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Abstract: The international community acknowledged the importance of taking practical steps to limit negative human intervention in the environment and to work on raising environmental awareness among different societal groups. Then, The issue of our research is as follows: "what efforts are being made at the national and international levels to protect the environment?", To answer this question, we relied on presenting various international conferences that aimed to encourage member states to reduce pollution and adopt environmental strategies, as well as the efforts made by Algeria at different levels in the field of the environment

1. *Introduction*

Over the decades, industrialization, urbanization, and globalization have led to increased exploitation of natural resources, resulting in harmful consequences such as climate change, deforestation, pollution, and loss of biodiversity. Greenhouse gas emissions, for example, know no borders; they affect the climate of the entire planet, leading to extreme weather events that impact all countries, whether developed or developing. Furthermore, the oceans, which absorb a significant portion of carbon dioxide, are also suffering from the effects of plastic pollution and overfishing, impacting marine ecosystems and the communities that depend on them. The growing awareness of environmental issues has led to global movements, such as international climate agreements, aimed at uniting nations in the fight against these challenges. Thus, environmental problems have become a collective concern, requiring concerted action on a global scale to preserve our planet for future generations.

Many countries initially believed that environmental issues concern only developed and industrialized nations, until most countries began to feel the impact of these problems, which are beyond political boundaries or social levels. Therefore, the international community acknowledged the importance of taking

practical steps to limit negative human intervention in the environment and to work on raising environmental awareness among different societal groups.

Global awareness of the environment is essential for preserving our planet and its resources for future generations. It fosters collaboration among nations, encouraging everyone to adopt sustainable practices and to combat climate change. The

global awareness of environmental issues has significantly evolved over the past few decades, driven by a growing understanding of the intricate relationship between human activities and ecological systems.

The 1972 United Nations Conference on the Human Environment, held in Stockholm, marked a seminal moment in international environmental policy, where the world recognized the urgent need for collective action to address environmental degradation (United Nation, 1972).

The issue of our research is as follows: "what efforts are being made at the national and international levels to protect the environment?", To answer this question, we relied on presenting various international conferences that aimed to encourage member states to reduce pollution and adopt environmental strategies, as well as the efforts made by Algeria at different levels in the field of the environment.

The importance of this research lies in demonstrating the global efforts for environmental protection that are essential to ensure a sustainable, balanced, and equitable future for all the inhabitants of the planet.

2. International Environnemental protection efforts

2.1 Stockholm, Rio de Janeiro Conferences and the kyoto Protocol:

2.1.1 Stockholm Conference:

The international conference held under the auspices of the United Nations in Stockholm in 1972 on the human environment is considered the cornerstone in the fight against environmental

pollution. This conference recommended the establishment of the United Nations Environment Programme and adopted a set of principles that enshrine the protection of the environment.

Following Stockholm conference, many other international conferences and meetings took place. The conference saw the participation of 6,000 individuals representing 113 countries and resulted in 26 principles and 109 recommendations included in the declaration issued by the conference(Aghate, 2011).

Most countries in the world participated in the conference, except for the Soviet Union and the European countries aligned with it.

The conference led to the adoption of 26 principles related to issues of development, the environment, and global challenges. Among these principles, note the following (Helène, 2004):

- Preserving the earth's ability to produce renewable resources (Principle 3)
- Sharing non-renewable resources and avoiding monopolization and waste (Principle 5)
- Conserving animal and plant life (Principle 4) and oceans (Principle 7)

The Committee successfully adopted decisions on all six chemicals under review and either moved them on to the next stage of the review process or adopted recommendations to the Conference of the Parties to list them under the Stockholm Convention

2.1.2 Rio de Janeiro Conference

The international dimension of environmental protection took shape with the holding of the Earth Summit, which took place in Rio de Janeiro, Brazil, from June 3 to 14, 1992. This event saw the participation of 178 countries, 110 heads of government, 10,000 journalists, and 40,000 participants (Michel 1984).

The summit resulted in the establishment of 27 principles for environmental protection and the formulation of a future action plan to safeguard the environment at the beginning of the 21st century, known as Agenda 21.

This document, which is the main outcome of the Rio Conference, is a plan for developmental action that began in the 1990s and extends into the 21st century. The document consists of 40 chapters over approximately 6,000 pages, addressing proposals, strategies, and comprehensive action programs aimed at halting and reversing the trends leading to environmental degradation (United Nations, 1993).

This was followed by the United Nations Framework Convention on Climate Change, signed on May 9, 1992, and the Convention on Biological Diversity, signed on June 5, 1992 (United Nations, 1992).

2.1.3 The Kyoto Protocol

In 1997 the Kyoto Protocol was adopted by the delegates to COP 3 under the United Nations Framework Convention on Climate Change and entered into force on 16 February 2005. The Kyoto Protocol currently has 193 parties.

The Kyoto Protocol is a multilateral environmental agreement that can be seen as a formula for translating the United Nations Framework Convention on Climate Change's principles into practice and follows the approach of an internationally negotiated agreement with wide-ranging targets and timetables. The United Nations Framework Convention on Climate Change is the framework convention that established the basic system of governance for the climate change regime and the Kyoto Protocol elaborates on this system by specifying the regulatory requirements to limit greenhouse gas (Dickason Joanne, 2001).

The Kyoto Protocol requires developed country to commit themselves to reducing their overall emissions of six GHGs by at least 5% below 1990 levels over the period 2008–2012, the first commitment period. There is a five-year commitment period, instead of a single target year, to cater for annual fluctuations that may occur in emissions due to unmanageable factors. Non-Annex I countries on the other hand do not have to make any comparable cuts under the Kyoto Protocol unless they choose to do so.

Many argue that Kyoto's failure is due to deficiencies in the structure of the agreement, such as the exemption of developing countries from reductions requirements, or the lack of an effective emissions trading scheme. The fundamental flaw of the Kyoto Protocol is that a mammoth 75 percent of global greenhouse gas emissions are excluded from its scope, severely limiting its efficacy

2.2 Johannesburg Summit, Copenhagen and Rio+20 Conferences:

2.2.1 Johannesburg Summit:

Johannesburg Summit, officially known as the World Summit on Sustainable Development (WSSD), took place in Johannesburg, South Africa, from August 26 to September 4, 2002. This pivotal conference aimed to address pressing global challenges such as poverty, environmental degradation, and sustainable development, building on the foundations laid by the 1992 Earth Summit in Rio de Janeiro.

Attracting over 60,000 participants, including heads of state, civil society representatives, and business leaders, the WSSD sought to establish a global framework for integrating social, economic, and environmental policies. One of the summit's key outcomes was the adoption of the Johannesburg Plan of Implementation, which outlined specific goals and commitments to promote sustainable development.

The conference also emphasized the importance of partnerships, recognizing the role of various stakeholders in achieving sustainability. Initiatives such as the "Type II Partnerships" encouraged collaborative efforts between governments, businesses, and non-governmental organizations to implement local solutions to global problems.

Overall, the Johannesburg Summit was a significant milestone in the global sustainability agenda, reinforcing the need for a cohesive approach to tackle the interconnected issues of poverty and environmental protection in the 21st century

2.2.2 Copenhagen Conference:

The Copenhagen Conference, officially known as the 15th Conference of the Parties (COP15) to the United Nations Framework Convention on Climate Change (UNFCCC), took place in December 2009 in Copenhagen, Denmark. This pivotal event aimed to establish a global framework for reducing greenhouse gas emissions and addressing climate change (Dickason, 2001).

One of the key outcomes of the conference was the Copenhagen Accord, which, while not legally binding, recognized the need to limit global temperature rise to below 2 degrees Celsius above pre-industrial levels. The Accord also called for developed countries to mobilize \$100 billion annually by 2020 to support climate action in developing nations.

Despite high hopes, COP15 faced criticism for its lack of concrete agreements and the perceived inadequacy of commitments from both developed and developing nations. However, the conference highlighted the urgency of international cooperation on climate issues and paved the way for future negotiations, including the Paris Agreement in 2015, which sought to build upon the foundations laid in Copenhagen (Marc, 2014).

2.2.3 Rio+20 Conference:

The Rio+20 Conference, formally known as the United Nations Conference on Sustainable Development, took place in Rio de Janeiro, Brazil, from June 20 to June 22, 2012. This

landmark event marked the 20th anniversary of the 1992 Earth Summit, which was pivotal in putting sustainable development on the global agenda.

The conference aimed to address critical issues such as poverty eradication, environmental sustainability, and the promotion of social equity. The prominent topics discussed during the conference included the role of the private sector in sustainable development, the importance of achieving sustainable energy for all, and the necessity of enhancing institutional frameworks for sustainable development. Several initiatives were launched, including the "Sustainable Development Goals" process, which later evolved into the 2030 Agenda for Sustainable Development adopted in 2015 (General Assembly, 2015).

A unique aspect of Rio+20 was the involvement of various stakeholders, including civil society, indigenous groups, and the private sector. This multidimensional participation was vital in fostering a comprehensive dialogue on sustainable development and ensuring that diverse perspectives were taken into account (Frank, 2012).

Despite its achievements, Rio+20 conference faced criticism for its lack of binding agreements and concrete commitments.

Many observers argued that the outcomes were largely aspirational and did not translate into effective actions on the ground (Biermann et al., 2012). However, Rio+20 laid the groundwork for the ongoing global discourse on sustainability, influencing subsequent international efforts in environmental governance.

2.2.4 stockholm+50:

Stockholm+50 marks the fiftieth anniversary of the 1972 UN Conference on the Human Environment in Stockholm that first made the link between environment and poverty and placed it at the forefront of the international agenda

Held between 5-16 June 1972 in Stockholm, the United Nations Conference on the Human Environment was the first UN conference on the environment. The meeting's outcome document—the Stockholm Declaration—included several principles that still shape global environmental management and negotiations. Another result of the meeting was the establishment of the United Nations Environment Programme (UNEP) and World Environment Day, which is held annually on 5 June.

The international meeting featured four plenary sessions in which leaders made calls for bold environmental action to accelerate the implementation of the 2030 Agenda and the Sustainable Development Goals. Three leadership dialogues, hundreds of side events – including several youth-led sessions – and webinars, as well as series of regional multi-stakeholder consultations in the run-up to the meeting enabled thousands of people around the world to engage in discussions and put forward their views.

The Leadership Dialogues are expected to contribute to the outcome of Stockholm+50 by giving clear and concrete recommendations and messages for action at all levels—mobilizing the global community behind strengthened cooperation and accelerated innovative action. The three themes of the Leadership Dialogues are:

- Reflecting on the urgent need for actions to achieve a healthy planet and prosperity for all
- Achieving a sustainable and inclusive recovery from the COVID-19 pandemic
- Accelerating the implementation of the environmental dimension of Sustainable Development in the context of the Decade of Action (<https://www.stockholm50.global/about/frequently-asked-questions>)

3. National Environmental protection efforts

3.1 Environmental Issues in Algeria

In addition to the global environmental problems experienced by all countries of the world without exception, the environment in Algeria suffers from many environmental problems that affected various aspects of life.

During the 1970s Algeria experienced rapid and significant industrial development. During this short period, the country's largest industrial vehicles were established, but the process of industrialization was not carried out within the framework of sustainable development and the unserved industrial enterprises were carried out without prior studies, making the industry the main sector consuming a large number of primary resources and one of the most environmentally polluting sectors in Algeria.

3.1.1 Industrial pollution results:

About 100 million tons of incinerators pass by Algerian shores annually, 50 million tons are shipped annually from

national ports and 10 thousands of tons are lost and infiltrated into the sea during this process.

The industrial wastewater volume is more than 220 million cubes, resulting in the formation of 134 tons of stranded substances and 8 thousand nuts. All of these industrial wastes have clearly contributed to water contamination, especially sewage and dams, such as Beni Behdel, Alakhal and Ghrouz dams, as well as Tafna, Seybu, Summan and Chlef Valleys.

There are many reasons why water is contaminated:

- The absence of regular monitoring by institutions responsible for protecting and cleansing the environment.
- Lack of taxes on environmentally polluting enterprises.
- The scarcity of means of financing that has disrupted water filtering projects.

Industrial vehicles located in Algiers, Skikda, Annaba are the most environmentally polluting vehicles (ministere 2012).

3.1.2 obstacles to environmental protection in Algeria:

Algeria, like the rest of the world, has had to strike a balance between environmental protection and development requirements through rational management of the resources used in the development process. However, these measures have been hampered (Development, 2012, p. 120), with agricultural land per capita falling from 1.1 hectares in 1962 to 0.35 hectares in 1980, and are expected to be less than 0.15 hectares at present, with enormous areas being converted into buildings. In addition, the population growth is so increasing that available environmental resources cannot afford it, Algeria's population has nearly doubled

7 times since 1962 until the present day, the population has increased from 6 million to more than 41 million, with an increase of more than 0.3% per year, as mentioned earlier.

Much of Algeria's land area is exposed to desertification. A high proportion of cars are supposed to be removed from use, in addition to the huge volume of medical waste incinerated in an inappropriate and unsanitary manner to reduce the cost and evade the to evade paying taxes, the volume of these wastes is estimated at about 124 thousand tons per year. On the other hand, a study carried out by the National Agency for Water Resources in Algeria on the quality of water consumed shows that 40 per cent are of good quality, 45 per cent are of satisfactory quality and 15 per cent are of poor quality (Mohamed, 2010, pp. 11-12).

3.2 The importance of environment in Algeria

The Algerian legislature entrusted the task of protecting the environment to an administrative body, so that this task was deliberated between several ministries, until the project was guided by the assignment of this task to a politically responsible body by the creation of a special ministry called the Ministry of Territorial Development and the Environment in 2001 (Manas, 2007).

Having felt the seriousness of the country's environmental situation and the risks that it would experience in the near term that might be difficult to control, Algeria has issued several separate texts that include the protection of environmental elements. This has made it sectoral for a particular sector, such as forests, water, fishing, etc.

Algerian legislation promulgated a law on the protection of the environment, Law No. 83/03 of 05/02/1983, aimed at

protecting the environment from all forms of pollution and combating it. Two decades later, the project reintroduced a new text aimed at protecting the environment in the context of sustainable development.

Act No. 03-10 of 19 July 2003, repealing Act No. 83/03, was promulgated with a number of provisions and regulations aimed at protecting the environment between the requirements of environmental conservation and its components and those of the economic development of today's human well-being and the future.

As a result of the economic, social and environmental developments that Algeria has begun to know, which take place in an unregulated form and far from any control framework, the public authorities have decided to draw up a scheme called the National Plan for Environment and Sustainable Development, for which they have allocated an estimated \$970 million. Prior to the development of the scheme, a diagnosis was made of Algeria's environmental situation, which was adopted as a ground for the development of the National Environment and Sustainable Development Programme, as a picture of the environment in the country. Based on the diagnosis, the National Environment Policy has been formulated, which includes some of the points related to the industrial sector that can be limited to:

3.2.1 Development of national environmental programmes from 2001 to 2010:

Faced with the seriousness of environmental problems, the Algerian government decided in 2001 to allocate a significant financial envelope to achieve the objectives set out in the National Action Plan for the Environment and Sustainable Development for a period of ten years.

Table 1. National Climate Change policy

Milestones in Algeria’s Climate Policy	Year
Ratification of the Framework Convention on Climate Change	1993
Submission of the initial National Communication	2001
Ratification of the Kyoto Protocol	2005
Establishment of the CDM –DNA	2006
Submission of the Second National Communication	2010
Submission of Nationally Determined Contribution (NDC)	2016
Paris Agreement (entry into force)	2016

Source: <https://www.climamed.eu/project/our-countries/algeria>

Thus, the environmental policy programs in Algeria were launched in order to achieve objectives and consider solutions to resolve environmental problems by adopting laws that state and private institutions and associations are called upon to implement

These programmes are financially supported by the establishment of the National Fund for Environment and Pollution Control. The Fund aims to provide financial assistance to industrial enterprises that seek to eliminate or control pollution sources by establishing units for the collection and treatment of waste.

3.2.2 Integration of ecological fees since 2005:

Based on the principle of who pollutes the environment to pay the price. In this regard, the environmental fee was introduced in the Finance Act of 2005. In the same year, a ministerial instruction was issued on how to apply the fee. The fee is set at 24000 DA for each ton of waste if the polluter is a hospital or clinic and 10500 DA for each ton if the polluter is engaged in industrial activity.

In legislative terms

Since 2001, a number of laws have been drafted, the most important being:

- Act No. 01-19 of 12-12-2001, on the management, control and disposal of waste.
- Law 03-09 of 19-07-2004 on the protection of the environment in the framework of sustainable development.
- Act No. 04-09 of 14-08-2004 on the promotion of renewable energies in the framework of sustainable development.

- Act No. 04-20 of 25-12-2004 on the prevention of major hazards and disasters.

2.2.3 Within the framework of sustainable development:

A number of international conventions have been ratified, most notably the Kyoto Protocol, and a number of bodies and organizations directly concerned with sustainable development have been established, including:

- National Centre for Clean Production Technologies
- National Observatory for Environment and Sustainable Development
- National Waste Agency
- National Centre for Environmental Training
- National Biological Resource Development Centre
- Supreme Council for Environment and Sustainable Development

Notwithstanding the existence of policies aimed at sustainable development; however, they remain inconsistent and under valuable, and the Algerian Government's endeavours have been to bring in laboratory equipment and the necessary equipment to prevent petroleum pollution, following funding from the Global Environment Fund for the Maghreb Program to Combat Pollution resulting from hydrocarbons.

On going works are also linked to the rehabilitation of drinking water supply and sewage treatment system, through the

rehabilitation of 10 cities with a population of more than 2 million, the rehabilitation of 24 sewage treatment plant, as well as partnership initiatives with European countries to improve the management of water resources.

With regard to reducing the issue of water shortages in Algiers and in some major coastal cities, the Government had set up seawater desalination plants, which had cost some 25 million US \$, with a capacity of up to 200 thousand cubic metres per day. In addition to the imposition of the Water Quality Preservation Tax, since the 1996 Finance law establishes a Water Quality Tax, which is collected on behalf of the National Fund for the Integrated Management of Water Resources by water production and distribution enterprises. (Edwarde, 2001) The Government has also taken several measures, including the choice of pollutant-free fuels, and the transformation into a new source of electricity or solar energy. It has begun to generalize the use of diluted petroleum gas as a fuel gas and the introduction of unleaded gasoline.

During 2009, it records some 40,000 vehicles converted into diluted petroleum gas, and the completion of 160 filling station spread across the Territory. The successful environmental policy is one that paves the way for environmental awareness, where lessons on the environment are included in the elementary education, and a textbook is printed to environmental education course for the secondary education. It also established radio and television programs over the environment that are shared by the public written press specialized in the treatment and dissemination of ecological topics. The strategy currently being pursued also aims to favour technical choices accepted by peasants on the one hand, and to take into account the importance of the environment on the

other, as well as to work intensively to restore 03 million hectares of steppe and to give greater priority to drift lands.

Algeria also promulgated the Algerian Territory management Act in 2001, under which the Ministry of Territory Management and the Environment launched a comprehensive national census of all special wastes by organizing workshops to train persons from the productive sectors of this type of waste who carry out the census process according to a thoughtful methodology. In fact, seven provinces in the country, namely, Algiers, Skikda, Ghardaia, Tlemcen, M'sila and Batna, witnessed the organization of two-day workshops under the supervision of international experts, which included engineers assigned to the special waste file at the level of environmental province inspectorates, as well as officials within organizations that sort out special waste.

The current workshops' schedule for the management of special waste in Algeria have been scheduled, and the facilities provided by the new law as well as the establishment of a plan for coordinating the work between the various bodies. (Jaoude, 2017).

4. CONCLUSION

Whether intentionally or unintentionally, man has caused many serious problems of the environment. Only one element of nature remains and has been prolonged by man's hands causing him various problems. Water is becoming contaminated and unhealthy, groundwater is threatened by depletion. Soil contains more chemicals than plant nutrients, which also causes food contamination.

Clean air is almost confined to certain places but it also remains threatened by pollution, Even the sunshine has become dangerous, animals that are not extinct yet have their numbers counted on the fingers... and many other problems associated with each other in a circular chain, Each problem causes the other, and trying to solve a problem might create another problem All these risks are caused by man on his journey to search for easy life and for well-being, but he has only reaped new risks which have come to threaten his entity as a whole. International efforts are also reflected in funding for sustainable development projects, the promotion of renewable energy, and the fight against deforestation. Although progress has been made, there is still much to be done. Cooperation among nations, businesses, and citizens is essential to build a future where the environment is preserved for future generations.

The environmental conferences have played a crucial role in raising awareness of these issues by bringing together governments, scientists, and non-governmental organizations to discuss global environmental problems and propose solutions. They have also contributed to establishing international agreements and commitments for environmental protection.

In the other hand, while these global conferences have sparked many hopes, they have often been marked by resounding failures. Despite ambitious promises and commitments from nations, the concrete results have proven disappointing. Agreements such as the Kyoto Protocol or the Paris Agreement have highlighted the divergences between the economic interests of countries and the urgent need to act against climate change.

To enforce the outcomes of environmental conferences, countries can adopt several strategies:

1. **Legal Commitment:** Ratify international agreements and integrate them into their national legislation. This makes commitments legally binding.
2. **Monitoring and Reporting Mechanisms:** Establish monitoring systems to assess progress made towards the goals set during the conferences. This may include regular reports and environmental audits.
3. **International Cooperation:** Collaborate with other countries to share resources, technologies, and best practices. Partnerships can enhance the effectiveness of actions taken.
4. **Funding and Technical Support:** Provide financial and technical support to developing countries to help them achieve their environmental goals. This can include grants, low-interest loans, or investments in sustainable projects.
5. **Awareness and Education:** Promote environmental awareness and citizen education to encourage sustainable behaviors and increase pressure on governments to meet their commitments.
6. **Stakeholder Inclusion:** Involve businesses, NGOs, and other stakeholders in the decision-making process to ensure a comprehensive approach to environmental issues.

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