

# The Role of Water Wealth in Protecting the Environment and Climate Change

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## I. Introduction

National and international policies in the field of environmental protection aim to regulate and control the activity and behavior of man in relation to the environment and the natural environment in which he lives. The activities that lead to imbalance in the ecological environment and affect the nature of the climate and its negative changes are aimed at. Preserving the elements of the environment and climate balance<sup>1</sup>.

**first axis: The concept of the environment and its protection areas**

### 1. definition of the environment

The environment involves man's relationship with living, animal and plant creatures, living with him in one level. The natural environment includes water and waste resources and disposal, insects, soil, housing, air, purity or pollution, weather and other natural characteristics of the medium<sup>2</sup>.

The environment represents, in a certain circumstance, the sum of social elements that can have a direct or indirect impact, sooner or later, on living organisms and human activities. Therefore, their protection requires not only the protection of the natural environment and the effects and resources but also the protection of everything related to the framework and conditions of life.<sup>3</sup>

The environment is the environment in which man or other creatures live, and from which he derives the elements of his life and his survival from food, clothing, housing and the acquisition of knowledge and cultures. They include the natural elements that make up the natural environment such as air, water, soil and various natural resources, and the human components of the human environment such as industry, construction, agriculture, grazing, Activities carried out by humans in the environment.<sup>4</sup>

The environment is defined as the environment in which we live, and includes living things, including human beings, as well as the necessary and sufficient elements for the life of air, soil and all that man has created, so as to adapt the elements of the former to his advantage.<sup>5</sup>

### 2. Definition by the International Conference on the Environment

The International Environment Conference (1972) recognized that the environment is a set of natural, social and cultural systems in which humans and other organisms live and derive their sustenance and perform their activities. This definition clearly includes natural and synthetic materials and products that satisfy human needs.<sup>6</sup>

### 3. The legal concept of the environment

The environment has become a valuable value within the values of society, so most countries, governments, bodies and international organizations have emphasized this value by protecting them by legal means, both in the constitutions and legislations of States, in international declarations.

The Algerian law on the protection of the environment within the framework of sustainable development, in its content, indicates that the environment is composed of abiotic resources such as air, air, water, land, subsoil, plant and animal, including genetic heritage and interactions between these resources, as well as places, landscapes and natural features.<sup>7</sup>

### 4. Areas of environmental protection

The earth, water and air, and what grows on the surface of plants and animals and others, and falls within the scope of the natural environment: soil, minerals, energy sources and neighborhoods (including human) in all its forms, and these represent the resources provided by God to humans and get them on The components of his life and meet the needs of growing, and include three areas are:<sup>8</sup>

- **Aerobic environment**

The atmosphere is the most valuable element of the environment. The atmosphere can not be dispensed with at all. It represents the atmosphere around the earth and is scientifically called the gas shell. It consists of essential gases for the survival of living organisms. Any change in the components of the gas atmosphere leads to negative effects on the life of living organisms.<sup>9</sup>

- **Water environment**

The seas and oceans play an important role in human life. They cover more than 80% of the Earth's surface and thus contribute a great deal to maintaining the biological balance of the Earth. In addition, the seas and oceans are of great economic importance to humans; they are sources of food, sources of energy and resources. As well as a source of various mineral and botanical resources.<sup>10</sup>

- **Terrestrial environment**

Soil is an effective resource that provides plants with life. It is made up of a mixture of different sizes of metal particles, organic matter and various types of living organisms. Therefore, the soil has biological, chemical and physical properties, some of which are dynamic and can be changed according to soil handling. Soil has many services and functions. The mission supports the growth and diversity of plants and animals by providing the biological, chemical and physical environment necessary for the exchange of water, minerals, energy and air. The soil regulates the distribution of rain or irrigation water due to excess leakage and checking, including nitrogen, phosphorus, pesticides, other nutrients and dissolved compounds in water. The soil is stored to facilitate the release of nutrients feeding plants and other elements, and regulates their production periodically. Water, air and other resources also support buildings and preserve archaeological wealth. Soil is the layer that covers the earth's crust and its thickness ranges from a few centimeters to several meters. It consists of a mixture of mineral, organic, water and air materials. The most important sources of renewable natural resources, and the components of living organisms.<sup>11</sup>

## **5. Water wealth is an effective element in the environment**

Water plays a central and critical role in all aspects of life – in the national environment, in our economies, in food security, in production, in politics. Water has indeed a special significance for the great religions. The inadequacy in the supply and access to water has only recently taken centre stage in global reflection as a serious and threatening phenomenon. Communities and individuals can exist even for substantial periods without many essential goods. The human being, however, can survive only a few days without clean, safe drinking water. Many people living in poverty, particularly in the developing countries, daily face enormous hardship because water supplies are neither sufficient nor safe. Women bear a disproportionate hardship. For water users living in poverty this is rapidly becoming an issue crucial for life and, in the broad sense of the concept, a right to life issue. Water is a major factor in each of the three pillars of sustainable development – economic, social and environmental. In this framework, it is understood that water must meet the needs of the present population and those of future generations of all societies. This is not solely in the economic realm but in the sphere of integral human development. Water policy, to be sustainable, must promote the good of every person and of the whole person. Water has a central place in the practices and beliefs of many religions of the world. This significance manifests itself differently in various religions and beliefs. Yet two particular qualities of water underlie its central place in religions: water is a primary building block of life, a creative force; water cleanses by washing away impurities, purifying objects for ritual use as well as making a person clean, externally and spiritually, ready to come into the presence of the focus of worship.<sup>12</sup>

- **Some ethical considerations**

The principle water difficulty today is not one of absolute scarcity, but rather of distribution<sup>1</sup> and resources. Access and deprivation underlie most water decisions. Hence linkages between water policy and ethics increasingly emerge throughout the world. Respect for life and the dignity of the human person must be the ultimate guiding norm for all development policy, including environmental policy. While never overlooking the need to protect our eco-systems, it is the critical or basic needs of humanity that must be operative in an appropriate prioritisation of water access. Powerful international interests, public and private, must adapt their agendas to serve human needs rather than dominate them. The human person must be the central point of convergence of all issues pertaining to development, the environment and water. The centrality of the human person must thus be foremost in any consideration of the issues of water. The first priority of every country and the international community for sustainable water policy should be to provide access to safe water to those who are deprived of such access at present.<sup>13</sup>

**Second axis: Impact of water pollution in nature**

**1. The water cycle in nature**

Here is some information on the concept of the water cycle in nature and the natural processes that comprise it:<sup>14</sup>

- The cycle of water in nature can be defined as a set of processes occurring in nature that are related to the element of water. Through these processes, a change occurs in the physical states in order to reconfigure the water element and maintain its purity.
- Water consists of the chemical composition of the elements of oxygen and hydrogen, and symbolizes the chemical compound water with the symbol H<sub>2</sub>O, and the sun plays a key role in the natural processes covered by the water cycle in the natural, these processes are:

- **The phenomenon of water melting**

Thermal energy emitted by solar radiation is used to melt icy glaciers in the Arctic and Antarctic poles, as well as ice pools from snowfall on the Earth's surface, where the ice turns into a liquid state.

- **Evaporation of water**

The role of solar radiation is to evaporate water from water bodies and transform it into water vapor that rises to the upper atmosphere. This also includes transpiration in plants, where some water evaporates in plant leaves.

- **Water condensation process**

After the rise of water vapor to the upper layers of the atmosphere, and collected in the form of clouds, some fluctuations occur as a result of temperature change and different atmospheric pressure, and this brings the water from the sky to the earth in the form of rain to enter the river water, In the form of reused and reused water, as well as the arrival of water to the plant again for the completion of metabolic processes, and then return the process of transpiration again and move water vapor to the upper atmosphere.

**2. The importance of water cycle in nature**

The importance of the water cycle in nature is in many of the effects it leaves in the natural environment, which helps to sustain life on earth. The most important of these effects are the following:

- Complete the series of interactions of living organisms with each other.
- Enable plants to carry out food industry operations.
- Restructuring the water element in nature again to preserve its purity and rid it of impurities.
- Providing water in different areas of the earth surface from rainfall.

**3. Types of pollution**

Pollution is the presence of substances alien to the environment, making them unusable, and these substances either radioactive, or energy, or microbes, which harm humans and living organisms, and the world, and lead to the loss of pollution types These are the following:<sup>15</sup>

- **Air Pollution**

Due to air pollution of the air with the smells of motor oils, factory fumes, etc., and is one of the most dangerous types of pollution. Chemical contamination occurs because of scientific and chemical experiments, nuclear reactors, and atomic experiments that lead to atmospheric pollution and result in chronic and dangerous diseases such as cancer.

- **Biological pollution**

In developing countries due to ignorance, scientific and technological backwardness, population increase, and increased waste, resulting in parasitic diseases, epidemics and infectious diseases.

- **Noise pollution**

It is one of the types of pollution that harm the human because of the high voices and loneliness for long and continuous times, leading to injury to human neurological diseases, psychological, soil pollution.

- **Water pollution**

Caused by human activities in the water bodies, and one of the most dangerous types of pollution is oil spill to the sea, which harms marine organisms and leads to their death and destruction.

**4. Freshwater pollution kills millions**

Freshwater pollution has become one of the most serious threats to human health worldwide, especially with the high percentage of pollutants present in the environment year after year. Freshwater is the water directly treated by humans for drinking, food preparation and other uses.

Such as rivers and lakes in many parts of the world, have deteriorated significantly recently because of the dumping of waste and lack of interest.

According to World Health Organization (WHO), more than 1 billion people worldwide are deprived of clean drinking water, and at least four million people die every year from diseases caused by drinking water pollution, mostly children

he pollution of freshwater is one of the most important topics that scientists are interested in early, mainly because of the importance of water and its necessity. Living organisms need it to live, and plants need it to grow. Scientists have proven that water is an important component in cell structure, the construction in every living organism was plant or animal, and that water is needed for all the interactions and transformations that take place inside the biology bodies is either central or auxiliary factor or in the interaction or the result of it, and demonstrated physiology that water is necessary for each member of his functions without which it has no aspects of life and its components.

Dirty air in India and China. Tainted water in sub-Saharan Africa. Toxic mining and smelter operations in South America. Pollution around the globe now contributes to an estimated 9 million deaths annually — or roughly one in six — according to an in-depth new study published Thursday in the *Lancet*. If accurate, that means pollution kills three times more people each year than HIV/AIDS, tuberculosis and malaria combined, with most of those deaths in poor and developing countries.<sup>16</sup>

## **5. Economic Effects of Water Pollution**

The presence of pollution, whether in agriculture or drinking, is an issue that affects not only the health of the individual, but also has a greater impact on the health of the state economy. If we address the health of the individual, we find that the multiple types of pollution followed by multiple types of different diseases, It is not easy to cure them; because the journey of healing a long journey; such as: diseases of the digestive system, respiratory system, kidneys, some cause death. These diseases are all affected by: the worker, the head of the household, and the public authority responsible for public health, the Ministry of Health; the worker who is ill because of water pollution is a non-productive factor in his work, which negatively affects the efficiency of productive employment in general, which in the end leads to weak production in the state. The diseases caused by pollution burden the head of the family in spending on treatment, which affects the negative income. Because these diseases require, of course, the provision of a certain quality of medicines, there is no doubt that the Ministry of Health in the state is required to provide such drugs, which will be followed by the deduction of a considerable part of its budget in order to provide these medicines to citizens.<sup>17</sup>

### **The third axis: Climate change and human suffering**

#### **1. The environment as a global and international common factor**

It is known that the human environment from the geographical and natural point of view is one and indivisible unit, and the elements that make up such as water, air, plant and animal life are interrelated and interrelated, air layers above the territory of a particular country become days or months after the atmosphere of another state or States and the territorial waters of a State become long or short of the territorial waters of another State. Land and sea animals and birds also move from one place to another and from one country to another and from one continent to another and do not know their borders.

Environmental studies have shown that the problems of the environment, in addition to their exacerbation, are boundless problems, that they are of an international nature. The international nature of the problems of the environment But also extends the actions aimed at combating these problems, international solidarity and cooperation from the trends that impose themselves in combating the problems of pollution of the environment in general, whether it is different from the pollution of the seas or the pollution of rivers, lakes and air Etc...

For all these reasons, the Stockholm Conference on the Environment was held under the slogan "Only One Earth." At the opening session of the Conference, Secretary-General Morris Strong emphasized this meaning: "Today we all came to affirm our shared responsibility for the terrestrial environment problems we all share."<sup>18</sup>

#### **2. Water scarcity and lack of water security**

The lack of water security may arise from material scarcity, resulting either from climatic or geographical factors, from unsustainable consumption, or from over-exploitation; it can also have economic assets, where weak infrastructure or capacity prevents access to water resources Available, or may occur where pollution or natural pollution causes access to water resources.

Indeed, the absence of water security and water scarcity affects large parts of the developing world. The past century has seen a six-fold increase in global water demand. Nearly three billion people (about 40 percent of the world's population) live in areas where demand for available water supplies is increasing.<sup>19</sup>

### **3. Climate change and human suffering**

Climate change poses a new threat to child survival and development. Over the next 10 years, climate change and emerging weather extremes are estimated to affect about 175 million children a year. Chronic diseases and sudden disasters disproportionately affect children, where children are particularly at risk of infection and disease in particular in situations that threaten water, sanitation and food security.

A woman displaced by flood waters holds water for shelter in Pakistan. Children are most vulnerable to diseases such as diarrhea and cholera in flood areas due to lack of clean water and sanitation.<sup>20</sup>

### **4. Children between the state of water and the impact of climate change**

Water and climate change are inextricably linked, especially since the effects of climate change are felt first through water: through droughts, floods and storms. These disasters can lead to water supply and latrines, water pollution and the lives of millions of children. Without clean water, children are at risk of diseases such as diarrhea, which kills 800 children under the age of five each year<sup>21</sup>

### **5. UNICEF's work on climate change and water and general hygiene**

UNICEF's Water and Hygiene Program adopts an innovative approach to climate change - developing climate-resilient infrastructure, preparing communities to deal with disasters, and empowering children to advocate for their future.

UNICEF is working to collect evidence at the country and community level to identify water, sanitation and hygiene (WASH) risks, assess performance risk, and effect adaptation measures in existing programs.

We continue to promote behavioral changes towards water conservation and support an enabling environment.

Using new technology to demarcate water sources, UNICEF will be able to drill more effectively to find water and adapt to the effects of climate change.

UNICEF seeks to stimulate partnerships and partnerships with local research organizations and other United Nations organizations, such as the United Nations Development Program (UNDP), the United Nations Environment Program (UNEP) and other national governmental organizations.

Clean water, basic latrines and hygiene practices are essential for the survival and development of children. Today, some 2.4 billion people do not use basic latrines, and 663 million people do not have access to clean water.

Without these basic needs, millions of children will be at risk. Water-related diseases and sanitation are one of the main causes of death among children under the age of five. Every day, more than 800 children die from preventable causes due to poor water, sanitation and hygiene.

UNICEF is working in more than 100 countries around the world to improve water and sanitation services and basic hygiene practices. Over the past year, UNICEF's efforts have delivered clean water to 14 million people and basic latrines for more than 11 million people.

In times of crisis when children are particularly vulnerable, clean water has reached 18 million people and sanitation services for another 4 million through UNICEF responses.<sup>22</sup>

## **II. Conclusion**

he environment, as well as the great human, is the source of its needs, and at the same time sink waste and human life between them. Despite this growing importance of the environment, its demand from man is very simple, to take it rationally and rationally and to raise it rationally and rationally. Unfortunately, despite the simplicity of this demand, it is difficult to implement on both fronts the input front and the output front.

human being is better able to accept and does not improve the subtraction, and the climax of the tragedy that the human behavior so disruptive destroys itself and destroys its kind and destroys other creatures, the lack of commitment and behavior is caused by many ideological factors, cultural, economic and social, in addition to the ignorance of the human results of his actions, Difficult is not impossible or impossible, but it is subject to certain requirements.

Finally, it can be said that environmental protection has become one of the modern manifestations of international relations and an international problem by nature, which should be confronted by the international means available.

<sup>1</sup> Ahmed Lakhel, *The Legal System for Environmental Protection and Economic Development*, Dar Houma for Printing, Publishing and Distribution, Algiers, 2015, p.14

<sup>2</sup> BOUTARA Bilal, *Women and Environmental Protection*, Design and Printing Press sakhri Wadi, I 1, 2012, p15.

<sup>3</sup> *The Role of NGOs in the Development of International Environmental Law*, Letter to PhD in Public Law, Faculty of Law and Political Science, University of Abu Bakr Belqayd Tlemcen, Algeria, University Year 2013 2014, p. 77.

<sup>4</sup> Ibrahim bin Suleiman Al-Ahideb, *Security and Environmental Protection*, Naif Arab University for Security Sciences, Riyadh, 1998, p.14

<sup>5</sup> Saih Turkish, *Environmental Protection under Algerian Legislation*, Al-Wafa Legal Library, Alexandria, 1, 2014, p. 22.

<sup>6</sup> Mohamed Khaled Jamal Rustam, *Legal Organization of the Environment in the World*, Halabi Publications, Beirut, Lebanon, 1, 2006, p.31

<sup>7</sup> Nooruddin Hamsha, *Criminal Protection of the Environment Comparative Study between Islamic Jurisprudence and Positive Law*, Memorandum of Master Degree in Shari'a and Law, Al-Haj Lakhdar Batna University, Faculty of Social Sciences and Islamic Sciences, Sharia Department, University Year 2005/2006, p.20.

<sup>8</sup> Mabarki Ibrahim, *Energy Conservation and Environmental Protection for Sustainable Development, A Future Study, 2030*, a note presented in the requirements of the Master of Science in Economics, Development Economics Branch, University of Haj Lakhdar Batna, Faculty of Economic and Commercial Sciences and Management Sciences, Department of Economic Sciences, for the academic year 2013 2014, p. 74

<sup>9</sup> Salem Ahmed, *Environmental Protection in Algerian Legislation*, Memorandum of Master's Degree in Law, Department of Administrative Law, University of Mohammed Khaider Biskra, Faculty of Law and Political Science, Department of Law, University Year 2013 2014, p.09

<sup>10</sup> Tariq Ibrahim Dessouki Attia, *The Legal System for the Protection of the Environment in the Field of Comparative Arab Legislation*, New University Publishing House, Alexandria, 2014, p. 124.

<sup>11</sup> Hamdoush Kalthoum, *The Role of Tax in Combating Pollution, Environmental Protection and Sustainable Development in Algerian Legislation*, Memorandum of the end of the study for a master's degree, specializing in Real Estate Law, University of Dr. Yahya Faris Al-Mediya, Faculty of Law, 2012-2013, p15.

<sup>12</sup> 1 Selborne, Lord, *The Ethics of Freshwater Use: A Survey*, COMSET Sub-Commission on the Ethics of Fresh Water, p. 5.

<sup>13</sup> Cf. Pope John Paul II, Message for the Celebration of World Day of Peace *Peace with God the Creator, Peace with all Creation*, 1 January 1990 p7.

<sup>14</sup> Article on the course of water in nature on 24 April 2018 on: <https://weziwezi.com>

<sup>15</sup> Salah Abdel-Rahman Abdel-Hadithi, *The International Legal System for the Protection of the Environment*, Al-Halabi Publications, Lebanon, 1, 2010, p.19

<sup>16</sup> Brady Dennis Reporter focusing on environmental policy and public health issues(Pollution kills 9 million people each year, new study finds) October 19, 2017 ,See reference below <https://www.washingtonpost.com>.

<sup>17</sup> A comprehensive topic on the purification and treatment of water environment and the environment, the first Maghreb Forum in the Maghreb on 06/06/2015 on:  
<http://www.ingdz.net/vb/showthread.php?t=72010>.

<sup>18</sup> Muammar Ratib Abdel Hafez, *International Law on the Environment and the Phenomenon of Pollution (A Step Forward to Protect the International Environment from Pollution)*, Dar al-Nahda al-Arabiya, Cairo, Egypt, 2007, p.30

<sup>19</sup> Article on Water Security and Climate Change Facts and Figures 10 September 2015 at:  
<https://www.scidev.net/mena/water/feature/Water>

<sup>20</sup> Water, Environment and Sanitation on 10 February 2019 p01 at:  
[www.unicef.org/arabic/wash/25432\\_48097.html](http://www.unicef.org/arabic/wash/25432_48097.html)

<sup>21</sup> Water, Environment and Sanitation on 10 February 2019 p02 at:  
[www.unicef.org/arabic/wash/25432\\_48097.html](http://www.unicef.org/arabic/wash/25432_48097.html)

<sup>22</sup> Press Center, UNICEF for each child at: <https://www.unicef.org/en/media/>