how a lack of recognition and misrecognition creates problems in any society. The study emphasizes the psychological effect of recognition on people and societies. The chapter seeks to explain trigger reasons behind environmental justice with Social Identity theory. Therefore, in this chapter, identity is defined as both individual and social-based. It focuses on the relations between negative social identity perception and environmental justice deeply. In this chapter, relations among parties around environmental issues appear as conflicts because of parties' conflicting interests. In this chapter, conflict is defined as both non-violence and violence process. Therefore, the conception of environmental defender and conflict are clarified.

Following the second chapter, the third chapter. The chapter gives some instances of cases across the world in order to try to prove its argument. While some example cases are chosen from Philippines, North Dakota and Spain, the primary goal of the study is to point out the cases in North-South Carolina, Florida and Michigan in the United States. All these cases have a common feature; it is about identity; however, there are differences among these in terms of group mobilizing, forms of mobilization, and conflicts of outcomes. Lastly, the concluding part demonstrates a synthesis of these all different field theories. From the findings, some have more than others since some are not recognized in any society. If people and societies are not recognized, they can not participate. If individuals and communities are not able to participate, they can not be recognized

(Schlosberg D. , 2004). Finally, the qualities of environmental justice movements across the world are illustrated.



CHAPTER 1

EXPLORING CLIMATE CHANGE FROM ENVIRONMENTAL JUSTICE PERSPECTIVE

In the chapter, after clarifying the concept of climate change, the scientific explanation of the climate change regime will be presented in ways of greenhouse gas effects and why 2-degree is a limit point. Also, the political process of problem managed by states and other important actors will be examined under IPCC efforts and fundamental climate agreements. After that, looking at the effects of climate change, it is expected to be shown who is more responsible and more vulnerable to climate change. Although the climate change problem is a long-term problem, it requires instant action to be solved. However, the political solution process is constantly inconclusive, although its current and future effects have been scientifically proven. While some states emit more greenhouse gases, states emit less are more affected by climate change. The situation causes some individuals and communities to be more exposed to environmental problems than others. The problem of climate change creates a serious injustice problem at this point. Therefore, the primary purpose of the part is to explain the background to understand how injustice situations occur. Finally, in the chapter, it is examined how the environmental justice movement occurs, focusing on the historical background. Also, the differences between environmental justice movements across the world are elaborated deeply regarding the type of conflict and population, social actors and groups, and mobilization forms

1.1. The Conceptualizing of Climate Change

For a long time, especially since the mid-19th century, humanity has pressed against Earth's physical boundaries. The world population has been increasing every passing day, and people need more natural resources, land, water, and energy resources

such as coal, oil, and gas. Using more resources means that humankind will continue pushing the boundaries of planetary, defined as the environmental limits for humanity to live safely. There are nine boundaries of planetary, and climate change is one of them (Steffen, et al., 2015, pp. 1-3). Today, the differences in climate change are observable and provable by scientific methods at the global level. The climate of the Earth has continued altering during history. Unfortunately, human-induced activities such as the use of fossil fuels, deforestation, the use of plastic, water pollution, and so. have resulted in a severe problem in climate change (The International Panel on Climate Change [IPCC], 2014a, pp. 2-6). Climate change is the most crucial problem to require urgent action, even if it seems like a long-term issue. To tackle the issue is necessary to understand how the problem occurred, its effects, and those affected by it (UN, 2019).

Evidence of climate change goes back until 1960 by the occurring of basic science. However, any state did not want to take any international action because there was not enough evidence to be carried into the political arena (Bodansky, 2001, pp. 24-26). In the 1980s, states began to see this issue as a global problem and decided to fight together. In that period, the advancement of scientific methods and technology, the emergence of small environmental groups, and the proof of the ozone hole enabled climate change to be a critical issue in the political area. As a result, in 1988, the developments resulted in the creation of the International Panel on Climate Change (IPCC), a global effort for climate change driven by scientific activities and the United Nations Environmental Programme (UNEP) (Edwards, 2010). As Clark A. Miller said, the affair of climate change requires both an individual and a social effort in the field of politics, economics, science, and such that (Miller C. A., 2001, pp. 44-46). Therefore, before coming to the question of how to fight, defining what the issue can be necessary.

As the National Aeronautics and Space Administration (NASA) defines, climate change is an alteration in weather events in a region. It may be the change in annual rainfall in that region or the increase and decrease in the region's average seasonal temperature (NASA, 2011). Another definition by the National Oceanic and Atmospheric

Administration (NOAA) is that climate change is a persistent and crucial alteration in a region's standard climatic situations. According to Climate Literacy, overlong circles (such as the El Nino Southern) or seasonal differentness that cause cold, heat, dry or wet periods throughout regions are natural processes of climate variability (Climate Literacy: The Essential Principles of Climate Science, 2009, p. 4).

Defining climate change requires an explanation of many conditions. IPCC provides a more comprehensive perspective for understanding causes. As the definition of the Framework Convention on Climate Change (UNFCCC) in its Article 1,

"climate change as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods (UN, 1992)"

As can be understood from Article 1, there is a distinction between human-originated processes and natural processes in the changes that occur. Although the formation of natural processes brings about the affair, data, and other scientific research outcomes reveal that human behaviors lead to global climate change. Because of this reason, it is crucial to contain human-induced activities in defining the climate change problem (IPCC, 2014b, p. 4).

Climate change is a scientifically proven affair in an undeniable dimension in the global arena. Thanks to advanced scientific methods and Earth-orbiting satellites, scientists have collected data from space, air, and ground since the beginning of 20 century (NASA, n.d.). The research results reveal that the Earth's average surface temperature has increased by approximately 1.62 degrees Fahrenheit (0.90 degrees Celsius) since the middle of the 19th century (Santer, et al., 1996). Unfortunately, 95% of all scientific research agrees that human-induced activities have had more impact on average temperature variance than the natural process (AAAS, 2009). The human-induced expansion of the greenhouse effect, mainly by burning fossil fuels like coal, gas, and oil, has engendered the world to change physically. For example, the average temperature of the oceans and atmosphere has

increased. A significant decrease in the glaciers has occurred; a dramatic increase in drought level and sea levels have arisen. If states do not act, all individuals and communities worldwide will become targets of the issue, regardless of economic and political developments (IPCC, 2014c, p. 40). In short, as Roger A. Pielke Jr. states, in order to overcome the issue, not only scientific explanation is essential, but also political knowledge is substantial to collective action (Pielke, 2000).

1.2. The Scientific Explanation of Climate Change

Scientific research shows that global climate change is a problem in the past and now, but it is also an issue for the future. The problem, along with other international issues such as increased poverty, destruction of the environment, and global security affairs, brings about severe losses for both nature and species (Maslin, 2014, p. 1). Even if the natural process is one of the drivers, the global-scale observation has proved that the human-induced process is the predominant reason to originate an unbalanced situation in the Earth's energy budget (IPCC, 2018, pp. 4-6). According to Mark Maslin, the atmospheric concentration of greenhouse gases such as Methane, Carbon dioxide, and Nitrous oxide has dramatically increased since 1750, which arises from human activities such as the augmentation of fossil-fuel-based substances consumption and lifestyles-based on the use of natural resources. As a result, humans face the risk of change that their activities cause, and the scientific concern is the most essential to understand what happens the Earth because the alterations occur on the physic of the World. Thanks to the scientific approach, it is possible to know how this problem arises, the role of greenhouse gases, the reasons for the increase in these gases, and what problems they will create in the future (Maslin, 2014, pp. 2-9).

For the problem to be understood scientifically, some concepts should be explained. Climate, weather, and climate systems are some of the most important terms. Firstly, although people often confuse climate and weather concepts, both are quite different from each other. Whereas weather expresses the mutable state of the atmosphere in minutes on the local scale, the climate is the conceptual definition of the average weather conditions

of a region and an explanation of changes in these conditions that have occurred over long periods. Climate explanations can be at the local, regional, or global level. Moreover, researchers require to analyze temperature, humidity, sunshine, wind, and other weather conditions over a long period to talk about the climate of a region (NOAA, 2018).

The other term is the climate system. As IPCC states, the system consists of five main components: atmosphere, hydrosphere, cryosphere, land surface, and biosphere. While Sun is the most critical external forcing mechanism to affect the climate system, the direct effects of human activities also force the system as external mechanisms. As a result, It is essential to comprehend the system that determines the climate of the Earth to detect and understand the influence of humans on its change (IPCC, 2001, pp. 87-91).

Physical laws related to the entire universe also apply to the process and component of the Earth's climate system; therefore, scientific research can help us understand and predict the climate system's behavior (Climate Literacy: The Essential Principles of Climate Science, 2009, p. 5). Environmental observations are one of the primary resources for comprehending the climate system. Devices on the weather station, buoys, and satellites enable scientists to collect climate data from the bottom of the ocean until the Sun's surface. Furthermore, an observation not only allows us to make predictions about the present and the future of climate; it is also possible to learn about the past climate thanks to ice cores, tree rings, and sedimentary layers (IPCC, 2013a).

The data collected by all these methods shows that since 1880, the global annual temperature has not only increased at an average rate of 0.13°F (0.07°C) per decade but also since 1981 over twice that rate ($+0.18^{\circ}\text{C}$ / $+0.32^{\circ}\text{F}$). The 2019 year was the second warmest year in terms of 140-year record because of the temperature of the global ocean and land surface with an average of 1.71°F (0.95°C). Whereas the value of 2019 is only (0.07°F / 0.04°C) less than the highest record value of (1.78°F / 0.99°C) measured in 2016, it is (0.04°F / 0.02°C) higher than the third-highest value calculated in 2015 (1.67°F / 0.93°C). The measurements in 1880-2019, the five warmest years record have arisen

between 2015-2018, while nine of the ten warmest years have been seen since 2005 (NOAA, 2019b).

As scientists explain, natural processes such as volcanoes and changes in solar irradiance are insufficient to explain the rapid climate change occurred within recent decades. The critical point for rapid change is anthropogenic reasons(human-caused). The primary human activity which has the most negative effect is burning fossil fuels such as oil, gas, and coal. Also, the release of jeopardous chemicals into the atmosphere and the reduction in the rate of forests causes demolishing for both nature and species; the rapid spread of industrial events and farming competition results in releasing more carbon dioxide into the atmosphere. These activities generate an imbalanced situation in the rate of greenhouse gases such as carbon dioxide, water vapor, methane, and nitrous oxide, so the Earth's heat has risen each passing day until today (Climate Literacy: The Essential Principles of Climate Science, 2009, p. 10). Eventually, scientists have agreed on the acknowledgment that the Earth has got in a new geological epoch called the Anthropocene thanks to the available proof of the undeniable rate about the impact of humanity on the Earth System (Crutzen, 2002, p. 23).

1.2.1. The Greenhouse Gases Effect

The fundamental energy resource is radiation from the Sun. When the solar radiation reaches the Earth's atmosphere, one-third of it returns straight into space; two-thirds are absorbed by land and oceans. A balance is essential between incoming solar radiation and outgoing radiation emitted by the climate system for a constant climate. Atmospheric gases such as water vapor, carbon dioxide, methane, nitrous oxide, and some artificial chemicals such as Chlorofluora Carbons (CFS)are greenhouse gases (GHGs). Warmth spreads throughout Earth to space; GHGs have the quality to trap this heat. Thanks to the GHGs effect, Earth's temperature remains warm enough to sustain life (Maslin, 2014, pp. 2-5).

Without GHGs effect, the Earth's average temperature would be near 0°F / -18°C instead of the much warmer 59°F / 15°C (Ma, 1998). Therefore, humanity needs a natural greenhouse gas process. Unfortunately, over the last six decades, humans have originated irregularity conditions in the amount of GHGs by deforestation, land-use change, and emissions of heat-trapping greenhouse gases from fossil fuel consumption. The imbalance in the atmosphere induces that these gases trap extra heat and result in warmer situations than it should be in the Earth's average temperature (Climate Literacy: The Essential Principles of Climate Science, 2009, pp. 7-10).

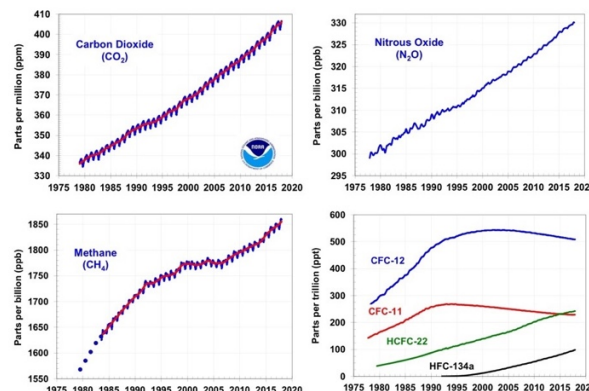
The effect of each greenhouse gas on the warming of the world differs in terms of three reasons. The first is how much is in the atmosphere; the second is how long they stay in the atmosphere, and the third is how strongly they affect the atmosphere (EPA, 2018). According to the Kyoto Protocol, Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), and Fluorinated gases such as Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur hexafluoride (SF₆) are the leading gases for rapid alteration in the climate because of the quality of trapping heat (UN, 1998, p. 19). When GHGs are released throughout the atmosphere, some remain a long time extending from a decade to many millennia. Human activities put gases into the atmosphere more quickly than they have been removed; the circumstance brings about an increase in the concentration of GHGs. In short, the problem of global warming arises (EPA, n.d.).

As the Annual Greenhouse Gas Index (AGGI) shows, the well-mixed greenhouse gases such as carbon dioxide, methane, nitrous oxide, and two chlorofluorocarbons account for approximately 96% of the accelerating global warming influence since 1750 (NOAA, 2019a). However, the effect of these gases over global warming is different from each other. While the time for CH₄ emissions to remain is approximately a decade, nitrous oxide N₂O is about a century. For CO₂ in the atmosphere, 40% will leave the atmosphere after 100 years, and 20% will remain throughout 1000 years; the final 10% will take 10,000 years (The Union of Concerned Scientists, 2009). As a result, the AGGI calculation expresses that CO₂ is responsible for 80% of the rising warming influence since 1990. In

other words, CO₂ is the chief greenhouse gas in terms of its amount in the atmosphere and rate of increase (NOAA, 2019a).

It is apparent in graphic 1 that there has been a continuous increase in the rate of gases after 1975 until today. Firstly, burning fossil fuel (coal, oil, and natural gases), biological materials, solid waste, and chemical reactions such as cement production are reasons to increase the concentration of CO₂. Also, the generation of coal, gas and oil, livestock, and another agricultural process, and solid waste landfills causes the rise in the level of CH₄. Secondly, agricultural and industrial activities, the oxidization of fossil fuels and solid waste, and the treatment of wastewater are fundamentally human-caused reasons for the rise of N₂O concentrations. Lastly, the industrial process results mean the augmentation in the level of fluorinated gases, banned by the Montreal Protocol because of the potential adverse effects over the ozone layer (EPA, 2018).

Figure 1.1.: The Annual Greenhouse Gas Index (AGGI)



Resource: (NOAA, 2019a), <https://www.esrl.noaa.gov/gmd/aggi/aggi.html>, accessed 7/10/2020

The change in the density of gases influences the climate system at different rates. According to AGGI 2019, the radiative forcing from well-mixed greenhouse gases have increased by 45% between 1990-2019, and CO₂ has the predominant role for about 80% of

this augmentation. Whereas CO₂ leads the total forcing along with methane, the CFCs have a relatively smaller influence on the total forcing (NOAA, 2019a). Thanks to the measurement, scientists can observe the rise of concentration of CO₂ from an annual average of 280 parts per million (ppm) in the pre-industrial era to 411 ppm in 2019. Moreover, researches have proven that when CO₂ concentration goes up or down, the temperature rises up or down simultaneously (Lüthi, et al., 2008). Thus, to prevent climate change, human activities that cause CO₂ emissions must be changed to reduce the concentration in the atmosphere and keep it at a specific rate (SDSN ; IDDRI , 2014).

1.2.2. The 2°C and Future Climate

In 2017, human-caused warming was approximately 1°C (apparently between 0.8°C- 1.2°C) above pre-industrial levels; global warming is possible to reach 1.5°C between 2030 and 2052 if the current rate continues to increase (IPCC, 2018, pp. 2-10). Humanity has been considerably rising the atmospheric concentrations of greenhouse gases. These increases in GHG concentration intensify the natural greenhouse effect. Global warming has continued to rise dramatically in the Earth's surface and atmosphere (UN, 1992). The rise in temperature until today has created severe alterations in both human and natural systems. Some extreme weather, such as hurricanes, droughts, floods, and tornadoes, have started appearing more often than in past decades. Also, the increase in sea-level rise and biodiversity loss has produced unexpected risks against unprotected persons and communities. As a result, 2°C is chosen as a critical point to struggle with these risks (Hoegh-Guldberg, et al., 2018, pp. 177-181). What needs to be understood is why 2°C is a limit point. Also, if the limit is exceeded, what kind of situation will occur in future climate change? The critical concept to answer this crucial question is the concept of the carbon budget. The carbon budget concept is the maximum level of cumulative emissions to stay within a degree of temperature increase (Hausfather, 2018).

In the Paris Agreement on climate change, nations determined to restrain global warming well below 2°C (above pre-industrial levels) with efforts to limit warming further to 1.5°C (UN, 2018, p. 3). Also, based on the authorities' demand, the IPCC took stock of

how the consequences of a 1.5°C temperature limit varies from 2°C, and a group of scientists examined the differentiation between emissions pathways for achieving these two temperature goals. Their conclusions reveal that humanity will suffer from severe climate impacts even with 1.5°C of warming, and the outcomes become significantly worse with 2 degrees (Levin, 2018).

The latest scientific research by the IPCC Fifth Assessment Report (AR5) Working Group 2 (WG2) demonstrates that even a rise in global temperatures of 2°C creates a critical threat to human well-being. An increase in temperatures by 2°C brings incredible difficulty in many parts of the world from severe climate disruptions such as dryness, floods, and intense tropical storms, heatwaves. Besides, it poses a problem against young people, future generations, and nature. Therefore, 2°C is the higher limit for keeping climate change within the boundaries of controllable risks and adapting climate change (IPCC, 2014b, p. 14).

As mentioned before, the meaningful relationship among total cumulative emissions of GHGs, their long-term concentrations and radiative forcing, and the resulting global average temperature response (Lüthi, et al., 2008). Keeping the increase in mean surface temperature to less than 2°C requires a robust restriction on global intensifying GHG emissions, especially in CO₂ emissions, because they are the largest single source (about 80%) of GHG emissions (EPA, 2018). Analysts have spent noteworthy time determining the quantity of carbon dioxide which humankind can emit while limiting warming to global temperature goals. According to the research, for a 50% possibility of restricting warming to 1.5°C, people have 770 gigatons of carbon dioxide (GtCO₂) budget; For 67%, the remaining budget drops from 770 to 570 GtCO₂ (Levin, 2018).

The world is not on route to stay in the 2°C goal. Even if the recognition of climate change has risen each passing day, and the growing number of countries have promised to diminish their GHG emissions, these commitments are not adequate to stay within the 2°C limit (SDSN ; IDDRI , 2014, pp. 3-6). As IPCC Fifth Assessment Report (AR5) reveals,

if authorities do not give additional commitments that force a significant drop in GHG emissions by mid-century and net-zero emissions throughout the second half of the century, the world will overreach the 2°C limit. Humanity is on a path to face an average temperature increase from 3.7°C to 4.8°C compared to pre-industrial levels; if full climate uncertainty is taken into account, the range can vary from 2.5°C to 7.8°C (IPCC, 2014b, pp. 11-14).

The outcomes of researches by the International Energy Agency (IEA) show a "baseline" of approximately 4°C (IEA, 2016). It means that the politics and energy practices of the states around are out of line (Matthew & Jennie, 2018). The current trajectory is not just dangerous; it is likely catastrophic. Humankind suffers from catastrophic jeopardies on the current path. The hazards of unabated climate change are tremendous. All have threatened each possibility of obtaining sustainable development and humanity's wishes to achieve a satisfying life for all people on the planet (Messerli, et al., 2019, pp. 1-11)

To sum up, the Earth has already had about 1°C of temperature rise; people are on track to consume the carbon budget associated with 1.5°C by 2030 (Levin, 2018). The lack of essential efforts against climate change would pose a problem for the life-support systems of the planet, such as human health, productivity, and safety. Extreme storms and other climate disruptions, rising sea levels would endanger many of the world's largest urban and low-lying countries, especially small island states. Therefore, it is indispensable that everybody needs to take much more serious about staying within the 2°C limit. Governments, businesses, civil societies, and all individuals must understand that collective effort is essential for profound transformations to reach this target (SDSN ; IDDRI , 2014).

1.3. Climate Change as Global Political Problem

Climate change presents a challenge to social, political, and economic systems. It is not enough that organized collective efforts remain at the national level because climate

change requires a combined global set of both causal processes and consequences. It means that the efforts need global action by coordination across some critical mass of global players (Dryzek, Norgaard, & Schlosberg, 2012, p. 1). Even if the climate appeared as an object for serious scientific study in 1960, climate change problems did not arise as a global political problem until IPCC was created in 1988 (Weart, 2003, pp. 156-163). According to Peter M. Haas and David McCabe, a small group of scientists and international organizations effectively inserted climate change on the global political agenda and pushed states to make environmental commitments (Haas & McCabe, 2001, pp. 323-348). Nevertheless, as Edward states, scientific acts alone cannot create a political problem. The development of climate models adapted as policy tools is essential to generate political issues (Edwards, 2010).

There are many different approaches to explain the late emergence of the climate problem in the political arena. For example, Edward expresses three necessary preconditions for a problem to be on the political agenda. There must be a necessity and supporters that care about the necessity; there must be a theory to describe why the necessity is occurring and how to solve it. There are none of these conditions in the 1960s. Climate change could only be put into the political process in the 1980s because climate science had matured enough to eliminate the cooling hypothesis and offer confidence about climate change effects. Also, the environmental movement and international environmental conferences prepared the public for the idea of an environmental crisis, and the modelers proposed concrete predictions with strategic implications. All those developments resulted in the preparation of the creation of IPCC (Edwards, 2010).

Shardul Agrawala state that the U.S. was responsible for preventing international action on climate change. He explains that there was not enough systematic evidence to support action in the late 1970s. However, after the international conference at Villach in 1985, he asserts that climate science was just advanced like ozone science was when it strongly encouraged a framework convention agreement. According to Agrawal, the framework convention did not happen in 1985 for two reasons because there are two

reasons. First, climate change is a political difficulty that needs restructuring energy sectors in terms of the many economic systems. Second, climate change is global; therefore, it requires effort from both developed and developing countries. Therefore, the U.S. administration's offer to postpone the creation of the IPCC and calling for more analysis instead of a generating framework convention had many supporters globally (Agrawala, 1998, pp. 605-620).

Although the climate change issue has taken time to attract international attention, significant developments have taken place in this area. In the 1970s, climate studies were directed mostly in a few national labs. Even if the U.S. administration supported research, it was not seen as a political issue (Weart, 2003). During the decade, climate change garnered more attention because weird weather was associated with human influence. In Stockholm, the 1972 UN conference with scientific reports popularized environmental concerns and increased the possibility that human activity could produce a crisis (Hart & Victor, 1993, pp. 643-680). In 1979, the Charney Report by the National Research Council predicted that doubling CO₂ would lead to 3°C warming. That was the first report to declare climate change as a policy problem explicitly (Edwards, 2010).

The International scientific conference at Villach presented the first "scientific consensus" about global warming in 1985. Villach was organized by the UN Environmental Program (directed by President Mostafa Tolba) with the World Meteorological Organization and scientist Bert Bolin. Villach was the first in a series of scientific international conventions and assessments completed with the 1988 creation of the IPCC (Haas & McCabe, 2001, pp. 323-348.). After 1985, while an extraordinarily hot summer was catalyzing the U.S. political action, newspaper coverage of climate change spiked across the world. Also, the Toronto scientific conference, organized by the same people who organized Villach, demanded a 20% reduction in emissions. In 1988, all coincided with the creation of the IPCC, established because governments could reassert control over the international scientific process (Bodansky, 2001, pp. 23-40.).

When the First IPCC report was published, another National Academy report was released. Moreover, foreign ministers met for the first time to debate climate change at the Second World Climate Conference; it was to negotiate a framework convention on climate change. After that, the UN established the Intergovernmental Negotiating Committee (INC) to create a framework convention outlining climate cooperation in 1991. Eventually, the UN Conference on Environment and Development in Rio in 1992 brought about the UNFCCC, the principal negotiating forum for global climate affairs (Hecht & Tirpak, 1995, pp. 371-402). With all international processes, the Kyoto protocol, Copenhagen, Redd +, and Paris agreements were signed at different times until today as states' commitments (United Nations Legal Instruments, n.d.).

1.3.1. The Fundamental Negotiations on Climate Change

The main topic of climate talks is significantly about cut GHG emissions. Until today, many countries continue developing constantly, and global emissions are expanding simultaneously. As explained above, 2°C is the tipping point because nearly all people worldwide turn into losers from a result of climate change impacts. Therefore, the scientists state that restraining climate change to 2°C as a maximum point seems reasonable (Maslin, 2014, p. 115). The world experiences considerable difficulty, and countries have tried to solve the problem with the way of international treaties supported by effective regional and national policies over the decades. There is a quarter-century of international climate diplomacy launched by the UN Framework Convention on Climate Change (UNFCCC) until the Paris Agreement. In this period, UNFCCC, Kyoto Protocol, Copenhagen and Cancun Agreements, and Paris Agreement are turning points respectively for global Climate Action (Demand Climate Justice, 2017).

World's leaders came together at the 1992 Rio Earth Summit, and they adopted a group of global environmental treaties, including the UNFCCC. The UNFCCC establishes a long-term purpose of preventing severe anthropocentric interference with the climate system. Even though it was created at the Rio Earth Summit in 1992, it officially came into

force on March 21, 1994. There are several principles containing agreement by consent of all agents and differential responsibilities within the UNFCCC. While the convention commits all countries to decrease greenhouse gas emissions, it sets the principle of shared but differentiated responsibilities and respective capabilities because countries differ in terms of their contributions to climate change. Also, capacities vary country by country; therefore, developing countries in reducing emissions must be supported by developed countries when they try to cope with climate impacts (Maslin, 2014, pp. 115-116).

Moreover, two different parties have been separated to represent formally at the negotiations that have been recognized. The first one is Annex I countries; they are all the developed countries. The second one is non-Annex I; they consist of the less developed and rapidly developing countries. After that, some countries discussed that their economies were in development; therefore, parties decided the richest countries be placed in a new category, named Annex II. (UN, 1992). The UNFCCC is not lawfully binding for parties to decrease greenhouse gas emissions and does not provide any targets or timetables. However, it set the principle for regular conferences among the ratifying countries, and the regular meeting is named the Conference of the Parties, or COP (Maslin, 2014).

The parties started gathering yearly at the COPs to advance compromises ahead. The Kyoto Protocol was drawn up as the first international agreement at COP3 on December 13, 1997. Only five years after the UNFCCC was created. The constitutionally binding deal commits that developed countries need to diminish emissions by an average of 5 percent compared to 1990 levels. Also, the protocol establishes a system to watch countries' progress. However, it does not force to take action in developing countries, even big carbon emitters such as India and China. The Kyoto Protocol also generates a cap and trade system for countries to both trade emissions units and supports sustainable development (Gaast & Alessi, 2015). Even if the Kyoto Protocol was confirmed and signed to make it a legal treaty in Bonn on July 23, 2001, the USA removed from the climate meetings in March 2001 under President Bush's administration. So, he did not sign the

Kyoto Protocol at the Bonn meeting (The White House, 2001). Moreover, the purposes produced by the Kyoto Protocol were reduced throughout the Bonn negotiation because making Japan, Canada, and Australia sure to join (Maslin, 2014, pp. 117-123).

The Kyoto Protocol became a rule on February 16, 2005, after enough countries accepted at least 55 percent of global emissions. Also, Australia eventually accepted the Kyoto Protocol as legally binding in December 2007. Between 2008 -2012, when the protocol was set to expire, countries are supposed to reduce emissions by their pledged amounts (Demand Climate Justice, 2017). For example, while the European Union pledges to reduce emissions by 8% under 1990 levels, Japan commits to 5%. Also, Russia commits to keeping levels steady at 1990 levels. The treaty does not involve developing countries because balancing out the historical legacy of emissions by developed countries, and it is decided that developing countries would join the post-2012 agreement. Simultaneously, Russia's membership tipped the scales, which allowed the Kyoto Protocol to become international law. The United States did not accept to join the protocol, even if it is one of the world's leading carbon emitted (Maslin, 2014, p. 117).

As it seems clear across the world that the Kyoto Protocol was hesitant because UNFCCC parties faced with challenges to deal with an alternative framework. Parties believed that the Kyoto Protocol would facilitate stronger action by all countries in terms of both developed and developing, but expectations did not come true as desired. The eyes focused on Copenhagen as a new hope. Thus, the world had enormous expectations for Copenhagen (COP15) in 2009 (Gaast & Alessi, 2015). The parties thought that they could make a big deal about pledges. At that time, Barack Obama had just started his duty as president, and other states had some proposals for emission. For example, the European Union said it would agree to reduce the emission rate by 20% by 2020 compared to 1990 if it is related to emission reduction in other developing countries. Also, Norway promised a 40% emission reduction compared to the 1990 level, while Japan offers a 25% emission

reduction rate from a 1990 baseline. Even the USA proposed a 17% reduction on a 2005 baseline, but the Copenhagen talk went wrong (Maslin, 2014, p. 123)

The American Meteorological Society stated in a report in 2009 that a 3.5°C to 7.4°C increase is possible in less than one hundred years. Thus, countries accepted that global temperatures should not increase by 2°C above preindustrial levels in the Copenhagen Accord, even though delegates from developing nations tried to set targets at 1.5°C. After attending the negotiations, while the U.S. administration announced that it is not enough, some countries later vowed to follow and made their pledges, the accord remains nonbinding (The Council on Foreign Relations, n.d.). In the lack of consensus, the Accord and its process lead to making it criticized. Participants have thought generally that the Copenhagen Conference causes setting back in multilateral climate diplomacy (Demand Climate Justice, 2017).

At COP 16 on November 29-December 10, 2010, in Cancun, countries approved the Cancun Agreements. The agreement is effectually based on the essential elements of the Copenhagen Accord under the UNFCCC. Because of the result of the ineffectualness of Copenhagen and NASA's report that 2000–2009 was the warmest decade ever recorded, there was an increased requirement to make a consensus in Mexico through COP16 (Gaast & Alessi, 2015). Parties pledged to keep global temperature increase under 2°C in the Cancun Agreements for the first time. While around eighty countries such as China, India, and the United States and the European Union offer emissions reduction targets and progress, they agreed on more effective mechanisms for watching the progress. Nevertheless, analysts explained that those efforts were not enough to stay below the 2° target (Maslin, 2014, p. 125).

The conference in 2011 in Durban, South Africa, almost falls after China, India, and the United States rejected as the world's three biggest polluters an accord offered by the EU. The conference in 2011 in Durban, South Africa, almost falls since China, India,

and the United States rejected an accord offered by the EU. Fortunately, at the latest, they consented to work on outlining a new and legal binding agreement in 2015. According to countries, the new agreement was required to differ from the Kyoto Protocol in terms of applying to both developed and developing countries (Jackson, n.d.).

World leaders gathered at COP 21 in Paris. They adopted the Paris Agreement on December 12, 2015, and the agreement entered into force in November 2016. The Paris Agreement is explained as the most significant global climate agreement in history by one hundred ninety-six countries. The mission of the Paris Agreement is to keep the global temperature rise under 2°C and track efforts to keep it below 1.5°C. It demands both developed and developing countries to set emissions reduction objects; it also enables countries to determine their targets (The Center for Climate and Energy Solutions, n.d.). However, there are no implementation mechanisms to assure whether countries follow their targets or not, but countries are supposed to submit determined targets nationally under the agreement. Unfortunately, states could not once repeatedly make compromises on mechanisms for trade emission reductions. Countries such as China, Australia, and Brazil continued to create legal holes. The legal holes were critical because they would weaken the influences of climate mitigation projects in violation of the rights of people who face most at risk from climate impacts (The Council on Foreign Relations, n.d.).

In short, politicians adopted in 1992 on a UN Framework Convention on Climate Change (UNFCCC) based on fundamental scientific insights on climate change. The UNFCCC is the primary source for the Kyoto Protocol in 1997, Copenhagen in 2009, the Cancun Agreements in 2010, and the Paris Agreement in 2015 (The Council on Foreign Relations, n.d.). Even if they are milestones for climate negotiations to cut GHG emissions, unfortunately, they could not enable countries to reach the global goal because the primary political difficulties caused by differentiated responsibilities and respective capabilities prevent global action. Also, the lack of effective international governance organizations for implementing and strengthening global environmental regulations such as those of the

Kyoto Protocol creates big challenges to achieve during negotiations (Jackson, n.d.). Even producing a common solution for problems does not exist in the present. GHG emissions continue rising so quickly; therefore, the problem among states requires effective socio-economic development planning urgently (Maslin, 2014, p. 133).

1.4. The Impact of Climate Change

Human intervention to the climate system continues to occur, which creates risks for human and natural systems. In many countries, melting snow and ice or increasing rainfall alter hydrological systems in terms of water resource quantity and quality. The icebergs' level remains to shrink nearly across the world because of climate change. Moreover, global warming also causes permafrost warming and thawing in terms of both high-latitude regions and high-elevation regions (IPCC, 2014b, pp. 11-31). Ocean acidification and sea-level rise are other evidence of climate change. All evidence has been seeing now obviously over decades, and they create risks over ecosystems and communities worldwide (Walsh, et al., 2014, pp. 27-36). Not only impacts seem on such as freshwater resources, ecosystems, coastal systems, but also there are effects on food security, vital economic sectors, human health and security, livelihood, and poverty. Risks vary in urban and rural areas regarding the extent of adaptation and mitigation (IPCC, 2014c, pp. 14-20).

Risks of climate change about freshwater appear with increasing greenhouse gas (GHG) concentrations (IPCC, 2014b, p. 14). Changes in the hydrological circle can reason different results and risks. They are conditioned by the interaction between climatic and non-climatic drivers. Anthropogenic climate change is one of many water resources stressors and impacts freshwater ecosystems in streamflow and water quality. Non-climatic drivers such as population increase, financial development, urbanization, and land-use patterns are significant about the sustainability of resources in decreasing water supply or increasing demand. Moreover, scientists interpret that the climate system changes

can decrease renewable surface water and groundwater reserves significantly within most dry subtropical regions as a high-possible risk. They also explain that ongoing climate change can reduce raw water quality, posing risks to drinking water quality even with conventional treatment for the future (Jiménez Cisneros, et al., 2014).

In response to increasing climate change, many species live in terrestrial, freshwater, and marine not only need to shift their geographic areas, migration patterns, but also seasonal flights and interactions with other species. Also, ecosystem transformations and species extinctions are the results of both human-induced reason and natural process. Even worse, if climate change combines with other stressors, such as environment alteration, exploitation, air, and sea pollution, it can results in invasive species extinction throughout and beyond the 21st century. All species cannot adapt to new climates because while some species can adapt to new climates, some are not fast sufficient to adapt biologically (IPCC, 2014b, pp. 14-16).

Coastal systems are especially sensitive against three chief drivers that occurred because of climate change; these are sea level, ocean temperature, and ocean acidity (IPCC, 2014c, p. 17). According to research, the most critical risk among them is sea-level for human systems since coastal systems and low-lying areas cause facing more exposure to adverse impacts such as submergence, coastal flooding, and coastal erosion. What is worse, the communities exposed to coastal hazards simultaneously with humanity pressures against coastal ecosystems can increase significantly in the coming decades because of population growth, economic development. Also, acidification and an increase in the warming of coastal waters can continue with significant negative consequences for coastal ecosystems (Wong, et al., 2014, pp. 361-409)

Climate change poses a critical threat to global food security, with potentially existential economic, political, and social outcomes for humanity (Porter, et al., 2014, pp. 485-533). Climate change affects food security in four dimensions: food availability, food

accessibility, food utilization, and food systems stability. When these four dimensions are affected by climate change, they can also impact food production, distribution channels, human health, and buying power and market movements. Even worse, people who live already in a hungry world are likely to be the first affected. There is a high possibility that climate change leads to shifting vulnerabilities in both developed and developing countries (FAO, 2008, pp. 3-21)

Moreover, livelihood systems such as agriculture-based are at high risk and vulnerable to food insecurity in terms of crop breakdown, new models of pests and diseases, lack of suitable seeds and planting material, and livestock death. People who live on the coasts and floodplains, in mountains, drylands, or the Arctics, are vulnerable to food insecurity (Porter, et al., 2014, pp. 490-500). In terms of an indirect effect, low-income individuals worldwide, but especially in urban regions, can be at risk of food insecurity by lack of adequate insurance coverage. Food systems can also be influenced via potential domestic and worldwide migration, based on resource conflicts and civil crises triggered by climate change (FAO, 2008, pp. 6-15).

Climate change is an influential power negatively against various technologies and energy sources. The rate of impacts depends on the resources the technological manners, or locations. Also, the impacts combined with population, age, revenue, technology, lifestyle, and regulation can determine the supply and demand for economic goods and services changes. Climate change may diminish production and economic growth by reducing energy demand for heating and increasing the energy demand for cooling in both the household and industrial areas. It also creates significant effects on insurance systems, the health sector, and tourism resorts, such as ski resorts, beach resorts, and nature resorts. Eventually, climate change can affect the global economy, but impacts on it are challenging to determine. Nevertheless, climate change can still be one reason why some nations stay in poverty and cannot struggle with poverty (Arent, et al., 2014, pp. 659-708).

Human health has constantly been affected by both climate and weather circumstances. The environment provides us clean air, food, water, shelter, and security, but human-based climate change causes alterations in the environment. These changes endanger human health and well-being in various forms. There are two ways that climate change threatened human health. The first one is the possibility of increasing the severity of health problems that have been already influenced by climate or weather circumstances. Secondly, the effect can occur by producing unusual or unanticipated health difficulties in regions where they have not appeared before (Crimmins, et al., 2016, pp. 6-14). Societies can be threatened by destroyed of physical, biological, and ecological systems. Health effects of these disruptions encompass increased respiratory and cardiovascular disease, injuries, and premature deaths based on extreme weather issues, but also include variations in the geographic distribution of food and other dangerous diseases, and threats to mental health. What is worse, people not equally at all these risks in terms of the level of effect (Luber, et al., 2014, pp. 221-222)

The other effects of climate change are seen over human security in the present day. They will do more so in the future by decreasing access to critical natural resources to sustain livelihoods. It ruins livelihoods, the interaction between culture and individual identity, and causes an increase in migration rate that people willingly have avoided. Also, it weakens states' ability to supply the essential condition for human security (Barnetta & Adger, 2007, pp. 639-655). Changes in climate may influence some or all of the factors at the same time. For various communities that have been already culturally marginalized, resource-dependent, and have limited resources, human security is under more danger because of climate change. Human insecurity does not arise from one reason; instead, it results from many factors. Situations of intense insecurity, such as scarcity, battle, and sociopolitical uncertainty, are some of the various factors (Adger, et al., 2014)

Moreover, the impact of climate change can vary over societies over time in terms of social resilience and knowledge tools. For example, according to research, lack of land

and displacement, such as on small islands and coastal societies, can produce negative cultural and welfare influence. Another example is that even if natural resource-dependent inhabitants like indigenous peoples know well to adapt to changing social and ecological circumstances because of nature knowledge, climate change can create a severe impact that is not controllable (Adger, et al., 2014). Also, when the mass migration problem comes together with the effects of climate change, severe results for migrants, and people living in conflict areas can reach extreme points. Even worse, climate change could have an intensifier effect in the possibility of the risks of destructive conflicts in civil conflict and inter-group battles by increasing drivers of current conflicts such as scarcity and economic breakdowns (IPCC, 2014c).

According to IPCC AR5, the observed proof submits that climate change and climate variability weaken the already existing poverty, intensify inequalities, and stimulate new vulnerabilities for individuals and communities. Poor people are not equally influenced because the poor are poor for multiple causes. However, not all vulnerable individuals are poor. Therefore, it is essential to comprehend both non-climate stressors and entrenched structural inequalities to shape vulnerabilities because climate change interacts with them intensely. Climate-related uncertainties especially negatively influence ethical and geographical disadvantaged groups who face inequalities in terms of multiple dimensions of discrimination in gender, age, race, class, caste, indigeneity, and (dis)ability. What is worse, as future risk, scientists predict that climate change can generate new poor in both developing and developed countries between the present and 2100. Also, it can generate obstacles for sustainable development (Olsson, et al., 2014, pp. 793-832).

To sum up, climate change has severe impacts on freshwater resources, ecosystems, coastal systems, food security, vital economic sectors, human health and security, livelihood, and poverty. Climate impacts have already hit both developed and developing countries, and analyses explain that they are not equally vulnerable nor prepared but have tried to adapt. However, many poorer countries are more vulnerable because of their less

capacity to adapt. There are obvious pieces of evidence about how climate change exacerbates gender inequality and social and economic injustices across the world. Also, climate change is negatively affecting the hope for a good world where poverty has been overcome, and people live in dignity and security. Unfortunately, it is impossible without urgent collective action for poor and marginalized people to overcome a wide range of poverty and reach sustainable development objects (Schramek & Harmeling, 2017) .

1.5. Who is More Responsible and Most Vulnerable?

As mentioned previously, anthropogenic climate change is unavoidably an international issue in terms of its causes and effects. The impacts can be seen throughout the world, even though these effects can differ considerably among nations. The responsibility for climate change is not evenly shared because some countries have emitted more greenhouse gases than other countries (IPCC, 2018). Also, climate change impacts do not influence everybody equally because some societies or people are more vulnerable than others. The effects of climate change create severe injustice worldwide, and the inequality conditions arise among responsible and vulnerable countries: inequality of responsibility, vulnerability, and mitigation. Inequality is a controversial issue in climate change negotiations, especially from the point of responsibility and vulnerability (IPCC, 2014c).

Parties have noticed that deep cuts in the GHG emission rate are expected to keep the rise in average global warmth below 2°C, comparable with pre-industrial levels (Maslin, 2014, p. 116). Even if they have come together for the United Nations Framework Convention on Climate Change (UNFCCC), created to form the first international agreement on decreasing global emissions, reaching the goal does not seem easy. Countries do not evenly generate CO₂ emissions in terms of significantly varying industrialization levels and urbanization; also, they vary from each other because of other variables about

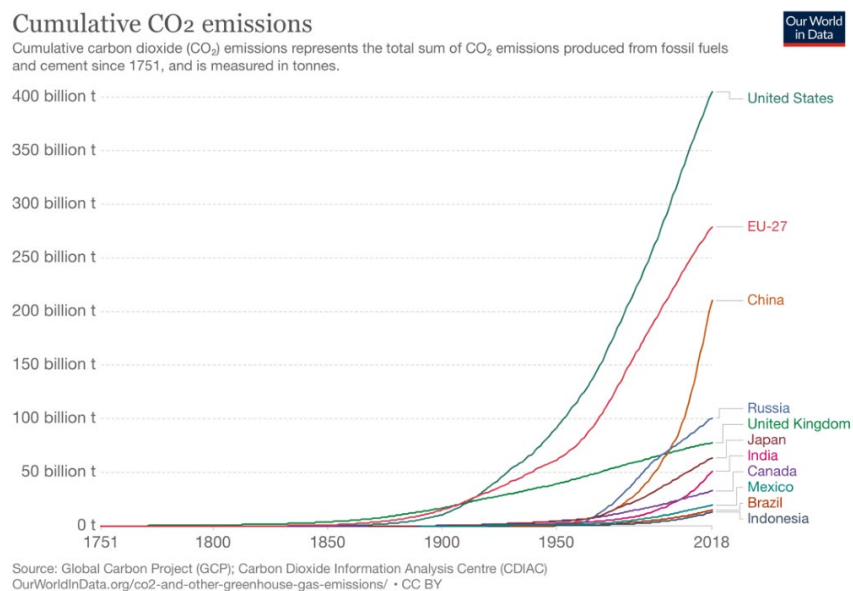
present and historical per capita GHG emissions among the world's states (SDSN ; IDDRI , 2014).

According to IPCC, even if some nations are the most responsible for current and historical GHG emissions, they are observed to suffer the least damage. Even worse, the nations and people least responsible for the GHG pollution causing climatic problems are projected to be first-affected from damages. The developed countries are mostly responsible for most anthropogenic GHGs historically because they have been releasing them since the industrial revolution (Markkanen & Anger-Kraavi, 2019). Even though some countries are considerably more guilty than others about contributing to climate change, it is so politically difficult to accept and prove the truth in the policy formally. Also, many carbon-based activities are connected with state affluence, such as industrialization and high consumption rates. Therefore, whereas developed countries typically cause high carbon dioxide emissions per capita, some developing countries take the lead in the increased carbon dioxide emissions rate (IPCC, 2014c).

According to IPCC, four-fifths of global CO₂ emissions originate from power production, industrial processes, and transportation. Not all countries have the same development process equally because of the unbalanced division of production and property (IPCC, 2014b). Hence, developed countries such as the United States, Canada, European countries, and Japan emit over 90% of the global industrial-based CO₂. Struggling with climate change needs deep emission cuts of all GHGs, even covering the deep decarbonization of energy policies. For being successful, the transformation of development requires to prove that socio-economic development needs are met within the constraints of very low emissions (Maslin, 2014, p. 7). Unfortunately, even if researchers explain that deep decarbonization politics can apply economically, developed countries seem not ready still to take responsibility. Therefore, responsibility is the focal point of the challenges the world community faces in finding practical and equitable solutions to global warming (SDSN ; IDDRI , 2014).

Moreover, the primary source of one-fifth of global CO₂ emissions is land-use changes. The causes of the emissions arise fundamentally from the destruction of forests in terms of farming, urbanization, or roads. Since vast ranges of rainforests clear cut, the region turns into a limited productive field with considerably lessened potential for storing CO₂. South America, Asia, and Africa are responsible for above 90% of current land-use change emissions. This circumstance results in significant moral issues. It is tough to force these nations to prevent deforestation because many forest regions in North America and Europe had already been destroyed by the beginning of the 20th century. Also, comparable to the amount of CO₂ released, industrial processes still predominate land-use changes (Maslin, 2014, pp. 7-8).

Figure 1.2.: Cumulative CO₂ Emissions

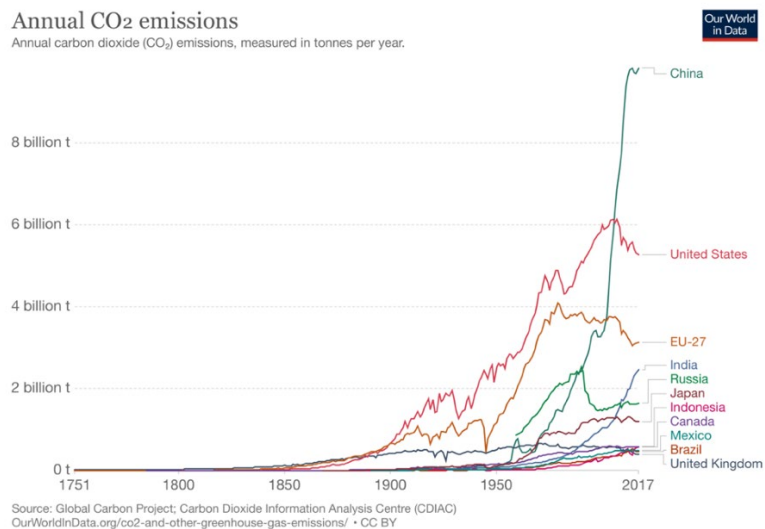


Resource: (Ritchie & Roser, 2017) ,Global Carbon Project (GCP), <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>, accessed 7/17/2020

Global average concentrations of CO₂ have had consistent fluctuations in the atmosphere over the past 800,000 years. Atmospheric concentrations of CO₂ did not

exceed 300 parts per million (ppm) until the Industrial Revolution but are now well over 400ppm. Over an extended period, each country has had a different level of contribution to concentration. It is possible to understand each country's total contribution to global emissions with cumulative CO₂ emission (Maslin, 2014, p. 5). According to the study of Hannah Ritchie and Max Roser, for the increased emission rate, the United States is in the first rank as historically responsible because of the cumulative CO₂ emission. While the US has 404.77 billion tons of cumulative CO₂ emission, the European Countries are in the second rank with 356.35 billion tons. China is the third country with 210.20 billion tons, and after that, Russia comes by 100.72 billion tons as the fourth country (Ritchie & Roser, 2017).

Figure 1.3.: Annual CO₂ Emissions

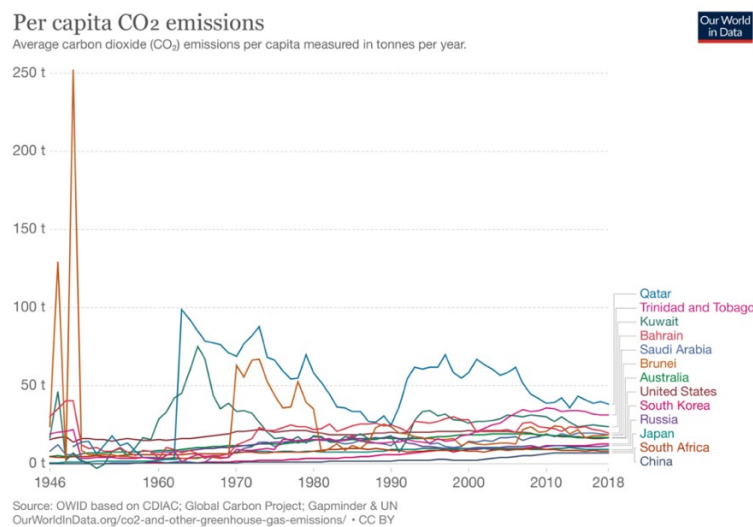


Resource: (Ritchie & Roser, 2017) ,Global Carbon Project (GCP), <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions> ,accessed 7/17/2020

In terms of the annual CO₂ emission rate in 2018, the ranks change. While China is the largest emitter country in both Asia and the world with 10.06 billion tons of CO₂ emission, the second most emitter country is the USA, with 5.42 billion tons of CO₂. It is

followed closely by 28 European countries as the third rank with 3.44 billion tons of CO₂. After that, India, Russia, Japan, Indonesia, Canada, Mexico, and Brazil come from top to bottom, respectively. Moreover, the CO₂ emission concentration rate varies by per capita in all countries. The largest per capita CO₂ emitters in the world are the primary oil-producing nations because of relatively their low population size. Most of them are Middle East countries. While Qatar had the highest emissions at 49 tons (t) per person in 2018, Trinidad and Tobago follow with 31.28 t per person as the second country. After them, Kuwait with 23.70 t and the United Arab Emirates with 21.35 t per person come (Ritchie & Roser, 2017).

Figure 1.4.: Per Capita CO₂ Emissions



Resource: (Ritchie & Roser, 2017) , Global Carbon Project (GCP), <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions> ,accessed 7/17/2020

Even if the developed and some developing countries such as China, India, South Africa, Brazil seem in the first ten ranks for CO₂ emission rates, the list of vulnerable countries to climate change not similar with CO₂ emission concentration list (Ritchie &

Roser, 2017). According to Timmons Roberts and Bradley Parks, people and communities in developing nations, especially poorer countries, are the first affected by the most severe impacts of climate-related disasters such as droughts, floods, and storms because of their geographic positions. Also, since the developed nations put their energy-based product processes to poorer countries, carbon dioxide emissions continue increasing with developing trade and industrialization in poorer countries (Roberts & Parks, 2010).

Most poor countries are likely more vulnerable ten times than rich countries such as the US. from the point of experiencing climate-related difficulty. Statistically, the percentage of urbanization and the proportion of the communities residing near a coast not only result in these inequalities in climate vulnerability, but income imbalance, inadequate civil society, and ineffective systems of property rights are also the focal point of inequalities (Markkanen & Anger-Kraavi, 2019). For example, according to the Global Climate Risk Index (GCRI), societies experience the reality of increased extreme weather events across the world. Approximately 495 000 people died over the world, and some people lost US\$ 3.54 trillion (in PPP) as a primary result of over 12 000 extreme weather disasters between 1999-2018 years (Eckstein, Künzel, Schäfer, & Winges, 2019).

As GCRI classified in figure 1.5., people in Puerto Rico, Myanmar, and Haiti are the most influenced countries between 1999-2018 years regarding casualties and economic damages that occurred. After these countries, the Philippines, Pakistan, and Vietnam follow, respectively. Economically, seven of ten countries, such as the Philippines, Pakistan, and Nepal, are developing countries in the country group low-income or lower-middle-income. Thailand and Dominica are listed as upper-middle-income nations. Puerto Rico has an advanced economy by making a high income. Even though Puerto Rico is not an independent national state, it is an unincorporated region of the United States. Nonetheless, Puerto Rico faces diverse circumstances and vulnerability towards extreme weather events than the many parts of the USA from the point of its geographical location

and socio-economic indicators. Therefore, Puerto Rico seems separately in this index (Eckstein, Künzel, Schäfer, & Winges, 2019).

Figure 1.5.: The 10 Countries Most Affected Between 1999 - 2018

CRI 1999-2018 (1998-2017)	Country	CRI score	Death toll	Deaths per 100 000 inhabitants	Total losses in million US\$ PPP	Losses per unit GDP in %	Number of events (total 1999-2018)
1 (1)	Puerto Rico	6.67	149.90	4.09	4 567.06	3.76	25
2 (3)	Myanmar	10.33	7 052.40	14.29	1 630.06	0.83	55
3 (4)	Haiti	13.83	274.15	2.81	388.93	2.38	78
4 (5)	Philippines	17.67	869.80	0.96	3 118.68	0.57	317
5 (8)	Pakistan	28.83	499.45	0.30	3 792.52	0.53	152
6 (9)	Vietnam	29.83	285.80	0.33	2 018.77	0.47	226
7 (7)	Bangladesh	30.00	577.45	0.39	1 686.33	0.41	191
8 (13)	Thailand	31.00	140.00	0.21	7 764.06	0.87	147
9 (11)	Nepal	31.50	228.00	0.87	225.86	0.40	180
10 (10)	Dominica	32.33	3.35	4.72	133.02	20.80	8

Resource: (Eckstein, Künzel, Schäfer, & Winges, 2019, p. 9), The Global Climate Risk Index (GCRI), The Long-Term Climate Risk Index (CRI), https://germanwatch.org/sites/germanwatch.org/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_14.pdf, accessed 7/20/2020

To sum up, climate change causes very severe injustice circumstances in responsibility, vulnerability, and mitigation. Responsibility and vulnerability are the focal point in the policy and economic arena and need sensitive solutions to prevent the vast catastrophic results of climate change (Markkanen & Anger-Kraavi, 2019). In 2015, countries signed two fundamental international agreements to take global action against climate change impacts. The first one is the Paris Agreement; the second one is the 2030 Agenda for Sustainable Development (The Council on Foreign Relations, n.d.). Unfortunately, in the present, the world has not solved the unequal circumstances in economic and political participation between the categories of socially determined, such as gender, age, ethnicity, belief, ability, or class (Barry & Johanna, 2006). As a result, climate change causes many global issues based on injustice circumstances. One of these circumstances is environmental justice regarding social, economic, and health inequalities (Schlosberg D., Defining Environmental Justice: Theories, Movements, and Nature, 2007, pp. 3-7).

1.6. Defining Environmental Justice

Humanity has lived with climate change for a long time. People continue to be directly or indirectly affected by its impacts (IPCC, 2014c). As mentioned above, the responsibility of the climate change problem differs individually and socially. Moreover, as can be seen, the people and societies most affected by this phenomenon's consequences are also less responsible for climate change (Eckstein, Künzel, Schäfer, & Wings, 2019). Climate change creates vulnerability over populations that have already been burdened by historic and excessive pollution, scarcity, political ineffectiveness, and unequal access to health and quality of care (IPCC, 2014b). At this point, climate change issues create another justice discourse based on environmental problems around the world. A new mobilization occurred in the United States; after that, it expanded across the world. (Schlosberg & Bomberg, 2008). It focuses on the environment, and it defines the environment as 'everything.' In environmental justice, everything means where we live, work, play, worship, and go to school; it also includes the physical and natural world. This relatively new national movement is called the environmental justice movement. Environmental justice (EJ) is a significant movement and organization discourse in the environmental politics platform; it also is a focal point of many disciplines, and it has expanded over time in terms of its concept and scope (Schlosberg & Collins, 2014).

As Environmental Protection Agency (EPA) states, EJ is the fair treatment of individuals worldwide, regardless of nationality, color, race, or income, during the process of development and implementation of environmental laws (EPA, n.d.). Robert D. Bullard has a similar definition to EPA. According to him, EJ is about the principle that all individuals and societies are allowed equal protection for environmental and also for public health laws and regulations (Bullard, 1983). Gordon Mitchell defines EJ as an affair about the fair distribution amongst social groups of environmental quality (Mitchell, 2018). Moreover, David Schlosberg argues that even if there are attempts to define environmental justice by numerous academics in environment politics theory, they are incomplete

theoretically because most of them focus solely on the distribution of goods to understand justice. They are also insufficient in practice since they do not include integrated demands and expressions of the essential movements for EJ globally. He expresses that defining environmental justice needs a more comprehensive approach in terms of given movement demands. According to him, EJ is not only about the existence of inequity in the distribution of environmental bads, but the concept is also about a lack of recognition and participation problems in the political process (Schlosberg D. , 2004).

The first studies on EJ emphasized mostly the inequality in the distribution of environmental bads. The concept was used to indicate that some individuals and societies face more risk than others. Specifically, in the first studies conducted in the United States of America, being more at risk than others were linked to racial and class distinction. Therefore, while problems stemming from environmental injustice constituted another example of social injustice, equality was the keyword of environmental injustice (Schlosberg & Bomberg, 2008). However, advances in theory and practice over time showed that the problem of injustice had not arisen solely from the unequal distribution of risk-sharing. Especially development in the last 20 years, the concept of EJ and its movement have expanded considerably; the expansion has occurred in different ways. Those occurred in defining the environment, the pluralist approach about the justice issues of environmental justice, and the varied reasons to produce environmental injustice. Also, the concept has expanded both thematically and geographically (Schlosberg D. , 2013).

Firstly, in EJ, while the concept of environment was considered a wild nature in the early periods, the concept's dimension has changed over time. The environment has started to be described as the place where we live, play, and work (Schlosberg & Collins, 2014). Although the dimension of the concept was adequately addressed by the environmental communities in the United States for a certain time, advocates of EJ insisted on paying attention to this aspect of the concept for a long time (Schlosberg & Bomberg, 2008). This expansion in the environment's concept does not mean that wild nature and extinct creatures are ignored. Especially from the very beginning, the environmental justice

movement is based on the point of view of indigenous people. It attaches importance to the interaction between human and non-human nature, and culture affirms the holiness of Mother Earth, the ecological unity, and the interdependence of all species (Schlosberg D. , 2004). Moreover, Julian Agyeman carried out studies focusing on policies and practices based on the everyday environment and the much wider natural environment. In the study, he combined the concepts of environment and justice with the concept of sustainability, and he also discussed the concept of environmentally fair and green cities, climate change, energy, and sustainable materialism (Agyeman, 2013).

Secondly, according to Schlosberg, the concept of justice in EJ requires a more pluralistic approach. The emerging justice movements show that it is necessary to go beyond the traditionalist idea of distribution, which is the focal point of most of the justice theories, to understand environmental movements. Even if the many explanations of EJ refers to an equity or the distribution of environmental ills and benefits, it is not enough to comprehend because activities, communities, and non-governmental organizations demand much more than only distribution (Schlosberg D. , 2013, pp. 37-42). As Schlosberg expresses, he does not try to replace the distribution paradigm with a new paradigm; on the contrary, he says that distribution, recognition, capabilities, and participation are connected. These all enable us the comprehensive perspectives to understand the essential justice problems claimed by environmental justice movements (Schlosberg D. , 2004).

Thirdly, another expansion has occurred in the analysis of the underlying causes of injustice. As an explanatory reason, environmental injustice initially focused on racism. What is important here was why minority communities were among the first to be affected, unlike others (Schlosberg D. , 2013, pp. 35-40). According to Benjamin Chavis, head of the united church of Christ's Commission on Racial Justice, the fight for EJ was seen as a struggle toward environmental racism for pollution in Black, Hispanic, Indigenous areas (Holifield, 2001). Also, Getches and Pellow are focused more on racism, and they state that environmental movements should be limited among color communities (Schlosberg D. , 2013). Timmons Roberts and et al. expressed three more causal factors. First, the

reasons for the impoverishment of the affected population are due to the economic system. Second, the areas where social resistance is weak in order not to obstruct the development processes, and in this, poor and racial minority communities are an easy target by governments and businesspeople. Thirdly, another form of racism, colored communities are characterized by pollution. The three factors contribute to the inequality, misrecognition, and exclusion that communities and movements face (Mohai, Pellow, & Roberts, 2009).

Finally, as thematically and geographically, by increasing EJ effectiveness, it has become much more comprehensive in terms of subject and reached from a local level to a global level. Although the environmental justice movements first emerged in the United States by emphasizing the inequalities in the distribution of toxins and hazardous waste, these demands have moved far beyond the problem of inequality. The frame of EJ includes transportation, access to the countryside and green space, and land use, but also it encompasses smart development policy, water quality and distribution, energy development, and food justice (Schlosberg D. , 2013, pp. 40-42). Some researchers, such as Cole and Foster, further expand the scope of environmental justice by emphasizing the influence of other social movements that constitute EJ. According to them, civil rights and antitoxic movements, indigenous societies movements, labor movements, and traditionalist environmentalists are the various strands that make up the environmental justice movements. Faber and McCarthy added the solidarity movement and the social and economic justice movements to these movements. Schlosberg also thinks that immigrant rights groups and urban environmental movements, local foods, and food justice movements would be on the list (Schlosberg & Collins, 2014).

Moreover, although environmental justice movements appeared in the United States firstly, they spread rapidly and became a global level (Rootes C. , 2017). Therefore, it is no surprise that the thematic expansion coincides with the geographic expansion. In Canada, Russia, Japan, Latin America, and South Africa, Middle East, China, the environmental justice frame has been applied for years; for example, there are some EJ

issues and movements such as gold mining in Ghana, indigenous water rights in Australia, wind farm development in Wales, energy politics in Mexico, salmon farming in Canada, pesticide drift in California. As a result, environmental justice movements appearance almost every continent in the world because of very broad-based global issues such as food sovereignty, climate justice, global toxics trade, indigenous rights, and anti-neoliberalism (Schlosberg & Collins, 2014).

To sum up, EJ is a vital movement and mobilizing discourse in the environmental politics arena. It is the subject for many disciplines, from sociology to economy, and it has expanded over time in terms of its concept and scope (EPA, n.d.). Even if the first researches about EJ focuses mostly on the inequality in the distribution of environmental bads, EJ is also about a lack of recognition and participation problem in the political process. The concept of environmental justice and its movement have expanded considerably for two decades in different ways. While the definition of the environment has become more comprehensive to include both human nature and non-human nature, researchers have had the pluralist approach to environmental justice issues to understand comprehensively (Schlosberg D. , 2007). Moreover, the varied reasons that cause environmental injustice are started to discuss by scholars, and the concept has expanded both thematically and geographically simultaneously. The thematic expands from human rights, gender, race to transportation, green space, smart development policy, water quality and distribution, energy development, and food justice, not only at the local level but also globally (Schlosberg D. , Theorising environmental justice: the expanding sphere of a discourse, 2013).

1.6.1. History of Environmental Justice

Environmental justice (EJ) is a significant part of promoting and sustaining a clean and healthy environment for individuals and societies who have lived and worked around pollution sources. It is crucial to understand the background of environmental justice itself in terms of its history (Rootes C. , 1999, pp. 1-12). Some academics and activists think that

the beginning of the Environmental Justice Movement is the 1982 protests in Warren County. In fact, the fight against dumping highly toxic waste in a poor was the first significant action by civil rights and white campaigners in the 1960s because the majority African American community came together with civil rights supporters and black political managers and environmentalists. Since then, thousands of environmental movements have started to be seen at both local and global levels because of race discrimination, health, safety, land rights, and social and economic reasons (Schlosberg & Collins, 2014).

The history of the environmental justice movement may go back from the civil rights movement in the 1960s to the environmental movements in the 1960s and 1970s. Low-income communities of color started to fight for their civil rights since they were exposed to severe threats from hazardous wastes and toxic chemicals (White-Newsome, 2016). Some societies of color came together to oppose environmental threats before Warren County. For instance, Latino farmworkers led by Cesar Chavez struggled for rights in the workplace in the early 1960s. African American pupils took to Houston's streets in 1967 because they opposed a city trash dump in their community that cost the life of a child. Besides, in New York City, the residents of West Harlem fought unsuccessfully opposite a sewage treatment plant in their community in 1968 (Schlosberg & Collins, 2014).

It is important to note that Warren County is often seen as the start of an environmental justice movement because the conclusions of Warren County protests incited for the appearance of some scientific research. Moreover, the Warren County protests marked the first instance of an environmental protest which had widespread national attention. In 1982, North Carolina had declared a plan to transfer soil contaminated by PCBs to a landfill in Warren County. The plan was critical because Warren County was one of only a few counties with a majority black population in the state (Katz, 2012). The decision brought about a wave of protests. Protesters tried to block the PCB-laden trucks at the entrance for the landfill, and hundreds were arrested during six weeks of marches. Besides, local civil rights activists and residents like the NAACP and the United Church

of Christ soon came together with national groups for protesting the landfill. Even if the protests concluded unsuccessfully about stopping the PCB landfill, the effort of protesters enabled environmental racism to put on the map. The demonstrations soon launched the national environmental justice movement, and the landfill site was eventually detoxified. Today, the action is generally recognized as the genesis of the environmental justice movement and indicated a change in terms of the public thoughts about environmental issues (Schlosberg & Collins, 2014).

In the United States, the United Church of Christ Commission for Racial Justice published its study called *Toxic Wastes and Race* in 1987. The report was vital to comprehend environmental issues in the United States. According to the report, there is national concern about the problem of dangerous wastes. The concern has been centered mostly on the environmental and health impacts of toxic substances and other hazardous materials arising from managing hazardous waste treatment, storage, and disposal facilities. Also, attempts to address the problem have neglected mainly the particular concerns of African Americans, Hispanic Americans, Asian Americans, Islanders, and Native Americans. What is worse, racial and ethnic groups in American are far more likely to be unknowing sufferers of exposure to such materials. The report changed the world after it was declared in 1987. It created a generation of social science researchers that study the interaction among race, environment, and class (United Church of Christ Commission , 1987). It generated a list of academic books such as *Dumping in Dixie: Race, Class, and Environmental Quality* in 1990; at the same time, it highlighted African Americans' environmental activism in the South where the first modern civil rights movement occurred. As a result, the struggle against toxic wastes has turned into a multi-themed, multi-ethnic, and multi-regional movement in time (Schlosberg D. , 2013).

It is no coincide that the Commission for Racial Justice, managed by Reverend Benjamin Chavis, also was the force behind the First National People of Color Environmental Leadership Summit in 1991. The Summit was the most significant single development in the history of movements since it expanded the environmental justice

movement beyond its initial anti-toxics focus to cover concerns such as public well-being, worker protection, land use, transportation, housing, resource allocation, and social empowerment. Besides, it also confirmed that it is likely to create a multi-racial grassroots action around environmental and economic justice. In Washington, D.C., more than 650 grassroots and national leaders from around the world attended the four-day Summit. Representatives came together from all fifty states, Puerto Rico, Chile, Mexico, and the Marshall Islands. During the Summit, people shared their action plans, redefined the environmental movement, and improved plans for solving environmental problems that affect people of color both in the United States and around the world. Eventually, on October 27, 1991, Summit members affirmed 17 Principles of Environmental Justice (Lester, Allen, & Hill, 2001). The principles were used as a model for many government and non-governmental organizations (NGOs). For instance, the Principles were translated Spanish and Portuguese, and they were used and circulated by NGOs and environmental justice groups at the Earth Summit in Rio de Janeiro in 1992 (The Council on Foreign Relations, n.d.).

In 1992, researchers by scholars, activists, and policy analysts that joined a conference sponsored by Bunyan Bryan and Paul Mohai were brought together in *Race and the Incidence of Environmental Hazards: A Time for Discourse* (Bryan & Mohai, 1991). Also, many presenters from this historic meeting, which later became called the Michigan Coalition, urged the EPA to address environmental justice concerns sounded by low-income and people of color communities throughout the country. As a result of much provocation from environmental justice supporters, in July 1992, the U.S. Environmental Protection Agency (EPA) declared *Environmental Equity: Reducing Risks for All Communities*, one of the first EPA reports accept environmental inequalities by race and class (EPA, 1992). Ten years later, in 2002, the United Church of Christ Commission accommodated aid for the Second People of Color Environmental Leadership Summit in Washington, D.C. While 500 delegates came together in the Second Summit, over 1,400 people joined in the memorable event (Schlosberg & Collins, 2014).

According to Daniel R. Faber and Deborah McCarthy explain, the environmental justice movement is not only a merger between civil rights and environmental groups. It also encompasses the occupational health and safety movement, the indigenous land rights movement, the public health and safety movements, and various social and economic justice movements. For environmental justice, there is a world action about so many issues such as fossil fuel extraction, open cast mining, tree plantations, hydropower dams, extractive industries, waste disposal (Faber & McCarthy, 2003). As the study, 2743 cases have environmental justice characteristics and conflicts with mobilization strategies until today. Bottom-up movements for more sustainable and socially uses of the environment happen across the world by all income groups, and it testifies that there is an existence of various forms of environmentalism as hope for sustainability globally (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

To sum up, environmental justice history is essential to comprehend the reasons under movements. Even if many academics, activists, and researchers assume that the Environmental Justice Movement started with the 1982 protests in Warren County, the history of the environmental justice movement may go back from the civil rights movement in the 1960s to the environmental movements in the 1960s and 1970s. Initially, the fight for environmental justice movements appeared by civil rights and white campaigners in the 1960s against dumping highly toxic waste in areas where generally poor and vulnerable people lived (White-Newsome, 2016). However, Warren County is often seen as the start of an environmental justice movement because protests launched the problems into the center of scientific research. As a result, according to the result of research, there have been over 2700 cases based on environmental justice and conflicts with mobilization strategies from beginning to today around the world (Katz, 2012). These figures show that although the starting point of the environmental justice movement is in the United States, today, mobilizations arising from environmental injustice emerge in almost every part of the world both locally and globally. All income, race, gender, class groups have been involved in these mobilizations, along with the most vulnerable individuals and communities. Besides, the reasons for environmental movement mobilization arise not only because of

discrimination but also because of health, economic, social, cultural, and security concerns (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

1.7. Concluding Remarks

To conclude, the chapter aims are to explain what climate change is and are its effects. By including scientific explanations of the problem, it has been shown how it reflects the political field. As mentioned above, while countries such as the United States, Canada, China, European Countries, and Australia are most responsible for increasing greenhouse gas in the atmosphere, countries like Myanmar, Haiti, the Philippines, Pakistan, and Vietnam are among the countries most affected by climate change. The problem of climate change raises many injustice problems among societies at this point. One of them is the environmental justice issue based on social, economic, and health inequalities in terms of climate impacts among social categories such as gender, age, ethnicity, belief, ability, or class. Environmental Injustice situations do not seem over some individuals and communities in developing countries but also occur in developed countries. Therefore, to understand injustice affairs, the background of climate change is required to comprehend in terms of scientific and political.

CHAPTER 2

THE PROBLEM OF RECOGNISING DIFFIRENT SOCIAL IDENTITIES INVOLVED IN ENVIRONMENTAL JUSTICE MOVEMENTS

In the chapter, unlike traditional justice theorists, the concept of justice is taken from a broader perspective. According to traditional justice theorists, the causes of injustice are about distributing environmental diseases and benefits. However, the distribution approach is insufficient to explain the demands for justice of movements occurring worldwide. Thus, starting from David Schlosberg's pluralist approach, the aim is to explain the justice of environmental justice in an integrative manner within distribution, recognition, participation, and capacity approaches. In the chapter, after discussing the justice of environmental justice in terms of the recognition approach more comprehensively, the psychological effect of non-recognition and misrecognition on people will be emphasized by using the arguments of Charles Taylor and Axel Honneth. After that, from this point of psychological effect, individual and social identity definitions will be examined under Social Identity Theory. Besides, environmental justice issues will be discussed under a negative identity perception. In the end, defining the environmental defenders, the intergroup relations are taken in the environmental justice movements. The movements are examined under the psychological effects of non-recognition and misrecognition. Environmental movements are named environmental conflicts because in countries, according to social, economic, and political structures, environmental actions

often emerge in conflict. Here, the concept of conflict is not explained solely by the occurrence of force between groups; conflicts can occur without violence. Therefore, by defining the concept of conflict, it will be tried to demonstrate the linkage between recognition issues and negative social identity perception.

2.1. Arguments of Justice: Distribution, Recognition, Participation and Capabilities Approaches

Much attention has not been paid to what these social movements demand as justice, although there have been hundreds of environmental justice problems and movements worldwide. Well, what do the environmental justice movements try to mean by the concept of justice? Most studies on environmental justice explain that justice issues are about equality or the distribution of environmental diseases and benefits (Schlosberg D. , 2004, p. 38). According to David Schlosberg, most environmental justice theories that only focus on distribution or equity are inadequate in terms of given movement demands. It is likely to deeply understand global environmental justice when researchers approach justice issues locally grounded, theoretically broad, and plural. Based on the idea, the justice of environmental justice not only refers to inequality in distribution, but it is also about the recognition of communities and participation in the political processes that shape and control environmental policy. In addition to this triangular structure, the capability approach enriches the explanations of the demands of environmental movements. The idea is not about replacing the theory of distribution theory of justice with another theory, but to state that combining these different approaches requires a more in-depth analysis (2007, pp. 4-6).

For many years, the statements made by John Rawls have been at the center of justice studies, and many other studies have made explanations based on his theory. Distribution theory focuses on how goods are distributed in a society and the best principles for that distribution to be fair. In terms of environmental diseases, the unfair conditions that

poor communities, indigenous communities, and non-white communities face prove that one of the reasons for environmental injustice is the distribution. Justice is the issue of how we distribute various rights, goods, and freedoms and how we shape social and economic equality and inequality, so justice is the most fundamental structure of society. For instance, in the study of *A Theory of Justice*, Rawls explains justice. According to him, justice is a measure of how the distributive aspects of society's basic structure are to be assessed. Justice is an issue-based on the appropriate division of social advantages. Since the Rawls study, many people see justice as fairness, impartiality, and distribution models in political theory during about thirty-five years (Schlosberg D. , 2013).

Moreover, Brian Barry stands on that the concept of justice only is seen when some distributive affairs occur. In terms of Barry's argument, justice is based on rules that govern our distributional relationship. Also, while he stays impartial against different notions of the good life people have, he says that individuals should agree on distributive justice rules. Barry's justice theory line shows an impartial and proceduralist approach, so it is the most popular opinion of justice within the academy (Barry B. , 1995). Although the justice literature in political theory has expanded over the last decade, innovations in this area have rarely been applied to the environmental justice literature. Unlike liberal theorists, the demands of environmental movements, both globally and in the United States, demand a more comprehensive and pragmatic notion of justice even if the injustice in the distribution of environmental bads and goods is at the center of environmental justice matters. For example, while the issue of distribution paradigm is often present in the environmental movements in the United States, the problem of distribution is always linked to the issue of recognition (Schlosberg & Bomberg, 2008).

Researchers such as Iris Young, Nancy Fraser, and Axel Honneth argue that along with classical distribution theory, it should also be addressed in the processes that cause misdistribution. They emphasize the need for individual and social recognition as an essential element of achieving justice. The problem here is the psychological component of recognition and the status of those who are poor in the process of distribution. For these

theorists, one of the main shortcomings of liberal theories of justice is that they only tend to develop ideal and fair processes for distributing goods and interests (Schlosberg D. , 2007, pp. 15-20). According to Young, while distributive justice theories provide models and procedures for improving justice in distribution, they do not in-depth examine the social, cultural, symbolic, and institutional conditions underlying justice's problem. Also, she criticizes that these theories handle goods only as static, and she says that reducing social justice to just distributive injustice is a rather inadequate explanation. The advocates of recognition theory are influenced by the real world of political injustice, rather than the ideal world which the distributive theorists focus (Young, *Justice and the Politics of Difference*, 1990).

The problem is here that environmental justice activists often see themselves as outside the cultural mainstream because their identities are devalued. The injustice here is not only because of constraining people but also because of distributive injustice. As theorists such as Young, Fraser, Honneth, and Taylor claim, a lack of recognition is the central concern in social and political arenas. Lack of recognition can mostly appear in different forms, such as insulting, degradation, and devaluation at the personal level and the level of a community. These forms oppress individuals and communities in the political and cultural realms (Schlosberg D. , 2004). Young argues that one reason for injustice circumstances and unfair distribution is the lack of recognition of group differences. According to her argument, distributive injustice arises directly from institutional structures, social structures, and cultural beliefs. If distributive injustice stems from these structures, the practices, rules, and languages, social relations should be focal points of discussions in any justice examination. Young claims that there are social group differences. While some groups are privileged, some groups are oppressed. She says that group differences must be accepted to prevent oppression and to ensure social justice. Besides, she sees democratic and participatory decision-making processes as both an element and a condition of social justice (Young, 1990).

As Young argued, Fraser argues that we should examine the causes of inequality and how it arises. Central points in arguments of Fraser are that attention should be paid to both distribution and recognition. In terms of her argument, the concept of justice has a bivalent approach. While misdistribution and misrecognition are different forms of justice, the two are usually linked. According to her, culture is a crucial and justification factor but closely linked to economic inequality (Fraser, *Justice Interruptus: Critical Reflections on the 'Postsocialist' Condition*, 1997). Unlike Young and Fraser, advocates of the distribution paradigm have different responses to recognition theory. As many distribution theorists have explained, like David Miller and John Rawls, recognition is something else that can be distributed and is a prerequisite for entry into the distribution system. They also leave the distribution of recognition to the state, which they see as an impartial arbitrator (Schlosberg D. , 2007). Nevertheless, for Young, recognition is not just something to distribute. Recognition is a relationship and a social norm and is not simply an element to be distributed, such as education, food, or housing assistance (Young, 1990).

Along with demands for recognition and equal distribution, another focal point of demand for environmental justice is the construction of participatory decision-making institutions. Participatory justice is defined as the just and equitable institutional processes of a state. Environmental justice movements make demands on policy processes that encourage active community participation, institutionalize community participation, and recognize the diversity of individuals and communities. As theorists of the recognition approach claim, there is a relationship between respect and a lack of recognition. They claim a direct link between membership of individuals and the decline in participation in a broader community, including the political and institutional order. According to them, if we are not recognized, we do not participate. Also, if we do not participate, we cannot be recognized (Schlosberg D. , 2007, pp. 27-30). From this point of view, justice should focus on political processes, an element that creates conditions that undermine both the unfair distribution of social goods and social recognition (2004).

Often, environmental justice activists request a place at the table to be involved in decision-making processes. Here, advocates of environmental movements demand the right to make decisions and speak on their behalf. Such community-based demands for participation arise as a result of disenfranchisement or misrecognition. Communities demand a voice because of struggling with a range of political, structural, and cultural obstacles constructed by political oppression and lack of political access. Besides, activities simultaneously challenge institutionalized exclusion, social culture of misrecognition, and current distributional patterns (Fraser, 1997). Young is one of the primary people to realize this relationship between them. Young emphasizes institutions and the political process in the study of Justice and the Politics of Difference. While Young approaches justice as both distribution and recognition of difference, her central point is in decision-making structures. She advocates democratic procedures for the equal participation of everyone in the decision-making process (Young, 1990).

While many traditional theorists have offered support for the notion of procedural justice, there has been entirely are resistance to the argument for recognition as an element of justice. Some traditional justice theorists, such as Miller, use the assumptions of a procedural approach as another argument against recognition. Miller argues that respect and recognition are necessary preconditions to any theory of procedural justice (Miller D. , Social Justice and Environmental Goods, 1999). This sort of interpretation of procedural justice misses the point of those like Fraser, Honneth, and Young, who insist on a thoroughly integrated understanding of justice. Importantly, these theorists and others are beginning to note that the relationship between justice as equity and justice as recognition is played out in the procedural realm, as both hinder individuals and communities from participating (Schlosberg D. , 2007, p. 26).

While many traditional theorists, like Miller, show serious resistance to the recognition approach, they do not deny participatory approaches. They use the participatory approach discourse against the recognition approach. According to Miller, respect and recognition are the necessary preconditions of the participatory justice theory.

Miller's approach prevents him and other traditional theorists from adopting a fully integrated understanding of justice (Miller D. , 2003). Theorists such as Young, Honneth, and Fraser, focus on an integrated understanding, acknowledge that participatory processes influence just distribution and recognition processes. Consequently, while material distribution and recognition are precisely two key concepts of justice in the political sphere, participation in decision-making processes is essential for both distribution equality and political recognition (Schlosberg D. , 2004).

Finally, the capability approach developed by Amartya Sen and Martha Nussbaum is also used to explain the demands of the environmental justice movements. The capacity approach focuses on the capacities required for individuals to function adequately in their chosen lives. For them, the focus on environmental justice movements is not just the distribution of goods; the focus here is on how these distributed goods become functional by individuals and communities. The capacity approach attaches ethical importance to this operation and development and argues that injustice occurs at this point. Capabilities mean an individual's opportunities to do and to be what chooses in a given society. The focus of the approach is on individual agency, functioning, and well-being (Sen, 2009; Nussbaum, 2011). As Sen explains, the primary characteristic of well-being is the capacity to obtain valuable functioning. Functioning mean various doings and beings-like eating, reading, or seeing. The approach encompasses both the features and capabilities owned by individuals and their capacity to state and use those capabilities for a functioning life. For instance, while reading is a function, having an education is one of the capabilities (Sen, 2009).

To sum up, although the demands for environmental justice have increased recently, little attention has been paid to the exact meaning of justice that underlies the demands of environmental justice movements. The literature of justice in political theory has expanded over the past decade, but the innovations have not been applied much to the environmental justice movements (Schlosberg D. , 2004). While many of the understanding of environmental justice refers to equity issues or the distribution of environmental diseases and benefits, activists, communities, and non-governmental

organizations want much more from distribution. Therefore, the inequality of distribution is insufficient to understand the demands of environmental movements. According to Schlosberg, the demands for global environmental justice are threefold. Moreover, the capacity approach enables explanations of reasons to be further enriched. Rather than replacing the distribution theory with a new theory, theorists have begun to adopt a broader approach towards a link between the approaches to distribution, recognition, participation, and capacity to understand the demands of environmental justice movements (Schlosberg D. , 2007, p. 4).

2.2. Lack of Recognition

Considering the concepts of environmental justice that political theorists generate in the last 20 years, most of them explain injustice issues based on distribution problems. However, David Schlosberg's approach offers more pluralistic views on environmental justice problems. According to him, the aim is not to reject the theory of distribution; the goal is to take together the other conceptions of justice, such as recognition, participation, and capabilities, with the distributive justice theory and pay attention to linkages comprehensively for understanding environmental injustices. One of the fundamental problems of contemporary liberal justice theories is that they neglect the importance of recognition and do not care about the connection of recognition with participation and distribution (Schlosberg D. , 2007, pp. 16-20). The lack of recognition is one of the injustice problems in environmental justice; therefore, recognition is an element of justice, and it has linkage with distribution, participation, and capabilities. Therefore, the conception of recognition as an independent and significant justice component should be considered in more detail (2004).

Groups discuss the recognition issue at both the personal and community levels in terms of recognition for cultures, traditions, and ways of economic, social, and religious life. Misrecognition affairs are shown as both the cause and the effect. Firstly, it has a quality to leads to distributive inequality, devastated communities, and exclusion. Secondly, it can create the preconditions for misidentification, such as ongoing inequality

and exclusion. Therefore, there is much more to injustice than maldistribution when environmental issues are examined based on the real world of political injustice instead of an original position's imagination realm. A lack of recognition in the social and political realms is the central concern here. Insulting speeches and devaluation at both individual and cultural levels negatively affect individuals and communities oppressed in cultural and political fields. It is an injustice issue in terms of both harming people and causing distributive problems (2007, p. 4).

As Iris Young says, the focal question for injustice is why some people and communities get more than others. Part of the injustice affairs and the reason for unjust distribution arise from a lack of recognition of group differences. She claims that there are social group differences and that some groups are privileged. Therefore, she advocates explicit acceptance of these group differences in order to ensure social justice. Young focuses on how the current maldistribution gets produced rather than what the best model for distribution is. According to her, distributive injustice arises from social structures, institutional ties, and cultural values. Therefore, the study of justice in any society requires considering the structures, practices, norms, language, symbols, and rules that determine social relations. Also, justice in a society should emphasize eliminating the problem of repression, non-recognition, and misrecognition (Young, 1990).

Recognition has both sociocultural and political elements. Viewed from a political perspective, Fraser demands participatory equality of all affected parties to solve injustices based on both distribution and recognition (Fraser, 2000). Thus, Young and Fraser make attention to democratic decision-making procedures (Young, 2000; Fraser, 2000). In the social sphere, Dean's concept of accountability is beneficial. According to him, the problem that causes misrecognition is the process of building the status of those who are misrecognized. At this point, the understanding of justice goes beyond the state's borders and covers both the social and cultural space. For this reason, Dean insists, we need to reveal where accountability and responsibility lie both for the construction of problematic concepts and the reconstruction of those based on more specific recognition (Dean, 1996).

Activists who demand recognition in environmental justice movements see themselves as outside the cultural mainstream, which makes their identities devalue. Therefore, recognition is discussed in the movements both at the personal and community level since misrecognition is felt in both (Honneth, *The Struggle for Recognition: The Moral Grammar of Social Conflicts*, 1995). Communities demand the right to speak to a range of cultural, political, and structural situations produced by cultural degradation, political pressure, and lack of political access. What causes them to demand the speech right is their disenfranchisement as a result of mal or misrecognition. Therefore, environmental justice activists call for policy-making procedures to enable the support of all diversity as exists in a community. According to many environmental justice activists, policymaking consists of procedures that regulate public support, accept community knowledge, and use cross-cultural formats and exchanges (2001).

Moreover, the monocultural features of the growing global economy raise concerns in recognizing various identities. The neoliberal vision of globalization is a danger to the extinction of different cultures. For example, the demand for justice in indigenous movements is about their rights and democratic food security concerns. The focal point is the recognition and protection of different cultures' identities and economies. The globalization of the neoliberal economy leads to the fragmentation of cultural and social networks in local communities. It also has the effect of destroying the essence and meaning of local cultures. Thus, cultural recognition is a central concern in the indigenous's social and environmental justice movements. In terms of this view, globalization supplies advancement and growth by slaughtering the local cultural values, environmental attitudes, and sustainable lifestyles (Bretting & Prindeville, 1998).

Justice is not just a matter of distribution and recognition, but it also is about linking the political and social processes of both. Inequitable distribution, a lack of recognition, and limited participation all work to produce injustice. These various forms of injustice are made up of complex structures, so they all need to be addressed simultaneously. They are not opposing notions; neither are they contradictory or antithetical. Thus, improved

participatory mechanisms can help solve problems of justice distribution and non-recognition. It may not merely be said that environmental justice demands in political practice encompass issues of equity, recognition, and participation; Therefore, the movements can represent an integration of these various claims into a broad call for justice (Schlosberg D. , 2013).

To sum up, although many traditional distributive justice theorists do not accept recognition as a justice problem, in practices, the demands of environmental movements in the United States and around the world emphasize more than the problem of unfair distribution. Therefore, the conception of recognition is not only independent than other justice approaches; it is also a significant justice component that should be considered in more detail (Schlosberg D. , 2004). Also, it has a linkage with distribution, participation, and capabilities. A lack of recognition creates an injustice problem because of not being accepted group differences in society. Being non-recognized and misrecognized harm people and causes distributive issues in societies. As a result, the main point here is why some societies get more than other communities. Hence, it is essential to examine the structures, practices, norms, language, symbols, and rules that determine social relations for solving misrecognition and non-recognition matters (Honneth, 1995).

2.2.1 The Psychology Impacts of Recognition

While the debate continues about whether recognition should have an injustice element or not, Charles Taylor and Axel Honneth bring a different perspective to recognition theory. Taylor and Honneth are theorists who acknowledge that the lack of recognition or misrecognition is a matter of justice, and their studies deal with the impact of non-recognition on human psychology. Even if Honneth's discussion is more broadening than Taylor's about acceptance of difference, for Taylor and Honneth, recognition is a crucial element for psychology in terms of justice. The non-recognition and misrecognition injure an individuals' positive understanding of self-evaluation about themselves; therefore, recognition is an essential human need (Schlosberg D. , 2007).

According to Taylor, individuals' identities are formed by recognition or misrecognition; therefore, people or communities can face real harm or extremely distortion when they are under the circumstance of restricting or contemptible picture of themselves. In other words, lack of recognition or misrecognition can cause challenges over people and communities, and challenges can occur because of imprisoning someone in a false, distorted, and reduced mode of being. Taylor divides recognition into two groups. The first is the equal dignity of everyone, and the second is the politics of difference, in which everyone is known for their distinctiveness. According to him, individuals and groups should be recognized as being different from others. They have equal rights in terms of recognition because self-worth comes from the recognition given by others. As a result, recognition is not only a courtesy which people owe to show others; It is also an essential personal requirement (Taylor, 1994).

Whereas Taylor seems to want only some identities recognized, Honneth emphasizes accepting of differences more comprehensively. As Honneth states, individuals require reciprocal and intersubjective recognition because of their own human dignity and integrity. Furthermore, he discusses forms of disrespect in three different groups: the first is a bodily violation, the second is the denial of rights, and the last is the humiliation of the forms of life (Honneth, 1995). Honneth remains firmly attached to the psychological dimension of recognition. He draws attention to the psychological state of social and cultural humiliations that lead to misidentifications. According to him, three dimensions of disrespect have psychological effects on individuals. Therefore, recognition should protect individuals from physical dangers and provide complete freedom to all. Moreover, recognition should offer equal political rights to individuals and protect individuals from forms of humiliation (1992).

While he explains the second notion of disrespect as that a person is excluded from the possession of individual rights within a society structurally, the third form of disrespect covers the cultural and institutional concurrence in the denial of self-esteem. Honneth deals intensely with the importance of self-esteem in the political realm. Self-esteem originates

from recognition by not only individuals but also from cultures and states, according to his explanation. At that point, Honneth's explanations about recognition go far beyond a simple request for internal self-realization, even if he says that the experience of misrecognition is psychological (2001). Thus, as Fraser critiques, a structural and institutional analysis is a necessary part of the call for recognition (Fraser, 2000). As a result, Honneth argues that a focus on self-realization and the institutional limits is the demand at the core of existing social movement struggles (Honneth, 2001).

In short, Taylor and Honneth approach with a different perspective to recognition discourse. They mostly deal with the impact of non-recognition on human psychology (Schlosberg D. , 2004). People require reciprocal and intersubjective recognition because of their own human dignity and integrity. The lack of recognition and misrecognition can damage a person's positive understanding of self-evaluation about himself/herself. Thus, recognition is a fundamental human necessity. Self-esteem arises from identification by not only individuals but also from cultures and states (Holifield, 2001). They bring attention to the psychological state of social and cultural humiliations that drive misrecognition and says that self-realization and the institutional limits are the demand by social movements (Schlosberg D. , 2007).

2.3. The Definition of Identity

The concept of identity is one of the basic concepts that we encounter in all areas of life. While people and societies can make sense of themselves, their environment, and the world, thanks to this concept, the concept also has a feature that can lead to conflicts in human or social relations. While the first show the positive part of the idea, the second case reveals a negative meaning. The concept's negativity is significant for this study because the purpose of the study is to demonstrate how the identities are influential in the relations between human-human, society-human, society-society. Who are these? What is the factor that individualizes someone, defines someone, make someone different from others, makes somebody "this" and not just another? They are questions that people try to answer to make sense of their lives (Hogg M. , 2001, pp. 184 - 200). In this process, "identity" appears as

one of the essential concepts because identity is a matter of who I am, who we are, and who they are. Then, what is identity, and how is it defined?

Identity refers to the facts that differentiate an individual from others and emerges as a practical process. Even though identity is perceived as pieces of paper that we keep in our wallets among society, it is not that simple. People think that their identities are lost after they die. However, even if people die, they do not lose their identity in some cases; moreover, after someone dies, they may have new identities such as martyrdom and sainthood because of their death reasons. In other words, humanity does not have only identities, but all species, objects, and substances in the universe have identities. Their disappearance does not mean that their identity has disappeared. For this reason, identity is challenging to explain with just one branch of science. It requires a multidisciplinary effort. Research of disciplines such as psychology, sociology, sociopsychology, geography, history, political science, philosophy, anthropology, and economics is needed to define identity (Jenkins, 2004).

According to John Stuart Mill, society cannot exist without identities (Smits, 2004, pp. 298-324), and as Jenkins states that the human world cannot exist without identities (Jenkins, 2004). Identity does not remain fixed and can change frequently; it also makes us understand who we are and who others are. At this point, the concept offers us two critical criteria, "similarity and difference," which enable us to make comparisons between persons or things. According to the British scientist John Locke, identity, which is a state of cognition, remembering, and consciousness, has two closely related dimensions: personal and social. Humans are unique individuals. Moreover, they have an inner world that cannot be ignored, and they have individuality and subjectivity. For this reason, personal identity is related to how an individual perceives and defines the physical, mental and psychological characteristics that distinguish him from others. From this perspective, identity becomes an essential factor underlying and explaining individuals' goals, commitments, loyalties, activities, desires, emotions, and reactions (Nimbalkar, 2011, pp. 268-275).

Human life is essentially a social life. Social life is essentially a matter of cooperative behavior. Hence, human relationships consist of a series of interactions and arise from the people who make them up. However, the characteristics of those persons alone are not sufficient to explain the interactions (Hogg & Williams, 2000, pp. 81-97). System Theory, one of the critical theories in social psychology, has tried to clarify the subject that adds a different dimension to this situation. According to the assumptions of this theory, relationships are formed by individuals. These relations are systems connected with the outside world and have a holistic structure. Each system always influences each other. In other words, according to the theory, each system frequently affects each other. Each system is a part of other systems, affect it, and are affected by it. When we start from the assumptions, the human world is a collection of interactions. These interactions enable individuals to socialize, and they give people different social identities. In this case, the question arises, "What is social identity?" (Leys, 1982, pp. 332-349)

Social identity is an individual's membership in a group that is emotional and meaningful to him or her. People define and evaluate themselves based on their group, and they classify themselves. The classification enables individuals to identify themselves with the group they belong to, and social identities appear as a result of identification. Social classification is unlimited, and the existence of any person can be attributed to dozens of different identities (Ellemers, Spears, & Doosje, 2002, pp. 161-186). People emerge in different ways, and they prioritize different things. They are also classified and understood differently; they grow up in different religious, ethnic, cultural, political, and similar communities. Individuals can also have different identities simultaneously within gender, age, ethnic, professional groups, family, political party, social movement, non-governmental organizations. For example, somebody can be both a woman, a Jew, a nurse, and a mother and a democrat at the same time. These are all identities of that person in society (Howarth, 2002, pp. 145-162).

Then, which dimension does determine a person's identity? It arises from the mutual interaction of similarity and difference. The combination of individual identity and

social identity forms the "personal identity" or "basic identity" of people. According to Marilynn B. Brewer, there is a balance between personal and social identities. While individuals in personal identity feel different from others, social identity's focal point is participation and sharing. In this way, people consider themselves a group member or feel in front of a group (Brewer, 1993, pp. 150-164). Which of the personal or social identities will stand out is determined by the environment around individuals and their situations? According to Henry Tajfel, identity occurs based on intergroup relations, and society is where individuals and communities meet and mingle. Therefore, individuals can only be understood in the dialectic of their subjective and social aspects (Tajfel H. , 1997, pp. 1-39).

People have always needed someone else in line with their experiences and feelings. The need to be together has been the trigger of collective life. In other words, the individual's need to belong to the community has vital importance arising from the sense of community. A sense of belonging is a requirement for people to produce social elements such as values, norms, and identity. Belonging is a process of articulation, removal, or integration. Being belonged in a place or a group is a necessity of being human. The sense of belonging can be traced back to the first days of infancy; thus, it is stated as a basic need for people in the psychological field (Hogg & Williams, 2000). According to the theory of needs by Abraham Maslow, identity is one of the most critical needs of human beings. Depending on identity, individuals need status, loyalty, belonging, recognition, and being valuable (Healy, 2016, p. 313).

Moreover, Roy Baumeister and Mark Leary took the argument further. According to them, belonging is a universal, fundamental, powerful, and prevalent human motive; the sense of belonging provides people with a high degree of psychological satisfaction. Despite individual differences, each individual needs to build relationships with others, develop a sense of commitment in their relationships, and gain a reputation in others' eyes. Satisfying these needs is vital for individuals to adapt to social environments. Being loved, respected, noticed, and connected are essential elements for an individual's psychology—

the absence of belonging causes feelings of rejection, isolation, and alienation. As a result, the individual's mental health can be negatively affected and causes the individual to experience behavioral and adaptation problems. For instance, lack of belonging can lead to mental and physical illnesses such as anxiety, anger, depression, antisocial and destructive behavior, stress, and even suicide (Baumeister & Leary, 1995, pp. 497-529).

To sum up, the relationship between identity and belonging, identity is the difference that explains the individual's various belongings and distinguishes the individual from others. The function of identities is to reveal and classify similarities or differences (Jenkins, 2004). Identity is generally understood as a collective phenomenon; It means a fundamental similarity between members of a group or category. The similarity is expected to manifest itself through solidarity, common tendencies, or collective actions. The use of the term "identity" occurs mainly in the demands of social movements, as well as in the literature on gender, race, ethnicity, and nationalism (Smits, 2004). The critical point here is that individuals must be identified with a group or category in order for individuals to behave collectively (Tajfel H. , 1997).

2.4. From Social Comparison Theory to Social Identity Theory

People have a two-dimensional identity structure. One of them is individual identity and social identity. These identities have psychological effects on individuals as well as sociological and sociopsychological effects. People instinctively compare themselves with others in order to have positive self-confidence; therefore, social comparison is vital for human psychology (Turner J. , 1975). As stated by the American socio psychologist Leon Festinger, the results of social comparison can lead to individual-based conflicts (Festinger, 1954). Whereas Festinger's study focuses on individual-based conflicts, Muzaffar Sherif deals with the social dimension of conflicts based on the concept of interdependence in his research (Turner R. H., 1990, pp. 283-291). Henry Tajfel and John Turner have gone beyond social comparison, and they have addressed the causes of conflicts between social groups more broadly. They emphasize social comparison, focusing on social identities

under the Social Identity Theory in terms of conflicts among social groups (Yılmaz, 2006, pp. 26-44).

People tend to compare themselves with others. The main reason for them is to have a positive personality or self-confidence. In general, two results emerge at the end of the social comparison process. The first is that the person thinks he or she is superior to others in similar positions. The second is that the person feels inadequate when compared to people who have a similar life. While the first situation creates a positive sense of personality over people, the second situation may cause a negative personality feeling. Even worse, traumatic consequences can occur on humans in terms of self-confidence. Moreover, there are two possibilities of different actions when an individual feels a negative personality feeling. The first one is that the individual accepts the superiority of others, considering that they deserve it. The second - generally occurs in most individuals with a negative sense of personality - is that individuals feel jealous and exhibit an aggressive attitude towards the people he or she compares himself/herself. As a result, the situation emerges as the cause of most individual-based conflicts because the individuals often do not base their actions on objective reasons and irrationally perform their attitudes (Turner J. , 1975).

Festinger is the first to focus on the relationship between social comparisons and conflicts. According to him, the results of social comparison can emerge as causes of serious conflicts. His research mostly takes social comparison at the individual level because his effort is to understand and resolve conflicts between individuals (Festinger, 1954). A systematic study of social comparisons at the group level began in the 1960s by Tajfel and Turner in England. Those group-level researchers started to mature in the mid-1970s (Yılmaz, 2006). Individuals tend to belong to the group and perceive their group as superior to other groups since it motivates people to make a positive self-evaluation. People do this positive self-evaluation according to the level of identification with the groups to

which they belong. At this point, it is essential to comprehend social identities (Jenkins, 2004).

Sherif and his colleagues developed an intergroup approach focusing on prejudice, discrimination, and social conflicts in the early 1950s to understand the causes of conflicts. According to Sherif, social conflicts are a reflection of the qualities of social groups. Sherif touches upon the significance of the psychological differences between people's individual behaviors and their behaviors inside any group. Therefore, he contradicts the argument that social conflicts arise from the result of personal or interpersonal attitudes. His researches have provided the concept of interdependence to the intergroup relations literature. After that, the intergroup perspective was reintroduced by European Social Psychologists in the late 1960s and early 1970s (Turner R. H., 1990). Researchers such as Tajfel and John Turner in England and Serge Moscovici in France developed and spread the approach during that period. As a result of those developments, the foundations of the "Social Identity theory" were laid (McLeod, 2019).

Social Identity theory attempts to define the concept of social identity comprehensively and deals with identity processes. Social Identity Theory, developed by Henri Tajfel and John Turner in the mid-1970s, is a social psychology theory that deals with group membership, group processes, and intergroup relations. Social Identity theory is a somewhat different perspective and also an idea since it contains a set of interrelated propositions that are empirically testable. Tajfel, who lived in prison camps in France and Germany during World War II, had experienced group conflicts. After that, Tajfel discussed the consequences of large groups' psychological processes such as religious and racial groups on intergroup conflicts. Tajfel and Turner, with the support of Moscovici in Paris and their friends at the University of Bristol, developed Social Identity Theory in the mid-1970s. They emphasize the argument of Sherif and argue that intergroup relations should be understood. Also, they focus on the role of individual needs and values in the organization of perception (McLeod, 2019).

Tajfel and Turner investigated what changes occurred in the individuals' personal identities and motives, judgments, and perceptions when they were members of a particular group. According to the theory, people's self-perception changes within the group (Tajfel & Turner, 2004). Membership of individuals to any community causes personal identity to be replaced by social identity; thus, people do not act individually; they often behave as members of a particular social community. The circumstance enables people to define their own and others' places within any social structure. People derive their self-definitions with the awareness of their membership in important social classes. As a result, the question of Who Am I is replaced by the question Who Are We (Tajfel H. , 1997).

In short, people tend to compare themselves with others. The main reason for them is to have a positive personality or self-confidence. The social comparison produces either a positive sense of personality over people or a negative personality feeling. According to Festinger, social comparison is essential to understand conflicts between individuals because social comparison can lead to conflicts in terms of negative personality feelings (Festinger, 1954). Moreover, Sherif focuses on the social dimension of conflicts based on interdependence in his research (Turner R. H., 1990). Turner and Tajfel take earlier research further and explain the conflicts between groups with the problem of social identity in the mid-1970s. The theory of Social Identity defines social identities comprehensively and deals with identity processes (McLeod, 2019). It is a social psychology theory that deals with group membership, group processes, and intergroup connections. Social Identity Theory is based on five main concepts intertwined: social identity, social classification, social comparison, smallest group paradigm, and social structure (Yılmaz, 2006).

2.4.1. Social Identity and Social Classification

Social identity theory focuses on the social identities of an individual instead of personal identity. According to Tajfel, Social identity is the knowledge of an individual's membership in a social group that is emotional and meaningful to him/her. The social group here refers to two or more people who perceive themselves as members of the same social class or share the same social identity (Tajfel H. , 1997). Turner and Tajfel claim that social identity is entirely different from a personal identity that arises from personality features and the individual's special relationship with others; self-concept is a part of a group membership (Tajfel & Turner, 2004). According to Turner, who particularly emphasizes the connection between social identity and self-concept, an individual's self-concept and self-esteem are anchored in his / her social class membership. Also, Turner emphasizes social classification for identities. Social classification is the process of separating objects or people into groups or classes based on specific common attributes (Turner J. , 1975).

The theory takes the concept of the group quite different from traditional definitions. The main reason for the difference is the emphasis on the psychological determinants of a group membership. According to the theory, group membership is based on psychological foundations, including acting together and belonging; it also has perceptual and cognitive foundations. The need for positive self-esteem is the basic human need (Tajfel H. , 1997). Social identity is responsible for fulfilling the need under certain circumstances, especially when social identity becomes evident (Tajfel & Turner, 2004). With these basic views, Turner has developed "Self-Classification Theory" as a new step. According to Turner, people can classify themselves in many dimensions as well as others. However, although the classification dimensions can be expressed in an unlimited number of categories, there are three most crucial classification dimensions of identity as

comparison categories: humanity dimension, inner-outer group dimension, and the self-dimension that separates someone from others in a group (Gagnon & Bourhis, 1996).

According to the theory, social classification helps to understand the social environment and guides human behavior, especially intergroup behavior. Then, why do individuals classify the social world? (Turner T. , 2010, pp. 243–272) The social identity theorists express, the classification process is individuals' desire to evaluate themselves positively. Self-classification leads to self-stereotyping. People stereotype others, particularly members of other groups, by overgeneralizing, considering their particular characteristics. Just as people stereotype other people in society, they also make stereotypes of themselves basing on the group identity after becoming a member of a new social group (Social Psychology of Intergroup Relations, 1997). Individuals structure their perceptions about themselves and others based on social classes; then, they add the classes to their self-concepts, that is, internalize them. Cognitive processes related to these structures generate group behavior. In the next stage, individuals tend to start organizing their relationships with other people and communities according to their membership in social groups such as religion, language, race, and gender (Tajfel & Turner, 2004).

Moreover, it attaches importance to the classification process, and this is due to the consequences the process has created. The social classification has two consequences. The first is that the individual realizes the internal-external group separation after classifying. People often tend to favor their groups while making this distinction. Thus, individuals to produce positive, firm, and permanent stereotypes about their group. Unlike their own groups, people are prone to perceive negative outgroups and produce strict stereotypes towards these groups. The negative approach, combined with a feeling of hostility towards outgroups, can also lead to intergroup conflicts (Yilmaz, 2006). However, the rigid stereotypes against the outer group mentioned above may not always appear in individuals. Whether or not the individual shows this attitude depends on the level of identification with

the group. If the identification is not very strong, the individual may not exhibit a negative attitude towards the outer group (Turner T. , 2010).

To sum up, social identity is the understanding of a person's membership in a social group that is emotional and significant to him/her. Social identity theorists express that social identity is dissimilar from a personal identity that rises from personality features and the individual's special relationship with other peoples; self-concept is a primary component for group membership (Tajfel & Turner, 2004). Turner highlights social classification for identities. According to him, social classification is the process of dividing objects or people into societies or classes based on particular shared attributes. Social classification is critical for understanding the social environment and manages human behavior, particularly intergroup behavior (Turner J. , 1975). Turner and Tajfel state that the classification process is somebody's request to assess themselves confidently (Tajfel & Turner, 2004).

2.4.2. Social Comparison

All the information that individuals and societies have, including the physical world, has been acquired through social comparison. Individuals get to know themselves and gain confidence in their beliefs' validity and applicability. People are motivated to engage in a social comparison process to be sure about their perception towards others and the world. According to Festinger, people instinctively make comparisons with other people to understand their own abilities and possessions. As a result of the comparison, the task of increasing self-esteem is attributed to people's social identities (Festinger, 1954). The classification process derives a social identity from membership in a meaningful group for the individual. People compare their groups with others that are at equal or slightly superior, with the effect of their tendency towards a positive social identity (Hogg & Williams, 2000).

When people perform this social comparison to acquire a positive social identity and increase their self-esteem, they tend to perceive their own groups by favoring and belittling the other group; the process is called in-group favoritism. The in-group favoritism is demonstrated by the findings obtained as a result of the minimal group paradigm. The minimal group paradigm by Tajfel is a social psychology research methodology that proposes that the minimal condition for group biases that occur as favoritism towards people's own groups and prejudice towards other groups is because of being a member of a group (Tajfel H. , 1997). For instance, in the research, participants are classified as A and B groups for arbitral reasons regarding shirt type or color choice. After being divided into groups, they will display favoritism to their group members and prejudice towards other group members. There are no needs to be any ideological reason, interests, or personal factors in-group biases. For biases to occur, it is enough to be a group member. Moreover, social classification causes individuals to perceive, in other words, exaggerate the similarities within their own groups and the differences between their groups and other groups (Yılmaz, 2006).

Individuals classify themselves as an in-group member and another person as an outgroup member and perform social encounters. At this point, they perceive intergroup differences as greater than it is. In this comparison, in-group favoritism will be realized; the in-group will be perceived more positively, and positive discrimination will be attributed to the in-group. The situation will result in a positive social identity in the individual, and self-esteem will increase by realizing positive self-evaluation (Turner J. , 1975). However, after the comparison, individuals may also conclude that their group is inadequate and unsuccessful than other group identities. The result may cause negative social identity perception in individuals and negatively affect the person's self-evaluation process. Due to the negative sense of social identity, the individual may show a negative attitude towards outgroups in some circumstances and start to exhibit aggressive behaviors beyond the negative attitude. Antagonistic attitudes among communities pose a significant danger for ensuring public peace since the collective negative perception of in-group

members may lead them to aggressive actions on a mass extent. Even worse, intergroup conflicts can go beyond other states' boundaries and turn into inter-communal battles worldwide (Yılmaz, 2006).

To sum up, people obtain information about the world through social comparison, and they gain confidence in their beliefs' validity and applicability. Social comparison is an instinct quality of humanity; therefore, individuals compare their groups with equal or slightly superior outgroups for getting a positive social identity (Turner J. , 1975). The social comparison may not always result positively, and individuals may have a negative perception of social identity due to the failure and inadequacy of their groups. The situation may cause inner group members to display conflicting behaviors towards outer group members. However, as stated before, negative social identity perception may not always create an antagonistic attitude in individuals and groups. If people do not have an excessive dependence on their social groups, the negativity perception may not cause offensive behavior. At this point, the Social Structure feature that affects the individual's commitment to his group is essential (Turner T. , 2010).

2.4.3. Social Structure

Social Identity theory sees social identity as the mediator of the mutual relationship between society and the individual, and it makes relevant explanations about the structures of social groups. Thus, it contributes to understanding group relations with large samples crucially. Society consists of relationships of power, position, and dignity between large-scale social classes based on race, gender, ethnicity, language, economic status, and profession. The large sample groups can distinguish positively from other groups in terms of good position, power, and dignity in society; In this case, these groups give their members a positive social identity (Tajfel & Turner, 2004). However, suppose the positions of the groups in society are not satisfying and not successful enough. In that case, the societies give their members a feeling of inadequacy and create a negative social identity

among the group members. In the condition, individuals with a negative sense of social identity may react differently (Turner H. , 1991).

People tend to gain a positive social identity by perceiving their group as superior to other groups through ingroup nepotism. Nevertheless, under some circumstances, it is unlikely that individuals will acquire a positive social identity from group membership through favoritism when the advantage of some groups over other groups is obvious (Yılmaz, 2006). According to Tajfel, in such a situation, individuals may react differently to negative identity formation. Firstly, while individuals are members of a group, they may also seek new groups that can bring positive contributions to their social identity. Secondly, members can leave the social community. However, individuals may not be able to leave their group for some reason. They may be due to objective reasons; it may also be because the group's values are intertwined with members' sense of self. Finally, if separation from groups is not possible, members can take three different actions. The first one is that they may try to admit that their group is inadequate and unsuccessful; the second is to try to produce an acceptable new interpretation. The third is to take action to change what makes their group inadequate and unsuccessful (Tajfel H. , 1997).

Individuals searching for a positive social identity prefer to belong to a group with a higher position than their group if their group prevents them from achieving their goals. Members in any low social position groups will try to combat their victimization by resisting membership in that group. If intergroup comparisons lead to the formation of an unsatisfactory social self, individuals avoid identifying with their group. As a result, social identity is not inevitable; it contains an element of "choice" for identification to occur (Turner T. , 2010). However, although social identity is not inevitable, it is challenging to say that some social identity groups based on ethnicity, religion, and race are easily changeable. Even if these types of identity are not satisfactory as a result of social comparison, they cannot be quickly abandoned by individuals because such identities are given to the individual before they are born, through family or social ties. Thus, it can be

difficult for people to separate from the social identity groups they have from the moment of birth. For this reason, people often tend not to accept the negative perception of these identities and take actions to change the perception. The situation reveals the relationship between identities and conflicts (Jenkins, 2004).

Is it the psychological characteristics of individuals or external factors that determine the perception of negativity towards social groups? Although the psychological behaviors that individuals adopt due to their own experiences affect, external factors are more critical in surrounding social identities with negative features. In societies where there is a power imbalance between groups, some communities are more dominant and powerful than other groups (Turner J. , 1975). The dominant groups classify other weak groups as a minority, subaltern, and sub-status groups because of their power in society, and they produce stereotypes for these classes: "Blacks," "Whites," "Indians," "Jews," "Armenians" and so on. Stereotypes make all group members the same and isolate people in their individual qualities, making them members of a stigmatized group. Often, dominant communities in any society make subgroups stereotypes based on the worst member's characteristics in the subgroup. These communities also cause minority groups to lose their positive characteristics among other groups (Jenkins, 2004).

Moreover, the kind of stigma often brings about minority groups to face discrimination, and they often endeavor to take steps to give discrimination a status by embracing this stigma. However, these steps often result in conflicts that communities have much both material and moral losses (Hopkins, 2015). For example, those who oppose their position and demand equality, such as black movements, carried out political movements. As a result, humanity has been classified, such as male-female-homosexual, white-yellow-black, Armenian-Turkish-Arab-Russian, Jewish-Muslim-Christian; all of stereotypes surround these categories. Because of the world's globalization and the incredible development of technology and communication, the demands of social identities for equality, justice, and freedom have reached a more mass level through social

movements. Although international efforts on human rights can provide social peace in some parts of the world, in some societies, these efforts have the opposite effect and turn into inter-communal conflicts that cause losses socially, politically and economically, and even loss of life (Jenkins, 2004).

Consequently, social Identity theory examines social structure. Society arises from relations of authority, status, and honor among social classes based on race, gender, ethnicity, language, economic status, and profession (Turner J. , 1975). The social structures of the social groups give their members a sense of positive and negative identity. Suppose the power of any social group is not satisfying and not successful enough for members. In that case, the groups give their members a perception of inadequacy and produce a negative social identity over the members. In the condition, members with a negative feeling of social identity may act differently. Social identities are not considered as inevitable, but it is challenging to state that some group identities based on ethnicity, belief, and race are easily alterable. Even if the group members have a negative perception, they may not leave their communities because the level of belongingness is high (Turner H. , 1991). They usually take joint action to eliminate the obstacles that cause negativity. While doing this, they often have a hostile attitude towards the outer group as they have an inner group and outer group perception. Therefore, antagonistic attitudes and behaviors can cause social movements to turn into violent social conflicts that may cause life loss (Turner T. , 2010).

2.5. Environmental Defenders

According to The United Nations (UN) Human Rights Council, environmental defenders play a vital role in environmental protection and sustainability. Even if the legal verification of the role of environmental defenders for sustainability is new, the earlier research has proved positive social and ecological successes of civil society groups and grassroots movements to form the politics and practices of resource management. Environmental defenders can be individuals and collectives to defend the environment and

protest inequitable and unsustainable resource usage in terms of social and biological causes (UNEP, 2020). As the EJAtlas explains, there are over 3100 environmental conflicts registered by April 2020, and many environmental defenders across the world have involved the actions. In these conflicts, many various reasons can be seen as clean water and air, access to fertile land, pollution, risks, and threats against health, livelihoods, social and cultural identities. Therefore, it is essential to where environmental conflicts occur, the features of involved environmental defenders, and how they mobilize environmental justice (EJAtlas).

The UN Environment Programme refers to environmental human rights defenders as

“someone who has defended environmental rights includes constitutional rights to a clean and healthy environment when the exercise of those rights is being threatened whether or not they self-identify as human rights defenders (UNEP, 2020).”

Thus, environmental defenders may cover fisherfolks, indigenous people, peasants, women, or whose lives and livelihoods can be endangered by environmental variation or dispossession. They also include environmental activists, social movements, journalists, or any other who actively protect the environment because devastation has reached unacceptable levels. During protests and mobilization against the exploitation of nature, even though defender's actions are not always formed as such, they generally mobilize for a larger purpose of environmental protection. Hence, environmental conflicts can be comprehensively described as social conflicts associated with the environment. While they can differ, environmental conflicts can sometimes overlap with other sorts of conflicts based on gender, status, territory, or identity (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

According to political ecologists, deficiency or abundance of resources is dependent on social constructs. Social constructions relate to human desires, needs and practices, and the conditions, means, and productive forces. For political ecologists, the alteration from nature in a resource has been a historical process of social construction. The research of environmental conflicts requires to focus on who has the authority to determine in terms of controlling and allocating environmental benefits and burdens such as issues of distribution, access rights, and the division of labor (Loftus, 2019, pp. 172-182). Unlike economic distribution conflicts, ecological conflicts do not occur from economic losses and benefits or are associated with profits, salaries, or prices between sellers and buyers over commodities. They are conflicts based on environmental advantages (such as clean water and air, access to fertile land) and bads (such as exposure to pollution) and risks and threats to health, livelihoods, social and cultural identities (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

Scientists have examined environmental conflicts in addressing the causes based upon the actors and their motivations, the forms of mobilization, the consequences, and their various influences within complex circumstances. An accepted thought is that environmental conflicts are mainly because of poverty or resource inadequacies, which can emerge demand-induced, supply-induced, or structural. Moreover, the fundamental actors in environmental conflicts are these that protect the environment from negative social or ecological influences. They are fundamental because their lives and livelihoods depend on healthy ecosystems. In these conflicts, the occurrence and severity of conflicts can escalate when resources have been getting scarcer. If resources are abused, wasted, or degenerated to a particular threshold, environmental conflicts may intensify (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

Even though environmental defenders are often covered by vulnerable groups, who frequently perform in collectives and employ largely non-violent protest forms, protesters

face significantly higher violence rates when indigenous people are involved in such mobilizations (Grant & Billon, 2019). In 2743 environmental justice conflicts cases globally, defenders experience high criminalization rates in 20% of cases, physical violence in 18% of cases, and killings in 13% of cases; significantly, when indigenous people are involved in the killings rate significantly increase. The rate of yearly documented assassinations has generally progressed above the last fifteen years. For instance, as Global Witness reported, 164 environmental defenders were killed in 2018. Moreover, defenders are not the only subject of murder and physical force, but also, they are exposed to harsh environmental, wellness, and cultural influences (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

The assassination of environmental defenders is the highest and most visible expression of direct violence, but it is not the only one appearing in environmental conflicts. Different violence types emerge in environmental actions: structural violence, cultural violence, and slow violence. Firstly, structural violence refers to a process that violence is rooted in political, social, and economic structures, building discrimination or social inequality. Secondly, cultural violence comes to mean to how cultural components such as language, religion, or ideology are employed to legitimize the previous forms of violence. Lastly, slow violence refers to every day and long-lasting violence. For example, societies are exposed to the increasing and heightening effects of the contamination process by extractive mining industries. As a result, Navas emphasizes a multidimensional approach to violence towards the research of environmental conflicts. However, even if there is a recognition for the multidimensional aspect, it is also challenging to track and assess environmental justice globally (Navas, Mingorría, & Aguilar-González, 2018).

To sum up, environmental defenders have a crucial role in environmental protection and sustainability. These actors have been named environmental defenders because they defend the environment and protest inequitable and unsustainable resource usage in terms of social and biological causes (UNEP, 2020). They can occur at the individual and

community scale. Until April 2020, over 3000 conflicts based on environmental have been recorded, and most of them are based on clean water and air, land use, pollution, health risks, social and cultural identities (EJAtlas). According to political ecologists, the change from nature into a resource has been a historical process of social construction. Even though environmental defenders frequently act in collectives and employ largely non-violent protest forms, demonstrators can face significantly higher force rates when indigenous people are attendant in such mobilizations (Loftus, 2019). Eventually, defenders are subject to criminalization, physical violence, and assassinations. Also, different violence forms appear in environmental conflicts. These are structural violence, cultural violence, and slow violence. Besides, activists can experience severe environmental, wellness, and cultural influences (Navas, Mingorría, & Aguilar-González, 2018).

2.6. Environmental Conflicts Based on Social Identities

According to Lewis A. Coser, conflict is a struggle between two or more people or groups for scarce resources, power, status, and values. According to Lee Manning, conflict is internal feelings or perceptions, either from competition over external resources such as status, land, power, interests, values, and beliefs. Also, conflicts differ according to the level of violence. The absence of violence does not automatically mean that there is no conflict. Efforts to obtain conflicting interests can be continued even without using violence. However, non-violent conflicts can immediately turn itself into violent conflicts, mostly when the elements of existence and identity are blocked, violating the fundamental rights and freedoms, suppressing identity and cultural rights, and the needs such as security, knowledge, and power (Yılmaz, 2006). Although the cause of many environmental movements today is environmental destruction and risks, identity groups of activists can determine the level of conflict of environmental movements because ignoring or misidentifying the identity of groups in society creates serious problems between groups. (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

Although the nature and dynamics of conflict differ across areas, the driving forces of conflictual relations are often similar. The driving forces are fundamentally formed by the perception that individuals or groups can be prevented by other people or groups while trying to realize their interests, needs, values, and desires. If this perception is intense enough, the perception turns into action and suppresses the other and tries to fulfill its demands, leading to tension between the parties and, consequently, to conflict. The conflicts often arise as political conflicts (Tajfel & Turner, 2004). The causes of political conflicts may not be limited to political factors. Environmental pollution, urbanization, and identity are also among the causes of political conflicts. Group motivation drives emotions for ethnic, religious, cultural, geographical, or class reasons and the group motivation can feed conflicts along with the destruction of the environment. The violence level of conflicts starts to increase when the parties abandon peaceful means or want to influence the party to achieve their interests or goals; especially, groups' physical, socio-emotional, cultural, pride and honor (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

The pressures against the desire to express identity can be seen in the form of cultural, political, and social restrictions on identity groups, as well as in the form of not recognizing or respecting certain religions, and even more in the form of insulting acts against these religious groups. Besides, the lack of recognition and use of ethnic languages hinders the desire to express identity (Defining Environmental Justice: Theories, Movements, and Nature, 2007). What makes the problem an element of conflict is the dominant groups in society that prevent minorities' desire to express identity. The reactions of minority groups to the suppression of dominant groups manifests itself in conflict. Suppressing or allowing the desire to express one's identity in society is closely related to the political system of communities. (Tajfel H. , 1997) For example, if states have a democratic political system based on the rule of law, freedom of expression, and free choice, disputes can be resolved before severe conflict levels. Unlike democratic governments, authoritarian, totalitarian, monarchic, or so-called democratic regimes can

easily carry identity problems to the extent of conflict because of their absence or weakness in preventing social mechanisms (Young, 2000).

Identity problems have had a significant impact on most environmental movements to date and continue. The fact that minority groups gathered around a particular social identity is more exposed to the effects of environmental destruction than others has become the motivation of many environmental movements (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019). For instance, in the case of Mt. Canatuan Gold Mine in Philippines, On October 23, 1996, TVI Resource Development Phil. Inc. was granted a mining permit to acquire a gold and silver mine (EJAtlas, 2015c). The mine area was problematic because Canatuan was the sacred place and altar of the Subanon indigenous people. The issues occurred because the mining permission was granted to the company without Free Prior Informed Consent (FPIC) by the affected communities; it means in non-compliance with the Indigenous People Rights Act (IPRA) of the Philippines. The government did not take action to preserve the Subanon case, and mining activities started in 2004. The mobilizing group consisted of artisanal miners, farmers, indigenous groups or traditional communities, ethnically/racially discriminated groups, Subanon (name of the indigenous group), and fishers (Borde & Rasch, 2018). Opponents who attempted to hinder the transport of mining tools to the mine were hit, and the company's security members fired on people, and they caused several persons injured (EJAtlas, 2015c).

Moreover, in the case of the Dakota Access Pipeline (DAPL) is part of the Bakken Pipeline Project (BPP), the project is A 1886 km underground oil pipeline to transport around 470,000 containers of raw oil a day from North Dakota to Illinois, where it will ship to refineries. The owner is the Energy Transfer Crude Oil, a Texas-based company, and is financed by more than 15 banks worldwide. In November 2016, the project was reported to be around 90% completed and was expected to be delivered by January 2017. The region closest to the Standing Rock Sioux reservation, Native American territories, is where the conflict is emerging. According to the arguments of the native tribes, the pipeline threatens

the Native American cultural sites and their water supply. Besides, it does not recognize the Treaty of Fort Laramie confirmed in 1868 in which United States recognize the Great Sioux Reservation. The proposal suit by the native societies was rejected in September 2016. Then, they filed an appeal, but it was refused again in October 2016 (EJAtlas, 2020b).

Native Americans organized spiritual and water security camps as a form of protest to obstruct the ongoing building pipeline, and people around the world supported them. During blockages and protests, over 750 people have been captured. Also, activists faced other violent methods such as pepper spray attacks, rubber bullets, sound cannons, and attacking with dogs (Wan, 2016). In DAPL, the lack of recognition and misrecognition caused the mobilization forms ranged from lawsuits and judicial activism to occupation of buildings and public spaces (EJAtlas, 2020b). However, it should be given point to that although the reasons such as identity, discrimination, and not being recognized are focused on explaining the environmental justice problems shown above, this is not enough to explain everything that causes the emergence of environmental justice movements. Social conflicts do not arise for just one or two reasons (Yılmaz, 2006).

As another example, in 2001, environmental justice issues appeared in Northeast Catalonia, Spain, because of the electrical highway project, and the project is under construction now. The project is an issue both in France and Spain. Therefore, while protests started in France in 2001, they arose in 2004 in Spain. In Catalonia, 63 municipalities denying the highway plan came together under the AMMAT association (Associació de Municipis contra la Molt Alta Tensió). Also, a public platform (No a la MAT) gained together defenders from different settings. Both groups started a surge of demonstrations from 2005. The first explanation of the project created profound concern because of environmental, healthy, and social-economic impacts. Moreover, identity issues were the focal point of environmental conflicts in terms of Catalonians (EJAtlas, 2014b).

In 2001, the electrical interconnection among Spain and France on the eastern part of the Pyrenees was established as an alliance between the two nations' management. According to the project, a high-power range of 400,000 Volts is proposed to link the French and Spanish electrical networks from Sentmenat to Baixàs. A portion of the line would go underground, mostly in France, and the rest would expect massive assistance towers heightened 60 meters. At that point, the problem was that the environmental impact of these towers would be huge. Loss of landscape, aesthetic degradation, biodiversity loss, global warming, deforestation, and vegetation loss were environmental impacts. Furthermore, while radiation was a potential health risk, an increase in corruption, co-optation of different actors, displacement, loss of livelihood, loss of sense of place were social-economic risks (EJAtlas, 2014b).

Moreover, the lack of recognition problem is in Catalonians. Catalonia is a semi-autonomous province in northeast Spain with a separate history going back approximately 1,000 years. The prosperous region has about 7.5 million population who have their own language, parliament, flag, and anthem. Besides, Catalonia also has its own police force and manages some of its public services (Rodon, 2012). The independence ambition of Catalonia causes Spain into its biggest political crisis for 40 years. Catalan nationalists have complained since their region transfers money very much to poorer areas of Spain in terms of taxes are controlled by Madrid. The Parliament of Spain resists not to accept† the independence of the Catalonian region; therefore, there is a recognition problem between Catalonians and the Madrid administration, and it continues today (Serrano & Bonillo, 2017).

So, why Catalonians have wanted to be independent for years? The first reason is cultural-nationalist motivation, which is deeply related to the political and historical. Catalans are culturally different from Spanians. They claim that the Catalan identity, which has a different language and culture, has been under the pressure and threat of the French and Spanish states for years. Therefore, they have defended their independence claims

based on cultural-nationalist motivation and have called for independence for years. The second reason is historical motivation. It means that Catalans, despite their geographical and cultural wealth, have been subjected to many restrictions within Spain. The restrictions have taken place in Catalans as a trauma. Thirdly, the reason is a political motivation. They oppose the ideology of the Spanish central government, the constitution, and the lack of democracy. Finally, it is an economic motivation, which may be the most important reason. As an economic power, Catalonia is a more prosperous region than many other countries in the Eurozone. Also, the unemployment rate and income inequality in Catalonia are much lower than in the rest of Spain. As a result, the government of Spain is dedicated not to recognize independence (Mortimer, 2017).

In the case of the electrical highway project, there was a broad awareness of solidarity and sympathy between the opponents, expressing in rallies, protests, and letters of application. As a first step, defenders sought advice from energy specialists to determine whether the 400 kV was really necessary for the purposes. A document was published in 2005, and it contained significant technical evidence against the high-power line. Opponents would invoke the evidence throughout their entire conflict. Many of the defenders were discussing both the current model of production and distribution of electricity and energy. The antagonist discourse consists of different dimensions: diversity on the energy model, on the notion of process, on the relationship between human beings and living environment; besides, hostile economic benefits and diverse ideas of democracy and political administration (EJAtlas, 2014b).

Although the advocates tried to continue the processes by legal means, the forms of mobilization continued by increasing violence. In this case, mobilization forms extended from official complaint letters and petitions, public campaigns, referendum, other local consultations, creation of alternative reports, development of a network to many direct actions to stop the construction; for instance, someone locked himself in any car that was buried in a place where an electrical tower had to be put. According to Environmental

Justice Atlas, the project is now under construction; the environmental justice efforts were not successful because societal energy needs never were debated genuinely. As a result, conflict outcomes were seen as the criminalization of activists, institutional changes, negotiation for an alternative solution, repression, strengthening of participation, and institutional changes (EJAtlas, 2014b).

To sum up, conflict refers to a challenge between two or more people or groups because of scarce resources, power, status, and values. It varies in terms of the level of violence. In particular, non-violent conflicts may instantly reach a severe level when problems occur from existence and identity elements (Yilmaz, 2006). Today, even if the cause of many environmental movements seems like environmental destruction and risks, defenders' identity features have the ability to determine the level of conflict of environmental movements because neglecting or misidentifying the group identities in society results in profound psychological influence between groups (Navas, Mingorría, & Aguilar-González, 2018). As a result, it is essential to emphasize that social conflicts that arise between individuals and groups are often multi-reason, so it needs to be explained with a comprehensive approach based on economic, structural, social, cultural, political, and health reasons at the same time (Yilmaz, 2006).

2.7. Concluding Remarks

The concept of justice is taken from a broader perspective based on David Schlosberg's pluralist approach. The examples of environmental justice movements are examined within distribution, recognition, participation, and capacity approaches regarding justice demands. The justice of environmental justice is discussed deeply, focusing on the recognition approach and the psychological influence of non-recognition. With the point of psychological impact, identity definitions at a different dimension as individual and social is reviewed under Social Identity theory. The aim is to enable a psychological approach as the underlying cause of environmental movements by using the arguments of Charles Taylor and Axel Honneth. According to these theorists, non-

recognition and misrecognition have a psychological effect on people in terms of self-esteem (Schlosberg D. , 2007). From this point of psychological effect, Social Identity Theory is settled in the center of the group dispute motivation in the environmental justice movements to discuss reasons comprehensively. Environmental defenders come together under the name of environmental movements and demand justice. Because of the social, political, and economic structures in different parts of the world, intergroup relations within environmental movements can range from peaceful forms to severe conflicts in which people are killed (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019). Therefore, the chapter gives same example cases to comprehend intergroup conflicts in environmental justice movements based on negative social identity perception. The absence of violence does not automatically mean that there is no conflict. Efforts to obtain conflicting interests can be continued even without using violence (Yılmaz, 2006). Therefore, conflicts are observed in environmental actions because defenders and other actors have conflicting interests in environmental bads or goods (Navas, Mingorría, & Aguilar-González, 2018).

CHAPTER 3

NEGATIVE IDENTITY PERCEPTION IN ENVIRONMENTAL JUSTICE CONFLICTS IN THE USA: NORTH-SOUTH CAROLINA, FLORIDA AND MICHIGAN CASES

In this chapter, environmental justice conflict qualities will be examined in terms of the type of conflict and population, the variations of mobilizing actors, and the forms of mobilization. Then, three different environmental justice conflict cases will be discussed. These cases are in North and South Caroline, Florida, and Michigan. By the comparative case method, the study aims to clarify what types of differences based on identities are there.

3.1. Features of Environmental Justice Conflicts

A new social movement emerged when discourses of injustice for non-white communities due to toxic waste in African American regions in the United States came together with environmental justice discourses in the 1980s (Katz, 2012). Although the center of the environmental movement is in the United States, over 3000 movements demand environmental justice worldwide to date (EJAtlas). Moreover, according to the researchers, there are many local-scale environmental movements that cannot be recorded. Environmental justice movements are an influential lens to make sense of the protection of human life and nature worldwide against the harmful effects of changing social metabolism. With the increase in the number of environmental justice movements across

the world, there are differences among movements in terms of the type of conflict and population, the variations of mobilizing actors, and the forms of mobilization (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019).

Firstly, environmental justice movements occur from various types of conflict and affect populations such as urban, semi-urban, and rural around the world. Movements not only appear from the reasons of nuclear, mineral ores, building materials, extraction, waste management, fossil fuels, but also, they arise from the affairs of biomass and land conflicts, tourism recreation, and industrial conflicts (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019, p. 4). One of the most well-known reasons for many environmental justice movements is fossil fuels, especially in the United States, Canada, Colombia, Peru, Brazil, Nigeria, South Africa, Egypt, India, China, Myanmar, Indonesia, and Japan. The other important reasons are mineral ones and building material extraction. There are many environmental justice problems and movements based on mineral ones and building material extraction in Mexico, Brazil, Peru, Chile, El Salvador, Ecuador, South Africa, Ghana, China, Indonesia, and the Philippines. Also, nuclear projects create widespread environmental justice movements around the world in some countries such as Niger, Japan, the United States, and European countries such as England, Spain, France, Portugal, and Austria (EJAtlas).

Moreover, the reasons that destruct the environment impact different types of populations. For instance, ten black sand mining companies operating in Cagayan in Luzon, Philippines, create an environmental justice movement because of large negative impacts on coastal communities and the environment. Therefore, the church and some organizations such as Concerned Laloeno Against Illegal Mining and Federation of Anti-Mining Advocates in Cagayan have opposed the project of ten companies since 2008. In the Cagayan case, mining operations are the main reason for mobilization since black sand mining in coastal areas results in coastal erosion, inundation of communities, and degradation of the marine ecosystem. In other words, the projects are about mineral ore exploration, wetlands, and coastal zone management, and building materials extraction.

Also, the impacts of companies' projects are mostly seen over the rural population (Guzman, 2014).

The other example is the issue of Hydraulic fracking in the Karoo, South Africa. Oil and Gas companies such as Shell, Bundu, Falcon, and Anglo have applied for licenses to explore shale gas by using the controversial method of horizontal hydraulic fracturing in the Greater Karo Basin. In this example, the reasons are about fossil fuel exploration and extraction, also is shale gas fracking. Also, the project's impact is seen over the semi-urban population type. Companies' demand has caused serious concern in the region because the exploration project creates severe threats to the quality of water and air, economic systems, human and animal health in the region. Thus, along with local farming communities and South African citizens in general, environmental justice organizations such as the Western Cape Wildlife and Environment Society, Earthlife Africa, Treasure the Karoo Action Group, and the Southern Cape Land Committee have come together counter this situation (EJAtlas, 2015a).

Secondly, some very different social actors mobilize in environmental justice movements. Local EJOs, citizens, farmers, social movements, indigenous groups, local government and political parties, local scientists and professionals, international EJOs, women, and fishermen play an essential role in the environmental justice mobilization to reach the goals. Besides, ethnically discriminated groups, landless peasants, trade unions, religious groups, industrial workers, informal workers, waste-pickers, and recyclers are parts of the environment's justice movements. As seen in the report of Environmental Justice Atlas (EJA) in 2015, in 1354 cases, local EJOs are one of the most mobilized groups. Moreover, the results reveal that indigenous and traditional communities and ethnically discriminated groups are involved in many environmental justice movements. These three different groups are involved in more than a third of cases documented with a large-scale variation (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019, pp. 4-5).

All these social actors and groups can come together to call for environmental justice around movements at the same time. Besides, one or some of them can also take a more prominent position in different environmental movements. For example, the environmental justice problem in Bhopal, India, is about industrial reasons and affects the urban population. Union Carbide India Limited (UCIL) and Dow Chemical Company (DCC) have risked thousands of people living in the region due to their chemical production processes since 1984. Over 150,000 gas victims are chronically ill, and more than 50,000 cannot work because they are so sick. What is worse, to date, more than 25,000 have died due to exposure to the poison gases because of the leak of methyl isocyanate (MIC) gas and other chemicals from the Union Carbide Corporation (UCC) pesticide plant. Indigenous groups or traditional communities, informal workers, local EJOs, local government/political parties' citizens, social movements, women, local scientists, and professionals have gathered to struggle with the environmental justice problem. Besides, international organizations such as Greenpeace, Amnesty International, Center for Constitutional Rights, and Earth Rights International have struggled for creating attention globally on Bhopal's environmental issues to solve the injustice (EJAtlas, 2014a).

The other example is dumpsite for byproducts of Shady Point coal-fired power plant operations in Bokoshe, Oklahoma, in the United States. In the Bokoshe case, environmental injustice's main reasons are landfills, toxic waste treatment, uncontrolled dump sites, and coal extraction and processing. Shady Point is a 350-megawatt plant that generates power for many places throughout the Midwestern United States. The byproduct of fired coal is a powdery material called coal combustion waste, or fly ash. All substances have been driven through inside of Bokoshe on 80 trucks a day to an unlined dumpsite since 2001. While other cities get the benefits of electricity produced from the Shady Point power plant, the people in Bokoshe suffer from the consequences such as loss of landscape, surface water pollution, decreasing water quality, air pollution, food insecurity. The mobilization for the issue is minimal, so its effects stay at the local scale. Citizens, social movements, and women's communities have fought against the injustice problem. Some organizations such as Prairie Rivers Network, Sierra Club, Western North Carolina

Alliance, Southern Alliance for Clean Energy, and Montana Environmental Information Center have gathered to solve the environmental problem in Bokoshe (EJAtlas, 2015b).

Finally, social actors and groups have various forms of mobilization for environmental justice issues. Social movement theory attempts to explain why social mobilization occurs, how it happens, how it manifests itself, and the consequences of mobilization. The theory focuses on how actors trust extensive protests options and various contention type to neutralize effective actors and reach their goals, extending from institutional means such as testimonies, campaigns, lobbying, and public hearings to direct action tactics such as boycotts, shaming, demonstrations, and protest. What determines actors' methods in different political contexts is explained by the political opportunity structures. According to Social Movement theorists, political opportunity structures increase and limit the instruments of collective action. Mobilizations for environmental injustice may be seen in very different forms. These forms range from a protest, blockades, boycotts of companies' products, strikes, land occupations, community-based participative research, creation of alternative reports to lawsuits, court cases, judicial activism, hunger strikes, and self-immolation (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019, pp. 3-7).

Environmental justice movements have gone through a long and challenging process to eliminate the cause of injustice. For this reason, it may require using of more than one different mobilization methods determined by political opportunity structures to solve the problems. For instance, since 2019, actors and groups have mobilized in many ways against sand and gravel mine issues in Santa Clara County, California. People have developed a network, marched on the street, shown media-based activism, and written official complaint letters (EJAtlas, 2020a). In Brazil, in the state of Rondônia, indigenous groups and the other groups have shown their reflection towards deforestation, mineral ore exploration, and logging operations. They have blockades, operated community-based participative research, created alternative reports, applied law process. They also have damaged properties and threaten to use arms because they have not given any successful

results from former methods since the 1980s. Hence, people and groups have been forced to resort to violent methods. As a result, the political structure in the region where injustice occurs is vital in ending the actions peacefully or turning into violent acts with many losses (EJAtlas, 2019).

In summary, environmental discourses that emerged in the United States in the 1980s due to toxic wastes were the beginning of the environmental justice movement (Schlosberg & Collins, 2014). Until today, discourses of environmental injustice have started to appear worldwide, and it has been recorded that there are over 3000 cases for environmental injustice reasons. These environmental movements vary according to the type of conflict and population, the type of actors involved in the mobilization, and the mobilization methods with the increasing number of environmental justice movements. The environmental justice movement is often local-based. Nonetheless, even though most of the recorded environmental movements are local, it cannot be denied that environmental justice is a global movement. The movement is global because local events belong to social actors and groups that regularly occur elsewhere. For instance, the companies causing the injustice are sometimes the same in even many countries because of the globalization of the neoliberal system. The forms of mobilization may be also parallel in different countries. Furthermore, national and international environmental justice organizations establish a robust global bond between individuals and communities. As a result, through the links and networks of movements, activities carry injustice to a global level (Martinez-Alier, Temper, Del Bene, & Scheidel, 2019, pp. 3-12).

3.2. Environmental Justice Issues Caused by Floods and Hurricanes in North and South Carolina

The effects of global warming occur with some changes in the water resources on the ground. These changes seriously affect human and non-human nature. The climate problem changes the natural water balance. Some consequences increase the frequency of

floods and hurricanes. The most affected by these severe weather problems are mostly non-white and low-income communities in the United States. One of the best examples is the racial and cultural imbalances in the consequences of climate change in the North and South Carolina states (Merrow, 2020). Environmental advocates who are uncomfortable with these inequalities and want to combat them have come together under the North Carolina Environmental Justice Network (NCEJN). These defenders' mission is to help people work together to solve environmental injustice problems that arise (North Carolina Environmental Justice Network , n.d.)

The aim is to empower vulnerable communities affected by these extreme weather events - particularly non-white and low-income communities. The other aim is to increase the local organizational power and make these societies reach a position to determine their destiny. Hence, it is one of the most serious attempts to ensure that they are on the table in the solution of political and economic inequality. Moreover, the NCEJ states that climate change spreads by deforestation, methane production, and carbon gas from animal husbandry and fossil fuels' continued use. They argue that such a production system must change for the planet to survive. The world is undergoing drastic change, increasing droughts, floods, storms, melting glaciers, and rising sea levels seriously affecting the region's rights. The water and food resources required for people to survive will continue to be affected more and more by such extreme weather events (NCEJN, n.d.)

These changes can cause many mass migrations in the region and even the destruction of some cities. Such city losses can trigger famine, epidemics, and war. As Earth's temperature rises, ocean temperatures will rise, melting polar glaciers, causing sea levels to rise. The rise can contribute to the frequency of storms and floods and increase their severity. Water-borne natural disasters such as hurricanes are beginning to be more severely affected by this change. The United States has begun to experience the effects of this change with extreme weather events. Floods, storms, and hurricanes continue to affect many states and towns; also, causing many losses of life, loss of property, and destruction of ecosystems (Merrow, 2020).

The worst, according to the NCEJN, is that these extreme weather events do not affect everyone in the society equally. Low-income communities, subject to racial and class segregation, are more vulnerable than high-income communities. In low-income communities, the elderly, people with chronic illnesses, and people with physical disabilities are particularly vulnerable. This injustice makes climate change a problem of environmental justice. Although poor people's impacts on climate change are less than rich people's due to lack of resources, the communities most affected by climate change are again low-income and minority groups like in North and South Carolina (NCEJN, n.d.).

The infrastructure established for floods in North and South Carolina is somewhat inadequate, and even low socio-economic neighborhoods are not available. In addition, every new flood problem this state suffers continues to cause higher-intensity poverty. The effects of floods are hitting colorful neighborhoods and underserved service areas with no public infrastructure. According to the federal flood insurance payments study by E&E News, floods in the US disproportionately harm black communities. (Mock, 2018). As the NCEJN argues, climate change poses an environmental justice issue because communities that face racial and class segregation are those that have the least control over material resources (NCEJN, n.d.).

For example, North and South Carolina may be the focus of environmental injustice issues with case numbers. Eight locations have long been vulnerable: Wilmington, Princeville, Royal Oak, Belews Creek, Warren County in North Carolina, Charleston, Spartanburg, and Geechee / Gullah Nation in South Carolina. Black communities in these places have struggled for years to have their fundamental rights to life. The urban communities here have not suffered from policy-driven violence and racism but also try to survive in the most vulnerable areas of the Carolina floodplains or areas filled with toxic pollution sources. Large industrial animal feeding operations in these regions, open-air lagoons where animal waste is collected, storage systems for coal ash waste, landfills, and

other large garbage disposal stations endanger the local people's lives. According to the research of CITYLAB, eight places that feel the severity of environmental disasters today and will feel in the future are under threat (Mock, 2018).

One of the points that the NCEJN criticizes is that the movements towards climate change mostly consist of white, privileged people who do not object to the process as long as they are not directly affected by fossil fuels. Most of these groups have remained silent throughout the past because colorful and low-income groups are affected by extreme weather events instead of them. Mainstream environmental communities did not support the survival efforts of communities living close to chemical factories, pipelines, and refineries; persons exposed to carcinogenic substances and avoided standing against excessive pollution in the air. Until now, thousands of people have faced the danger of many fossil fuels; Thus, many groups of white and privileged people are trying to support action against climate change. According to NCEJN, although this effort is significant; however, it is unlikely to be successful only if such supports involve privileged people. Movements that create significant change in societies show success when they come from bottom to top, not top to bottom (NCEJN, n.d.).

As Brenton Mock explains, Wilmington is one of the first cities to be hit by hurricanes that often occur along the Atlantic coast. Its environmental risks are further increased by proximity to pig farms, nuclear reactors, and coal ash ponds. Princeville is one of the first cities in the country chartered by African Americans. Due to its location on the Tar River banks, one of the deepest floodplains in the state, it has a feature that tries to defy numerous significant hurricanes and floods. For example, Hurricane Matthew reportedly caused the loss of 2,000 people to Princeville. What is more, after Hurricane Florence in 2016, residents explain that they have decided to leave. These events may have left places like Princeville more vulnerable to other upcoming extreme weather events (Mock, 2018).

The other eight locations are Royal Oak. Formerly enslaved African Americans found the royal oak here. Today it is perhaps one of the most vulnerable places in the state to extreme weather events because almost all waste facilities surround it. Also, what makes its position even more problematic is that the community that lives here is a non-legal community. Though located within the city of Supply, Brunswick County has consistently refused to provide water and sewerage services to the area, so the people of the Royal Oak, through the Civil Rights Center of the University of North Carolina, can have the power to sue. Given its proximity to Wilmington, it is highly vulnerable to the same dangers, such as floods, coal ash spills, and nuclear reactor discharges (Mock, 2018).

Belews Creek, another vulnerable place, is located further inland. It consists of a predominantly black and non-legal community. This area is currently the gathering base of pollution, as the state cannot adequately control coal ash pollution. Last December, a minority group living in this area filed a lawsuit against Duke Energy for dumping untreated coal ash into their dependent stream for drinking water. Environmental advocates here, Rev. They have tried to mobilize well-known activists such as William Barber and former Vice President Al Gore to the movement they have led. For Hurricane Florence, Duke Energy had to remove the flood gates to prevent an accident at the Belews Creek factory, but this has shown that hurricane consequences do not only affect the east coast of the state. Another area is Charleston, built by slave labor. Ever since the city was founded, African Americans have faced disastrous consequences from racial violence and government neglect. However, they were subjected to efforts by the government to displace these communities to make way for new luxury housing. While Hurricane Florence did not completely devastate Charleston, the city has been hit multiple times in the last few decades. Most recently, Hurricane Joaquin in 2015 caused several billion dollars in damage to Charleston (Mock, 2018).

Finally, the same problems occurred in the Geechee / Gullah Nation. The nation consists of an African population living in the Carolinas and Georgia barrier islands. Being

barrier islands means that when hurricanes occur, these groups are often at the forefront of disaster. However, they have proven their resilience by applying traditional African construction methods and planning toward extreme weather conditions. Perhaps the Geechee / Gullahs' most significant challenge is that the beach's luxury structures have been degraded in their lands, where they have lived for hundreds of years (Mock, 2018). According to the Building a Fair Climate Future for North Carolina report, like many states, systemic and historical inequalities in North Carolina stemming from the fragmentation of communities and the long exposure of low-income communities to pollution sources. Along with other unfair policies, the lives of colorful and minority communities cannot be recovered further by the effects of extreme weather, floods, heatwaves, and climate change that occur in this region (Allen, 2020).

The report also explains that the communities most affected by the changing climate in North Carolina do not have the necessary funding to restore their homes, schools, hospitals, and some community centers, in the aftermath of disasters and face too much difficulty to access these resources. As Cathleen Kelly said, environmental justice advocates in North Carolina who suffer from environmental racism also face a disproportionate mass of energy, an increasing threat to an increasingly heated world. In addition, advocates of environmental justice highlight the consequences of systemic discrimination and ecological injustice due to the police's excessive use of force and are factors that reinforce environmental injustice in situations such as poverty, economic instability, and pollution concentrations (Allen, 2020).

As a result, climate change effects are often most devastating in colorful communities, including more frequent floods and stronger storms. Most of those still trying to repair damage from hurricanes and floods are in a minority and low-income communities in North and South Carolina (Mock, 2018). Even though the NCEJN perceives negative social identity, it seeks to provide a broader analysis of environmental problems' political and economic roots to combat injustice rather than violent methods. As a result, these

communities, faced with extreme weather events, see themselves on the menu rather than at the table to decide their future since they are not socially and economically recognized in their residence area. One of the biggest causes of environmental injustice is that many businesses, government agencies, and other organizations in power positions have discriminatory practices and policies and support. It is the meaning of institutionalization of something, and the problems of injustice are institutionalized. As in our home's garden, environmental injustices can occur at the state, national, and international levels. Therefore, environmental injustice is a problem for everyone, not someone (NCEJN, n.d.).

3.3. Homestead Air Reserve Base Superfund Site, Florida, USA

Between 2017 and 2019, an unaccompanied minor's shelter was established in Homestead, south of Miami, and a few thousand immigrants were housed in Florida. However, there was a big problem here: The facility was located very close to the Homestead Air Reserve Base US Superfund site. The other problem was that the shelter was located very close to the Operating Units, which contained a wide variety of dangerous chemicals and toxins that seriously endanger the children's health living here. In 1942, the Homestead facility was first opened as the Air Reserve Base. In 1945, when Hurricane Andrew would seriously damage the area, the Base remained active. Shortly after the hurricane, ownership was transferred to Dade County and used for new commercial and industrial purposes. In 1953, the Air Force returned to the region and built military facilities (EPA, 2020).

For half a decade after the air force had returned to the area, their daily activities and projects created various wastes, such as waste dyes, paint thinners, pesticides, solvents, waste oils, waste gasoline, and hydraulic fluids. The important point here is that the Air Force has released these substances into the area and dropped dangerous chemicals and toxins on the land (Vazin & Pellow, 2019). Going even further, 5,500 gallons of Ethyl Ether were dumped into the area in 1984, one of which produced several leaks containing

PCBs (EPA, 2020). The EPA officially declared a Superfund site with the Operable Unit (OU) due to waste management issues. Over time, in the early 1990s, the Air Force was assigned to measure the area's toxicity and find solutions to the pollution they created. For the air force, this was a serious task as it often requires the excavation of contaminated soil and rocks to clear the area. These excavated areas need to be replaced with clean materials. This is still not a definitive solution, as it may affect the underlying sediment and groundwater (EPA, 2017)

In the studies conducted so far, 53 different metals such as toxins, pesticides, semi-volatile, and volatile organic compounds, volatile chlorinated compounds have been detected. The research results are not limited to this either; specific toxins themselves include but are not limited to chloroform, arsenic, antimony, benzene, bromodichloromethane, cadmium, barium, chromium (VI), ethylbenzene, lead, manganese, mercury, 2-methylnaphthalene, PCBs, cyanide, vanadium, arsenic and more (Vazin & Pellow, 2019). In addition to various health problems, these chemicals can cause kidney failure, hemolytic anemia, and developmental damage in adults and children (EPA, 2017).

The community of these chemical wastes is significant, and therefore caution is required. Homestead is placed on the southerly point of Florida. This region is characterized by intense hurricanes and tropical storms permanently destroyed. Rain, wind, floods, soil sediment, and gummed pollutants in groundwater from these storms can greatly increase the possibility of spreading to large areas (Iannelli, 2019). Therefore, although toxic wastes are thought to remain in the area where they are discharged, they have the ability to spread over time. In 1994, one-third of the Base was converted into Homestead Air Reserve Base, while the other two-thirds were reserved for other uses. Forty acres of the total land was transferred to the Ministry of Labor. The Ministry of Labor used this area for vocational training to accommodate approximately 500 students, and a Job Corps facility was built. Job Corps facility was opened between 1999 and 2015. In 2016, this

facility was redesigned as a custody center for migrant and refugee children. Although this facility was closed in 2017, it reopened in 2018 and was named Homestead Temporary Shelter for Unaccompanied Foreign Children (EJAtlas, 2017).

This shelter accommodated children aged 13-17 who had arrived in the United States alone or had arrived with their families and separated from them. Bed capacity varied between 2000-3000 beds as long as it served. The children detained here stayed for an average of 70 days (EJAtlas, 2017). This facility's operation was under the umbrella company of Caliburn International, Comprehensive Health Services Inc, as the shelter is within federal limits (Kates, 2019a). The problem with clearing the area is that the Base is designated as a Super Fund area. Although the area continues to be actively cleaned, standards for cleaning the site have been regulated according to industrial zoning standards. This has led to the determination of the area's cleaning criteria, keeping in mind the adult workers for a short time, rather than the long-term child residents (EPA, 2017).

According to the EPA, there are no residences near the Superfund site, so it is in an uncrowded area. However, the two wells are less than 60 meters from immigrant children's shelter buildings to measure arsenic levels. These two wells have recently measured significant increases in arsenic levels. The problem is that the shelter is very susceptible to contamination due to storms due to its location. As a result of the research, it is very high that the researchers in the area are exposed to danger from toxic particles by the deterioration of the material caused by severe dust pollution in the air, steam interference, and even cleaning works in the area. (Kates, 2019a).

Some other actors have referred to the threat in legal documents relating to nearby lands, although Caliburn International and the federal government disapprove of accepting this pollution's consequences. For example, it was stated that these areas would not be used for hospitals, schools, or nursery for the property transfer. At the same time, the Air Force's transfer to the Ministry of Labor in 1996 for the facility that will also be a shelter in the

same area was not included. The only decision the EPA made about the risk to children in Homestead has limited the refuge uses, emphasizing the amount of understanding (EJAtlas, 2017). Obviously, the shelter was allowed to exist because the custodians in Homestead were immigrants and not American children (EPA, 2020).

Local activists and environmental advocates have struggled to close the shelter since 2016. Outside of the sanctuary, protests and marches took place on crucial days like Father's Day, July 4, to solve this problem. Participants in the demonstrations were perhaps a hundred people, but even in quieter times, there were demonstrations; for example, Charlie Fomby held protests around the shelter for more than four months in spring 2019 (EJAtlas, 2017). When larger groups gathered for the protests, they tried to show encouragement to the children from behind the fences. When the signs left by the protesters were removed overnight, the same protesters came back and shouted slogans on the walls of the facility, writing "Houses Instead of This" and "Close" on the fence (Vassolo, 2019).

Debbie Wasserman Schultz, Donna Shalala, and Debbie Mucarsel-Powell wrote a letter to President Trump in May 2019. In this letter, the US Inspector General of Health and Human Services, the federal government, and Comprehensive Health Services Inc. investigating the \$ 341 million unsolicited deal between its representatives was demanded .Debbie Wasserman Schultz, Donna Shalala, and Debbie Mucarsel-Powell wrote a letter to President Trump in May 2019. In this letter, they demanded the investigation the \$ 341 million unsolicited deal between its representatives. Nevertheless, the congress members' concerns were more related to the children's detention than the concern for environmental pollution. Female representatives of the congress were denied permission to visit the facility. However, in April the same week, former Chief of Staff of the White House, John Kelly, was permitted to enter the shelter. Oddly enough, it turned out that Kelly's visit coincided with Caliburn International's appointment to the board of (Kates, 2019a).

This detention center for immigrant children went beyond environmental concerns and led to actions of many different sizes. A very comprehensive report was published by the WeCount team, the local immigrant group. In this comprehensive report, both the environmental wastes endangering children's lives were mentioned and highlighted the level of dangerous noise generated by the airstrip in the region. This report has been produced with three claims. The first is the collection of soil, groundwater, and air samples from all over the detention center; second, considering the exposure scenarios For the Human Health Risk Assessment (HHRA) report; The third one is the conduct of a Child-based Gurus Risk Assessment (NRA) (EJAtlas, 2017).

As a result, the first positive response to the extensive protests and public outcry came in July 2019. The federal government has started to reduce the number of children in shelters (EJAtlas, 2017). On August 3, the last group of children left the shelter. This problem was not completely resolved, as it was planned that by the end of summer and early autumn 2019, it was only during the hurricane season that the children would leave the shelter. This plan caused a prolonged public reaction until the autumn of 2019. Finally, in October, the federal government announced that the shelter would not renew its operating contract and close the shelter (Kates, 2019b).

To summarize, the Homestead Shelter issue is one of an environmental justice success story. Immigrant children are removed from danger from a dirty environment due to widespread public reaction and protests. The key to this success story is the promotion of community-based activism by influential politicians and international groups. Together they exerted serious pressure on the federal government. Moreover, it is important to contextualize this achievement in the broader picture of environmental justice, and there were many groups to take action to achieve this success. Besides, forms of mobilization and conflict outcomes vary from the beginning of the process to the end. Group mobilizations consist of local governments, political parties, neighbors, citizens, communities, social movements, ethnic and racially discriminated groups. The groups'

forms of mobilization are the creation of alternative reports, information, alternative proposals, media-based activism, alternative media, official complaint letters and petitions, public campaigns and street protests, and marches. The company's withdrawal of the investment project has been temporarily suspended. Finally, the consequences of the conflict are the company's withdrawal of investment. Eventually, the project was temporarily suspended (EJAtlas, 2017).

3.4. Water Management in Flint, Michigan, USA

Thousands of Flint people, mostly poor and black, faced the contamination of their drinking water with lead and other pollutants. Michigan government Richard Snyder switched the main city's water supply from the Detroit Water and Sewerage Department to the Flint River in April 2014. There were two fundamental causes for this; the first was the termination of the water service contract between Flint and Detroit; the second was the city's project to build a new pipeline to supply water from Lake Huron to Flint to reduce costs. However, due to the delay in constructing the pipeline, the water supply passed to the Flint River (Egan, 2017). This river is very polluted because in the past it was used as a warehouse for industrial waste. Flint River's corrosive water leaked lead from old water pipes, got into the water supply, and produced extremely high lead levels since 2014. According to scientific research conducted in 2015, Flint River water contained 10 times more lead than Detroit water (Ahmad, 2020).

Flint River consumption has been a public health threat to children and other vulnerable populations since 2014. In February 2015, a Flint inhabitant contacted the Environmental Protection Agency (EPA) regarding extremely high lead levels in drinking water; The EPA then took action. In June of the same year, it confirmed that Flint, Michigan's high lead level was correct. A doctor working at Hurley Hospital in September 2015 found very high levels of lead in the bodies of children. The governor formed the Flint Water Advisory Task Force in 2015 due to public outcry. In a short time, a state of

emergency was announced in Flint shortly after. In January 2016, 150 protesters toured the Michigan state capital's corridors to protest the incident, dumping contaminated water with water containers and calling for mass action to address the drinking water crisis (CNN, 2020).

Protests and lawsuits over the drinking water problem continued throughout 2015 by activists and religious groups. Shortly after the cases were rejected, in April 2016, 514 residents filed a collective lawsuit to solve the problem. They claimed that the water problem was due to negligence, and they claimed more than \$ 220 million in compensation for the EPA's role in this. Later that year, as an environmental justice association, Flint environmental advocates formed a new initiative, the Community Development Organization. As a response to the water crisis, this organization has undertaken the task of helping people affected by the Flint River water switch and sharing necessary information (Eligon, 2016). As a temporary solution, four government officials resigned due to mismanagement of the water crisis. Also, Snyder apologized to the citizens. Its effects are not fully understood for years (CNN, 2020). For civil rights and environmental defenders, the Flint water and health crisis has known as environmental racism. This term, which originated in the United States of America in the 1980s, refers to blacks' disproportionate exposure to polluted air, water, and land (Eligon, 2016).

Many of these advocates claim that environmental racism is the main reason why black communities have higher disease rates on Louisiana's factory-filled Cancer Road, as well as the postal code that belongs to the dirtiest environmental area in Michigan is southwest of Detroit, where 84 percent black. Decisions regarding environmental areas are mostly related to political power. In some cities, incinerators were built in African American neighborhoods that lacked the political power to hinder the baton-burning process. Even more so, in Michigan, where black communities accounted for 14 percent of the total population and Republicans dominated the state government, Flint had very little political power. This whole process raises a question: If the Flint people were rich and

generally white, would the Michigan state government respond more quickly and peacefully to complaints about the same water issue? The answer is probably not. According to the Michigan Civil Rights Commission's testimony, people living in Flint do not equally benefit from environmental or health laws. Even worse, they do not have a meaningful say in the decisions that lead to the crisis (Lawler, 2016).

In summary, although Flint residents have been provided with water filters, bottled water, and home water test kits as a temporary action, the long-term health effects of this poisoning have not been fully understood for years. Besides, various group mobilization, forms of mobilization, and conflict outcomes in this environmental conflict occurred (Eligon, 2016). Group mobilizations consist of local environmental justice organizations, neighbors, citizens, communities, ethnic-racially discriminated groups, local scientists-professionals, and religious groups. Forms of mobilization by groups, artistic and creative actions (such as guerrilla theater, murals), the creation of alternative reports, the development of collective action, the participation of national and international NGOs, litigation, media-based activism, alternative media, official letters of complaint and petitions, public campaigns, street protests, marches and occupation of buildings, public spaces. Finally, four government officials resigned due to conflict outcomes environmental improvements, restoration of the area, court order under negotiation, mismanagement of the water crisis. Unfortunately, these efforts did not help solve the problem of long-term recognition in societies (EJAtlas, 2018).

CONCLUSION

In this thesis, along with the definition of the environmental defenders, the relations between groups in the environmental justice movements have been the focal point. There have been many human-induced environmental problems for years. Especially, environmental issues have been increasing in the last 20 decades because climate change has reached a severe point. Therefore, along with problems based on human activities such as nuclear, mineral ores, building materials, extraction, waste management, fossil fuels, and tourism recreation, humanity has to struggle with more extreme weather events such as tropical storms, winter storms, severe weather, hail, tornados, storm surges, river floods, landslide, wildfires, droughts. Inequalities in exposure and vulnerability emerge from reasons based on non-climatic factors and created by growth processes. These inequalities have formed differential hazards from climate change. People marginalized in social, economic, cultural, political, and institutional areas are generally more vulnerable to climate change. These individuals face many challenges during the adaptation and mitigation process. The inequalities can be based on the result of the intersection of social processes such as discrimination based on class, ethnicity, age, gender, and so on, along with socioeconomic status and income inequalities. Therefore, in the study, the vulnerability situation to environmental affairs is taken on the basis of recognition of group differences in any society.

As mentioned in chapter 2, so many traditional justice theorists believe that the main concern caused to environmental injustice arises from equity or the distribution of environmental diseases and benefits. The thesis shows that the discourse made by the distribution justice theorists approaches to environmental issues with a narrow point of view to understand what are demands by people around environmental justice movements, focusing on a comprehensive approach to movements' demands. The study emphasizes that

the need for individual and social recognition is seen as a necessary element of achieving justice. What is the problem here is that environmental justice defenders usually feel that they remain outside of the cultural mainstream because their identities are not recognized. While someone in any society is privileged, someone is oppressed. In the study, a lack of recognition is taken as the central concern in many areas, such as social and political. Also, the forms of recognition issues are shown as insulting, degradation devaluation at the personal level, and community level.

The thesis shows that environmental defenders' demands in both the United States and around the world highlight more than the difficulty of unfair distribution in practices by giving examples from practices using EJAtlas. Defenders discuss the recognition issue at both the personal and community levels in terms of cultures, traditions, ways of economic, social, and religious life. Here, the main argument is that non-recognition or misrecognition can create impacts over human psychologies because these circumstances can damage an individuals' positive perception of self-evaluation about themselves. Recognition or misrecognition determines individuals' identities; therefore, people or communities can struggle with real harm or extreme distortion when they face circumstances of restricting or contemptible picture of themselves. The study claims that group diversity requires to be admitted for preventing force and to ensure social justice, and it shows the identities problems as a trigger reason for the environmental justice movement.

In the study, why identity emerges as a trigger for collective action is explained by Social Identity theory. Humanity favor to compare themselves with other people to have a positive personality or self-confidence. After the social comparison process, they have two results. The first is that the individual can consider that he or she is better than others or in similar positions. The second is that the person can feel weaker regarding people who have a similar life. While the first situation can create a positive sense of personality over people, the second situation may cause a negative personality perception. What is worst is that

traumatic outcomes can happen on humans' self-confidence. Besides, two possibilities of different actions can occur when people feel a negative personality sense. Firstly, the individual can accept the superiority of others because she or he can consider that others deserve being better. Secondly, individuals feel jealous and exhibit an aggressive attitude - generally occurs in most individuals with a negative sense of personality - towards the people he or she compares himself/herself. Therefore, the study emphasizes the second attitude because it leads to conflict between parties in environmental justice issues.

The study illustrates the vital role of environmental defenders in environmental protection and sustainability and examines intergroup relations among parties around environmental justice issues in chapter 2. Environmental defenders may behave individually or collectively to defend the environment and protest unfair and unsustainable resource usage. Environmental defenders may become fisherfolks, indigenous, peasants, women, environmental activists, social movements, journalists, or any other. The study also highlights that relations among parties around environmental issues seem like a conflict in a non-violent or violent way. In the study, the concept of conflict is not explained solely by the occurrence of force between groups; conflicts can occur without violence. These conflicts can emerge from many various reasons clean water and air, access to fertile land, pollution, risks, and threats against health, livelihoods, social and cultural identities. Furthermore, environmental conflicts can be comprehensively defined as social conflicts connected with the environment. Even though social conflicts can vary, environmental conflicts can sometimes overlap with other sorts of fights based on gender, status, territory, or identity.

Even though the many environmental movements' reasons seem arising from environmental destruction or risks, identity groups of activists have a triggering impact on creating collective action and determine the level of conflict of environmental movements because ignoring or misidentifying the identity of groups in society creates serious problems between groups. In the study, it is claimed that the nature and dynamics of

conflict change across areas; the driving forces of conflictual relations have often similar features. The driving forces are fundamentally formed by the understanding that people or groups can be prevented by others while they try to realize their interests, needs, values, and desires. When the perception is intense enough, individuals and groups' behaviors can turn into action and suppresses the other and tries to fulfill its demands, leading to tension between the parties and, consequently, to conflict.

The study mentions the over 3100 cases of environmental justice conflict, and it is not possible to examine all cases by one by. While some example cases are chosen from Philippines, North Dakota and Spain, the primary goal of the study is to point out the cases in North-South Caroline, Florida and Michigan in the United States. All these cases have a common feature; it is about identity. In all projects, mainly some identity groups face really severe environmental diseases and issues. In chapter 3, three different cases in the United States are examined. With these instance cases, the aim is to show what type of differences there are among environmental justice conflicts in terms of group mobilizing, forms of mobilization, and conflicts of outcomes. Unfortunately, even if these identities try to cope with peaceful and legal ways, they could not solve the problem in these ways. Therefore, their mobilization patterns have started changing from non-violence to violence way. They are not allowed because these identities have a recognition problem in their own countries. They are minority groups and already disadvantaged from major groups in societies regarding social, economic, health, etc.

For example, while forms of mobilization appear such as artistic and creative actions (such as guerilla theatre, murals), creation of alternative reports/knowledge, development of a network/collective action, the involvement of national and international NGOs, lawsuits, court cases, judicial activism, media-based activism/alternative media, official complaint letters and petitions, public campaigns, street protest/marches, and occupation of buildings/public spaces in water management issues in Flint, Michigan, forms of mobilization consist of the creation of alternative reports/knowledge,

development of alternative proposals, media-based activism/alternative media, official complaint letters and petitions, public campaigns and street protest/marches in Homestead Air Reserve Base Superfund Site, Florida. Along with more forms of mobilization process, the environmental defenders in Flint are not as successful as the other defenders in Florida because of different states' regulations and approaches toward environmental issues and human rights. However, it is not possible to claim this theoretical connection clearly. A very broad sampling is needed to establish a clear connection. Since my research coincided with the Covid-19 period, it was not possible for me to create a very large sample. Therefore, this thesis is a basis for establishing a connection with more theoretical explanations.

To sum up, the study examines these identities with negative identity perception. When they are compared with other social groups, they are obviously disadvantaged and know their negative situation. Therefore, they come together to struggle with the problem. However, in the study, the intergroup conflict reasons are taken only in identities based; therefore, it is crucial to highlight that intergroup conflicts are complex and likely to emerge from many causes; thus, conflicts should be taken with a comprehensive approach in terms of economic, structural, social, cultural, political, and health causes at the same time to solve issues.

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APPENDIX

Name of Conflict	Type of conflict 1.st and 2.st level	Relevant Government Actors	Environmental Justice Organization and Other Supporter	Group Mobilizing
1- Floods and Hurricanes (CAFOs), USA	Climate change Impact Rising Seas and Retreating Shores	North Carolina State Legislature, state Attorney General	Clean Water for North Carolina, Organic Consumers Association, Rural Empowerment Association for Community Help, North Carolina Environmental Justice Network North Carolina Environmental Justice Network (NCEJN)	Local ejos Neighbours/citizens/communities Ethnically/racially discriminated groups Low income, rural, African American, Immigrant
2- Homestead Air Reserve Base Superfund Site, Florida, USA	Climate Change Impact Rising Seas and Retreating Shores Coral Reefs and Ocean Acidification. Water Resources and the Everglades Impacts from other reasons Waste Management Landfills, toxic waste treatment, uncontrolled dump sites Military installations	US Environmental Protection Agency, Immigration and Customs Enforcement, Department of Health and Human Resources, United States Air Force	WeCount! Witness: Tornillo. Target: MPP Amnesty International Florida Immigration Coalition	Local government/political parties. Neighbours/citizens/communities Social movements. Ethnically/racially discriminated group.

3-Water Management in Flint, Michigan, USA	Climate Change Impacts Severe Storm Heavy Precipitation Flooding Air Pollution Impacts from other reasons Water Management Water access rights and entitlements Water treatment and access to sanitation (access to sewage)	Detroit Water and Sewerage Department (DWSD), Michigan Department of Environmental Quality, Department of Environmental Quality and the Department of Health and Human Services,	Supporters: Michigan Civil Rights Commission, Virginia Tech, EJOs: Community Development Organization,	Local ejos Neighbours/citizens/communities Ethnically/racially discriminated groups Local scientists/professionals Religious groups
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Forms of Mobilization	Conflict Outcome/Response	Project Status	Is the environmental justice success?
1- - Development of a network/collective action - Involvement of national and international NGOs - Lawsuits, court cases, judicial activism - Media based activism/alternative media - Official complaint letters and petitions - Public campaigns - Occupation of buildings/public spaces	- Strengthening of participation - Lawsuit in progress	In operation	No Activities to block environmental destruction are still ongoing.
2- - Creation of alternative reports/knowledge - Development of alternative proposals - Media based activism/alternative media - Official complaint letters and petitions	- Withdrawal of company/investment - Project temporarily suspended	Stopped 2016-2019	Yes The vulnerable population at risk - migrant children, has been moved away from the hazard - the Air Reserve Base

• Public campaigns • Street protest/marches			Superfund site. Community grassroots activism in conjunction with notable politicians and international organizations put enough pressure on the federal government to make a change
3- • Artistic and creative actions (eg guerilla theatre, murals) • Creation of alternative reports/knowledge • Development of a network/collective action • Involvement of national and international NGOs • Lawsuits, court cases, judicial activism • Media based activism/alternative media • Official complaint letters and petitions • Public campaigns • Street protest/marches • Occupation of buildings/public spaces	• Environmental improvements, rehabilitation/restoration of area • Court decision (undecided) • Under negotiation • Four government officials, resigned due to their mismanagement of the water crisis	In operation 2014- still continue	Not Sure As a temporary action Water filters, bottled water and at-home water test kits are being provided to Flint residents. But, the long-term health effects of that poisoning may not be fully understood for year.