

Short Paper

Climate Summit and the Egyptian Vision

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“We are meeting today and the environmental clock is ticking, marking the end of the planet if we do not do our best to preserve it”.

“Although not responsible for the climate crisis, the African continent faces the most negative consequences of the phenomenon and its economic, social, security and political implications. However, the continent is a model of serious climate action as far as its capabilities and available support allow”. With these words, the British Prime Minister, Boris Johnson and His Excellency President Abdel Fattah El-Sisi began their speeches before the Climate Summit in Glasgow, Scotland, which began on Sunday, October 31, 2021 under the auspices of the United Nations - known as the twenty-sixth Conference of the Parties to the Framework Convention on Climate Change - in the Scottish city of Glasgow and will continue until November 12 within the ceiling of high expectations in dealing with the problems of climate change besetting our planet. The event is abbreviated as “26COP”, which will last for two weeks and is an acronym for the words “26th Conference of the Parties to the Framework Convention on Climate Change.” For the first time, delegations representing 200 countries participated in the summit to discuss ways to reduce emissions by 2030 and help improve life on the planet.

The summit was honored by the honorable presence of the Arab Republic of Egypt with an official delegation headed by His Excellency President Abdel Fattah El-Sisi, President of the Republic, who gave an important speech at the summit, which is attended by world leaders as evidence that we are a large country with its position at the level of the continent and the whole world. Earth's climate depends mainly on the sun, with about 30 percent of sunlight scattered back into space, some of it absorbed by the atmosphere and the rest absorbed by the Earth's surface. The Earth's surface also reflects part of the sunlight in the form of animated energy called infrared radiation. What is happening is that infrared radiation is delayed by “greenhouse gases” such as water vapor, carbon dioxide, ozone and methane, which cause infrared radiation to bounce back, raising the temperature of the lower atmosphere and the Earth's surface.

Although greenhouse gases make up only one percent of the atmosphere, they form a blanket around the ground or a glass roof, which traps heat and keeps the Earth's temperature at 30 degrees higher than otherwise. However, human activities contribute to making this cover “thicker” because natural levels of these gases are supported by carbon dioxide emissions from the combustion of coal,

oil and natural gas, through the emission of more methane and nitrous oxide produced from agricultural activities and landuse changes, and through long-lived industrial gases that are not produced naturally. People usually use the terms global warming and climate change interchange, assuming they say the same thing. But there is a difference between the two: global warming refers to rising average temperatures near the Earth's surface, while climate change refers to changes in atmospheric layers such as temperature, rainfall and other changes measured over decades or longer periods.

What is Climate Change?

Climate change refers to long-term shifts in temperature and weather patterns. These shifts may be natural – for example, through changes in the density of the Sun, slow changes in the Earth's rotation around the Sun, or natural processes within the climate system (such as changes in the water cycle in the oceans), but since the nineteenth century, human activities have become the main cause of climate change on the planet. This is mainly due to the burning of fossil fuels, such as coal, oil and gas as a result of various industries and human activities such as the use of fuel in cars, deforestation, reforestation, urbanization, desertification, etc., where the burning of fossil fuels produces the emission of gases that act as a cover that wraps around the globe, especially carbon nan gas and methane, which leads to the capture of the sun's heat and raising the earth's temperatures. This releases carbon dioxide and landfills are a major source of methane emissions. Energy production and consumption, industry, transport, buildings, agriculture and land use are the main sources of emissions. Recent studies have shown that concentrations of these gases are now at their highest levels in two million years. Emissions continue to rise as a result of their continued sources. As a result, the globe is now 1.1 degrees Celsius warmer than it was in the late nineteenth century.

What are the Expected Effects of Climate Change?

The phenomenon of climate change is distinguished from most other environmental problems in nature by being global in nature, as it transcends the borders of countries to pose a danger to the whole world. The steady increase in surface air temperatures on the globe as a whole has been confirmed, with the global average increasing at a rate of 0.3 to 0.6 degrees over the past 100 years. Studies by the Intergovernmental Panel on Climate Change (IPCC) have indicated that the continuous rise in the global average temperature will

lead to many serious problems such as sea level rise threatening to submerge some areas in the world, as well as the impact on water resources and crop production, in addition to the spread of some diseases. Climate change is sure to affect our health and our ability to farm, live, safety and work as the consequences of climate change include severe drought, water scarcity, severe fires, rising sea levels, saltwater infiltration of adjacent lands, floods, melting polar ice and degradation of biodiversity. In a 2018 United Nations report, scientists acknowledged that limiting global warming to no more than 1.5°C would help us avoid the worst climate impacts and maintain a livable climate. Conversely, the current trajectory of carbon dioxide emissions could increase global temperatures by up to 4.4°C by the end of the century.

Everyone Asks: Can We Stop the Phenomenon of Climate Change?

The honest scientific answer: It is only possible to slow the pace of global warming, not stop it completely, thus delaying the scale of the damage and reducing it until the end of the current century in the hope that we can coexist as a human race with the variables that we have caused. Climate change poses a great challenge to humanity, so do we have solutions to this phenomenon? The countries of the world have become aware of the danger of silence on the phenomenon of climate change and the need to confront it effectively, as the effects of climate change have existed for a while, but some countries of the world were not dealing with this crisis effectively and adequately, especially the industrialized countries that cause climate change and are negligent in the right of developing countries, where they do not take measures that protect the world from climate change and do not provide adequate funding. Despite this, there are some measures that can be taken to reduce this phenomenon and its catastrophic effects, the most important of which are:

Emission Reduction

This can be done by shifting existing energy systems from fossil fuels to new and renewable energy sources, such as solar or wind, thereby reducing climate-changing emissions. Here, a growing coalition of countries is committed to bringing emissions to net zero by 2050. However, current emissions must be cut by about half by 2030 to keep global warming below 1.5°C, and fossil fuel production must be reduced by about 6 percent per year during the decade 2020-2030.

Adaptation to Climate Impacts

Humanity must also adapt to the potential future consequences of climate change. Priority must be given to the most vulnerable people with the least resources to face climate risks, especially in developing countries that are least involved in and most affected by the phenomenon.

- Financing the required amendments and procedures. Climate adaptation and coping with its effects require significant financial investments, but inaction on climate action comes at a high price. An important step is the fulfillment by industrialized countries and the main cause of the phenomenon of their commitment to provide financial

allocations to developing countries so that they can adjust and move towards greener economies.

Is July 2021 really the hottest month in recorded history?

One of the parties says that July 2021 is the hottest month in the history recorded on the surface of the earth.

What is the Truth of That?

This was shown in a report by one of the US federal agencies concerned with monitoring the atmosphere and oceans in August 2021, where it announced that July 2021 was the hottest month in history since the start of the world's temperature recording system on the planet 142 years ago. The recorded data reveal that the average temperature during this month over the earth, and the oceans together, increased by about 0.93 degrees Celsius, from the average temperature in the twentieth century, which is 15.8 degrees Celsius, and scientists believe that this is due to the long-term effects of the phenomenon of climate change. Has the number of days of extreme heat really doubled globally since the eighties of the last century?

Research conducted by the BBC found that the number of very hot days in which temperatures exceed 50°C, which are witnessed in different parts of the world annually, has doubled since the eighties of the last century. The total number of days when temperatures exceeded 50°C has increased in each of the past four decades. Between 1980 and 2009, temperatures exceeded 50°C for just 14 days, while the number rose to 26 days between 2010 and 2019. This has happened in increasing areas of our globe, which presents humanity with new challenges, especially in terms of health and livelihood aspects in general.

What are the Groups Most Affected by the Phenomenon of Climate Change?

Although all groups are affected by the results of the phenomenon of negative climate change, children bear the brunt of its effects, although they are the least responsible group for the occurrence of the phenomenon, as climate change poses a direct threat to the child's ability to survive, develop and prosper.

In terms of:

- The severity of weather phenomena such as hurricanes and heat waves threaten children's lives and destroy infrastructure vital to their well-being.
- Floods cause the destruction and damage of water and sanitation facilities, leading to the spread of various diseases,
- which represent an imminent danger to humans in general and children in particular.
- Drought and global change in rainfall lead to disruption in crop productivity and increased food prices, which means food insecurity and food deprivation for poor people, including of course children.

Children are the most vulnerable group to diseases that will become more prevalent as a result of climate change and drought, such

as malaria, fever and pneumonia, which alone kills 2,400 children a day globally and is closely linked to under nutrition, lack of safe drinking water and air pollution, symptoms exacerbated by climate change.

The frightening and terrifying effects of climate change: In a report broadcast by the agency "AFP", on the impact of climate change on humanity, it is clear that: Some 166 million people in Africa and Central America needed assistance between 2015 and 2019 due to food emergencies linked to climate change. Between 15 and 75 million people are at risk of famine by 2050. Some 1.4 million children will be severely stunted in Africa due to climate change in 2050. Agricultural yields have declined by 4-10% globally over the past 30 years.

Catches in the tropics have declined by 40-70%, with rising emissions.

- As for the impact of climate change on internal migration, between 2020 and 2050, the rate will increase to 6 times the current rate.
- Global warming will also have terrifying effects on "water stress", with 122 million people in Central America, 28 million in Brazil, and 31 million in the rest of South America affected by a shortage of water allocations.

Climate change in Egypt and its negative effects Egypt is one of the countries most affected by the negative effects of climate change, and these effects are summarized as follows:

1. Impact on food security
2. Impact on water resources
3. Impact on the ecosystem
4. Impact on public health
5. Impact on urban areas
6. Impact on energy
7. Impact on the economy

What about the Egyptian Strategy to Confront Climate Change?

The phenomenon of climate change is distinguished from most other environmental problems as it is global in nature, as it transcends the borders of countries to pose a danger to the whole world, as President Abdel Fattah El-Sisi participated in the Climate Change Summit under the auspices of the United Nations - known as the Twenty-sixth Conference of the Parties to the Framework Convention on Climate Change - in the Scottish city of Glasgow, which began on Sunday, October 31 and continued until November 12. During the closing session of the Glasgow Conference "COP 26", it was announced that Egypt was chosen to host the 27th session of the COP27 conference on November 7 and 8 in Sharm El Sheikh, making Egypt the first country at the level of Africa to host the next climate summit, so the entire black continent will be represented in the conference, and therefore the whole world will see the efforts of Egypt and the African continent in confronting climate change.

The Egyptian strategy to confront climate change is represented in many points, the most important of which are:

- Establishing the National Council for Climate Change to formulate the state's general policies regarding dealing with climate change, and work to develop and update sectoral strategies and plans for climate change, in light of international agreements and national interests, and link these plans to the sustainable development strategy 2030.
- Egypt protects its coasts on the White and Red Sea from the impact of sea level rise through clear plans carried out in cooperation between ministries and concerned scientific authorities.
- Research bodies in Egypt are working to develop drought resistant agricultural crops and crops that reduce emissions.
- Egypt is working to protect the agricultural area adjacent to the beaches from deterioration through mega projects.
- Provide climate finance for the implementation of the adaptation component of the NDCs.
- Egypt is implementing a huge desalination program (Ain Sokhna desalination plant at a cost of 2.3 billion pounds) and tertiary treatment of wastewater (Bahr Al-Baqar water treatment plant at a cost of 20 billion pounds) and Egypt is updating its strategy for low-emission development and implementing a huge renewable energy program (wind power generation project on the west coast of the Gulf of Suez at a cost of 4.3 billion pounds.)
- Implementation of huge projects in the villages of the Egyptian countryside, such as the Decent Life project at a cost of 700 billion pounds.
- Implementation of projects to preserve available water resources, such as the project of lining canals at a cost of 6 billion pounds. Egypt is the first country in the region to issue \$750 million worth of green bonds last year.
- Expansion of projects to establish greenhouses with the aim of adapting to climate change (the target during the next five years is about one million greenhouses.)
- Expanding sustainable transport projects, developing the transport and communications network (at a total cost of 377 billion pounds until 2024), converting cars to work with electricity or natural gas, and operating trains with electricity to eliminate pollution.
- Expanding health initiatives to maintain the health of citizens from various diseases.

Production of new varieties and hybrids of rice, such as short-lived varieties, which reduces methane emissions.

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