

GLOBAL WARMING: A CRISIS WE CREATED

For a long time, there has been a problem in the world that people have been trying to draw attention to. The main source of this problem is humans, that is, us. The name of this problem is Global Warming. The world is getting warmer day by day, bringing with it seasonal changes, drought, water scarcity, a disappearing ecological balance, and cities facing the threat of extinction. We have done all of this together, with human hands. As a result of our actions, we are experiencing disasters.

If we were to define global warming roughly, it is when greenhouse gases released into the Earth's atmosphere create a blanket effect, trapping the sun's rays on Earth and heating up the globe. As the Earth heats up, a chain of disasters will occur, which we are experiencing and which we will leave as a legacy to future generations. What are these disasters? Drying lakes, disappearing water sources, melting glaciers, the resulting temperature changes in ocean waters, endangering marine habitats, extremely hot summers, short but extremely cold winters, storms occurring in regions where they were not experienced before, the disruption of the ecological order in nature due to the breaking of seasonal cycles, and the danger of many islands and countries being submerged by water due to rising sea levels from melting glaciers. Both we and future generations will face many such problems. The disasters we will leave to future generations are not limited to these. It will be a world that is even warmer, with dried up and vanished water sources, a destroyed ecological balance, and perhaps many extinct animal populations.

If we ask how we arrived at this situation, we can get many different answers, but I think the best answer is the uncontrolled release of fossil fuels like coal, petroleum, and natural gas into nature, which began with the Industrial Revolution, and the destruction of forest areas. Due to the concentration and trapping of harmful greenhouse gases in the atmosphere from the uncontrolled use of fossil fuels, the globe began to warm up day by day. Disasters gradually began in the warming world, and the chain of catastrophes has grown to reach us today. We have actually started to witness this warming and these disasters as we experience them. In fact, there were scientists who drew attention to the fact that the world was starting to warm up and that precautions should be taken, and who worked on this, but unfortunately, they were not listened to enough. In recent years, many organizations are once again drawing attention to this problem and offering solutions. There are states that understand the scale of the problem and accept the proposed solutions, and they are all trying to lighten the burden on the world by making their plans.

I want to elaborate a little more on how we, as humans, created the problem. As I mentioned before, the use of fossil fuels that started with the Industrial Revolution continues today. Coal and natural gas are still used for electricity generation; natural gas and coal are still widely and uncontrollably used to heat our homes, and the resulting carbon dioxide emissions continue to heat the globe. I mentioned destroyed forests, which are, so to speak, the lungs of our world. Forests actually benefit both the world and us by cleaning up the released carbon dioxide. Destroyed forests reduce the absorption of carbon dioxide released into the world, and every tree cut down releases the carbon dioxide it holds back into nature. In a way, we are cutting down our lungs and making it harder for ourselves to breathe. The main

reasons for the destruction of forests include clearing land for agriculture, destruction for new settlements, the timber trade, and, for Turkey, mining activities. As I said, forests are the lungs of the world and allow us to breathe comfortably by cleaning up the carbon dioxide released into nature. Excessive and unnecessary consumption of things that do not benefit us as individuals is also a factor. The energy spent on producing items we do not and will not use, and the methane gas emitted by food we will not eat, are also greenhouse gases. I want to elaborate a little more on the destructive effects these situations create; this might make it a little clearer, I think. For example, due to the globe warming more than necessary, a lot of moisture is held in the air, causing precipitation imbalance. Because of this, some regions experience droughts, while others experience sudden downpours and floods.

Sometimes, the expected rain not falling or not falling on time brings with it other problems and disasters. I want to touch upon another problem, the melting of glaciers. The melting of glaciers threatens life in the polar regions, causes temperature changes in ocean waters, and raises the water level of seas and oceans, creating the danger of countries or islands at sea level being submerged. The temperature changes in the oceans are also a great danger. Oceans absorb the majority of the heat released into the world, benefiting us and the world we live in, but these benefits also have their own harms. For instance, some organisms live at certain temperatures and flee to cooler waters when the water warms up, meaning they migrate. These migrations sometimes pose a danger to the regions migrated to and may even cause the extinction of some species. The alarm bells are also ringing for coral reefs, and the extinction of the organisms living in those reefs is a possibility. Warming waters also cause a decrease in oxygen within the water, leading to the absence of life there and creating dead zones. In a study on this topic, I read something about ocean acidification.

This phenomenon called ocean acidification changes the pH value of the ocean water, becoming harmful to the organisms living in it as well as to us. This will disrupt the ecological system of marine life, which has its own internal ecosystem, and may even cause the extinction of some species. Storms in the seas are also becoming more dangerous due to increasing temperatures, making them both more destructive and posing a serious threat to coastal countries and regions. I mentioned that global warming is drying up lakes, streams, and water sources; I want to elaborate on this a little more. The issue I will address is its impact on agriculture, meaning its effect on our tables, on what we eat and drink. These effects will primarily include insufficient food and drink production. This will lead to both scarcities and price increases in food and beverage prices. The situation that will cause these is the inability of farmers to produce enough due to the drying up of streams, lakes, and water sources, or the resulting products not having sufficient nutritional value. The decrease in the production of staple foods like barley, wheat, and corn may lead to mass famines. Due to rising temperatures, these products burn in the fields or their yields decrease, and it also causes increased attacks by harmful insects and an increase in some agricultural diseases. Furthermore, sudden rainfall also poses a great danger. Untimely rain can hit the crop in the field, preventing harvest and causing the products to rot on the branch. Global warming also threatens this area of our lives. In short, hitting the agricultural sector increases the prices of our food, lowers the nutritional value of what we eat and drink, and may even cause mass famine in the future. In light of these situations and recent reports and maps, it should not be overlooked that Turkey is also facing a drought threat. Turkey is facing the threat of drought, and a resulting famine is at our door. This is one of the reasons for the increase in food product prices in recent years. The fact that our country, which is an agricultural country, is facing drought will undoubtedly create huge problems in the future.

Measures must be taken immediately, or the situation does not look bright for either us or future generations.

So, is it possible to prevent these situations or to save the world by trying to reverse the existing damage? According to the scientists who are working on these issues and offering solutions, which I mentioned before, yes, it is. I will try to explain the proposed solutions: what states should do, what companies should do, and what we, as individuals, should do. I will base these suggestions on the studies that have been presented, and most of my suggestions will be based on my readings and research of recent studies.

First, let me address what states should do. The state is perhaps the entity that will take the biggest steps in this matter and even implement regulations that will cause companies and individuals to take steps. States should first take steps and invest in green and renewable energy. They should also incentivize companies on these issues, and sanctions should be imposed on companies that do not comply. They should even encourage companies to use the energy structures provided. For example, wind turbines can be installed in the windiest regions, and solar panels can be installed in the sunniest places. Individuals who want to use renewable energy systems in their homes should be encouraged, and companies that produce or supply these systems should be provided with facilities. The state can monitor and even impose restrictions on the greenhouse gas emissions released into the atmosphere by factories and industrial facilities. It can impose heavy fines on non-compliant companies and use the resulting fines to invest in renewable green energy. Public transportation should also be encouraged for transport. To do this, they should develop public transportation networks, make transport faster, and of course, provide much more affordable prices. The expansion, speed, and affordability of public transportation networks will direct people towards public transportation, which will reduce the use of fossil fuels in individual transport. Protecting forests and preventing deforestation is also an important factor. I mentioned before that forests are the lungs of our world and absorb the carbon dioxide released into nature. Speaking specifically about Turkey, our existing forests are being destroyed. They are being destroyed due to forest fires, mining areas, and new construction sites. These should not be allowed, and strict laws should be enacted to prevent the destruction of forests. The laws must be adhered to by everyone and never relaxed.

There are also steps we can take as individuals. Let's not say, "What can I do?" because sometimes small steps turn into big ones. Big steps always have an impact. We should aim to minimize our energy consumption. We can choose the least energy-consuming devices in our homes. Recyclable materials can be preferred, and we can separate and dispose of our waste in this way. We can put the necessary pressure on local administrations in our living areas to carry out recycling efforts. We can walk or cycle short distances. This benefits both our health and our finances. We should prefer public transport as much as possible, and again, we should communicate our demands to both local administrations and those who govern the state for the expansion of public transport and put pressure on this matter. We should avoid single-use products because most single-use products pollute nature and create microplastics, which mix with everything we eat and drink, potentially causing health problems in the future. Seasonal and local products should be preferred as much as possible. Products coming from far away increase both carbon emissions and are expensive due to their costs. Buying expensive products harms your finances.

As someone who has watched and read a lot about global warming, I have tried my best to explain what global warming is, what its harmful effects on our world are, and what the effects of these impacts are on us and future generations. I have tried to explain what needs to be done for a more liveable world by states, companies, and us as individuals. I hope I draw attention to this issue and cause someone to take a step towards a more liveable world. After all, this world we live in is our home and the legacy we received from our future generations. It is certainly possible to leave them a better world, but only if the necessary steps are taken; otherwise, the chain of disasters I mentioned in my text will grow, and we will leave an unliveable world to our future generations.