

## Quality Assurance in Higher Education as a response to the Sustainable Development Goals in Algeria: Descriptive study

Djennadi Lydia\*<sup>1</sup>, Belimane Wissam<sup>2</sup>

<sup>1</sup>LIMGE laboratory, Higher National School of Management (ENSM), Kolea, Algeria, [djennadi@ensmanagement.edu.dz](mailto:djennadi@ensmanagement.edu.dz), [djennadi.lydia@gmail.com](mailto:djennadi.lydia@gmail.com)

<sup>2</sup>LIMGE laboratory, Higher National School of Management (ENSM), Kolea, Algeria, [w.belimane@ensmanagement.edu.dz](mailto:w.belimane@ensmanagement.edu.dz), [belimane.wissam@gmail.com](mailto:belimane.wissam@gmail.com)

*Received: 19/05/2024*

*Accepted: 31/12/2024*

*Published: 31/12/2025*

### Abstract:

Faced with significant societal and environmental challenges, Algeria has officially adopted the United Nations 2030 Agenda (UN's 2030), committing to the 17 Sustainable Development Goals (SDGs), with a notable emphasis on SDG4 for education for sustainable development, aiming at quality education for all.

In response, the Ministry of Higher Education has set up a strategy to implement Quality Assurance and promote continuous improvement across all institutions. This strategy includes the creation of a National Standard (RNAQES) that promotes Social Responsibility and Sustainable Development.

This study aims to describe Algeria's context concerning quality assurance and sustainable development through qualitative analysis of existing literature and institutional documents.

**Keywords:** Higher education; Quality assurance; Sustainable development; Social responsibility; National Quality Assurance Standard (RNAQES)

**Jel Classification Codes:** Q01, I23

---

\* Djennadi Lydia,

## **1. INTRODUCTION**

The environment has been deteriorating for several years (PNUE, 2004<sup>1</sup>; GIEC, 2014<sup>2</sup>, 2019<sup>3</sup>, 2021<sup>4</sup>). Recent years have been marked by serious environmental problems at global and national levels, including floods, water scarcity, fires, cyclones and global warming, etc. Reports of the Intergovernmental Panel on Climate Change (IPCC) indicate that human activity is primarily responsible for these changes. In response to these concerns, all organizations have sought to integrate environmental protection and sustainable development into their programs (governments, businesses, education, higher education, etc.) and ensure that their activities and operations respect the environment (Tabeaud, 2010).

These challenges are particularly relevant to Algeria, which is also grappling with environmental and societal issues. In response, Algeria has officially adopted the United Nations 2030 Agenda (UN's 2030), which outlines the 17 Sustainable Development Goals (SDGs), and is committed to achieving them.

Higher Education Institutions (HEIs) are also concerned by the integration of sustainable development into their operations and training programs. Indeed, education and teaching are considered essential elements in the ecological and sustainable transition and are fundamental pillars in any process of change (Sauvé, 2014). Education for sustainable development thus facilitates the achievement of the SDGs. In fact, the United Nations has devoted an entire goal to quality education, which also includes education for sustainable development. SDG 4.3 aims to provide high-quality technical and vocational education and training, as well as higher education.

To achieve this objective, the Algerian Ministry of Higher Education and Scientific Research (MESRS) has implemented quality assurance across all its HEIs (universities, schools, etc.). This initiative includes the development of the National Quality Assurance Standard for Higher Education (RNAQES), which addresses all institutional and functional aspects of these establishments. This national standard ensures that institutions adhere to the principles of social responsibility and sustainable development. The first version, published in 2016, encouraged the introduction of a culture of sustainable development within establishments. In its latest version, published in 2023, the standards have reinforced the notion of sustainable development by urging institutions to develop strategies that encompass the three dimensions of social, environmental, and economic responsibility.

---

<sup>1</sup><https://news.un.org/fr/story/2004/06/50582>

<sup>2</sup>[https://www.wwf.fr/vous-informer/actualites/rapport-du-giec-sur-les-impacts-des-changements-climatiques-alors-que-la-planete-est-deja-frappee-de?gclid=Cj0KCQjw1dGJBhD4ARIsANb6OdkW3VEsj\\_m9-7k2jVwmP8rJCDSaMAB6YRHw2ouOVk0PWFSOK2Gv-18aAvgdEALw\\_wcB](https://www.wwf.fr/vous-informer/actualites/rapport-du-giec-sur-les-impacts-des-changements-climatiques-alors-que-la-planete-est-deja-frappee-de?gclid=Cj0KCQjw1dGJBhD4ARIsANb6OdkW3VEsj_m9-7k2jVwmP8rJCDSaMAB6YRHw2ouOVk0PWFSOK2Gv-18aAvgdEALw_wcB)

<sup>3</sup>[https://www.ipcc.ch/site/assets/uploads/sites/2/2019/09/SR15\\_Summary\\_Volume\\_french.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/09/SR15_Summary_Volume_french.pdf)

<sup>4</sup>[https://www.carefrance.org/actualite/communiqué-presse-news/2021-08-09\\_rapport-giec-climat.htm?gclid=Cj0KCQjw1dGJBhD4ARIsANb6OdmO80Epyg4IgAcwkhe-PmFUbnUTdW0cNxKZmW9Tirtg9XgZGhBIFvQaAlSrEALw\\_wcB](https://www.carefrance.org/actualite/communiqué-presse-news/2021-08-09_rapport-giec-climat.htm?gclid=Cj0KCQjw1dGJBhD4ARIsANb6OdmO80Epyg4IgAcwkhe-PmFUbnUTdW0cNxKZmW9Tirtg9XgZGhBIFvQaAlSrEALw_wcB)

## **2. RESEARCH QUESTION AND METHODOLOGY**

The present research attempt to answer the following question: “*How does the state attempt to respond to the SDGs, and more specifically to SDG 4.3, which aims to provide quality in higher education?*”

To answer this question, we conducted documentary research using secondary sources. This method involves “*observing reality indirectly, through documents which are, in a way, the traces left by the phenomena we want to study*” (Del Bayle, 2000). The approach adopted is qualitative and descriptive. Data were obtained from existing literature and institutional texts on the subject, including books, articles, collective works, annual reports, and reference frameworks...etc.

## **3.KEY CONCEPTS: ENVIRONMENT, SUSTAINABLE DEVELOPMENT& SOCIAL RESPONSABILITY**

### **3.1. Environmental issues and concerns:**

From the 1970s onwards, environmental protection became a priority objective in international debates, whereas it had previously been considered secondary (Bost & Sylvie, 2011; Mancebo, 2013; Brunel, 2018). This shift gained momentum in 1972 when the Club of Rome published a report titled “*The limits to growth*”. This report highlighted the dangers inherent in current economic and demographic growth on a global scale, stating that humanity was likely to face a major crisis in the 21st century, due to the cumulative impacts of pollution, overexploitation of natural resources and geopolitical tensions, unless substantial changes were made to ecological, ethical and political dynamics.

The year 1972 was also marked by the international community meeting in Stockholm at a United Nations conference (Mancebo, 2013). This meeting marked a significant turning point, as it was the first to elevate the environmental question to a central issue on a global scale (Godard, 2015). Moreover, most of the world's environment ministries were created after 1972.

The concept of 'environment' is the focus of much scientific work in the academic world (Colin, 1992; Hugon, 2005) and has been defined in numerous ways. One notable definition is provided by (Godard, 2015), an economist who defines the environment as “*a collection of goods or natural assets that provide services to humans, whether these services are directly useful, such as those aspects of the environment that are part of consumers' utility functions (the spectacle of wild nature, landscapes, clean air, outdoor temperature, etc.), or whether they are incorporated into the environment as a whole. ), or whether they are incorporated into production in the form of production factors or raw materials (agricultural soils, seeds, plant fertilizers, wood), natural resource reserves (forests) or waste assimilation functions (wetlands)*”. This conception of the environment is characterized by an anthropocentric and utilitarian perspective.

According to the same author (Godard, 2015), to address environmental problems, technological accidents and natural disasters, scientific and technical research should be used to create products and services that are more respectful of the environment. He argues that environmental degradation results from technical and technological progress.

### **3.2. The emergence of sustainable development in international discourse:**

The concept of "environment" has evolved over time into the broader concept of "Sustainable development" which encompasses economic and social aspects alongside environmental concerns. Consequently, the environment is a fundamental pillar of sustainable development. This expression appeared in international discourse from the 1980s onwards and is central to current debates. All countries, North and South, are concerned by the issues it raises.

The concept of sustainable development was first formalized and given political significance in the 1987 Brundtland Report, which defined it as " *development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Mancebo, 2013). Several authors have attempted to define this concept (Flipo, 2007; Mulder, 2009; Pestre, 2011; Brunel, 2018). From their various definitions, it is clear that sustainable development represents a dynamic process aimed at establishing a harmonious balance between humanity and natural ecosystems, as well as between different populations globally, both rich and poor, for present and future generations. This concept also addresses crucial geopolitical concerns, promoting stability and peace while ensuring the long-term viability of humanity. Some authors view it as an ideal of social justice, offering hope for all humanity.

Several other events and conferences were subsequently organized, such as the Earth Summit held in Rio in 1992, the Habitat 1 and Habitat 2 conferences, the Istanbul Conference, the Millennium Declaration, the Johannesburg Summit, the signing of the Kyoto Protocol, the Conferences of the Parties (COPs), the 2030 Agenda, etc (Djennadi, 2021). According to (Ghouati, 2016), these various events were characterized by a lack of binding decisions and commitments.

The aforementioned Millennium Declaration set eight Goals (MDGs) for 2015: eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria, and other diseases, protecting the environment, and developing a global partnership for development<sup>1</sup>. A report was drawn up in 2015 on the achievement of these goals. It states that they have not been achieved despite significant progress. The MDGs have been criticized for not sufficiently integrating the environmental dimension into development plans.

In response, new targets have been set for the year 2030 to achieve a more promising and sustainable future for humanity as a whole, through a new report that lists new SDGs. They are seen as a continuation of the old MDGs and complement them with other concerns such as peace, justice, etc. Moreover, unlike the MDGs, which only concerned developing countries, the SDGs now concern all the countries of the world (Arnould & Veyret, 2019). Adopted in 2015 as part of the 2030 Agenda, the 17 SDGs aim to promote economic and social development while preserving the environment and the planet.

The seventeen (17) SDGs are : (1) The eradication of poverty; (2) The fight against hunger; (3) The health and well-being of people and workers; (4) Access to quality education; (5) Gender equality; (6) Access to safe water and sanitation; (7) Access to clean and affordable energy; (8) Decent work and economic growth; (9) The promotion of innovation and sustainable infrastructure; (10) Reducing inequality; (11) Creating sustainable cities and communities; (12) Responsible production and consumption; (13) Combating climate change;

---

<sup>1</sup>[https://www.unodc.org/art/docs/ART\\_MDG\\_F\\_screen.pdf](https://www.unodc.org/art/docs/ART_MDG_F_screen.pdf)

(14) Protecting aquatic life; (15) Protecting terrestrial life; (16) Peace, justice and effective institutions; (17) Strengthening partnerships for global goals<sup>1</sup>.

### **3.3. Sustainable development and social responsibility:**

In recent years, there has been considerable discussion about the notion of "Social Responsibility (SR)", which is attracting growing interest. This concept has gained widespread acceptance in both developed and developing countries (Jbara, 2017). Social Responsibility or Corporate Social Responsibility (CSR) focuses not only on economic activities but also on the consequences and impact of these activities on society. This includes considering the social and environmental effects of organizations' activities.

SR helps organizations promote sustainable development. The concepts of "Sustainable Development" and "Social Responsibility" are closely linked, as sustainable development also encompasses three pillars: economic, social, and environmental.

## **4. THE SDGs AND EDUCATION IN ALGERIA**

As soon as the 2030 Agenda was adopted, Algeria formally incorporated it and established an interministerial coordination committee to implement, monitor, and evaluate the SDGs. This committee is placed under the authority of the Ministry of Foreign Affairs and brings together various other ministries, institutions and national bodies linked to the achievement of these SDGs, such as: the Ministry of the Interior and Local Authorities, the MESRS, the Ministry of the Environment and Renewable Energies, the National Statistics Office, the National Economic, Social and Environmental Council, etc.

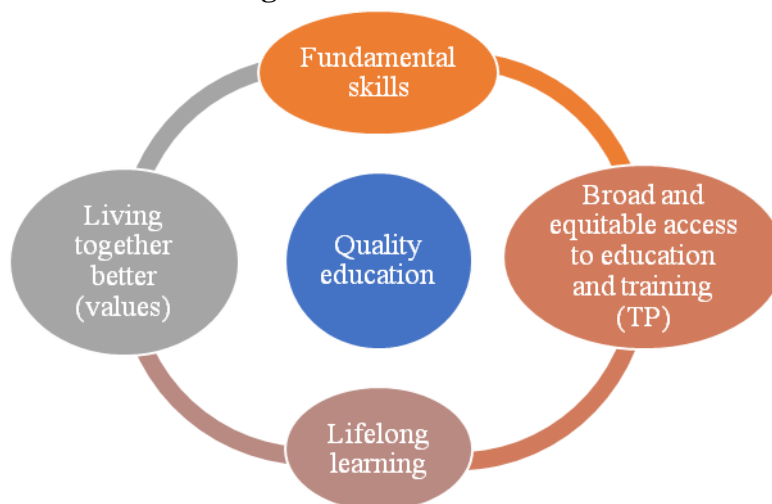
According to the various implementation and progress reports, Algeria has achieved encouraging results on certain goals, such as SDG 3 on health, and is focusing on other goals in order to achieve them. Some goals have not been explored due to a lack of measurement indicators and statistical data

As we saw earlier, SDG 4 is devoted to quality education. Moreover, education is considered to be a key area for achieving all the other goals. According to (Charlier & Croché, 2018), the United Nations is betting heavily on this factor to make progress towards sustainable development. It is regarded as a fundamental issue and a necessary condition for sustainable development (Veyret & Arnould, 2008).

---

<sup>1</sup><https://www.novethic.fr/entreprises-responsables/les-objectifs-de-developpement-durable-odd.html>

**Fig.1.**The SDG 4



**Source:** (Diemer, Khushik, & Ndiaye, 2017)

The targets for SDG 4 encompass a range of educational objectives<sup>1</sup>:

- ✓ SDG 4.1: Ensure free, equal, and quality primary and secondary education;
- ✓ SDG 4.2: Provide quality early childhood care and development and pre-school education;
- ✓ SDG 4.3: Guarantee quality technical and vocational education and training and higher education;
- ✓ SDG 4.4: Enhance technical and vocational skills;
- ✓ SDG 4.5: Ensure equal access for vulnerable people to all levels of education and vocational training;
- ✓ SDG 4.6: Improve youth and adult literacy and numeracy;
- ✓ SDG 4.7: Foster knowledge and skills for sustainable development.

To achieve SDG 4.3, which focuses on quality higher education, the MESRS has established specialized Quality Assurance Units (QAU). These units are tasked with implementing a quality approach across all HEIs and promoting initiatives aimed at enhancing the quality of higher education.

Furthermore, the higher education and scientific research sector plays a crucial role in education for sustainable development and the achievement of SDG 4.7. In fact, it could make a significant contribution to enriching reflection and defining a scientific and ethical stance, as well as implementing appropriate actions. Through its diversity and influence, this sector can play a decisive role in the preservation and dissemination of knowledge and technology, as well as in the economic, social and cultural development of the country through its knowledge transmission and research activities.

Integrating environmental issues into training programs, institutional structures and research activities could revitalize education for sustainable development in terms of both content and methodology. It can also serve as a model of environmentally friendly institutions, addressing issues of academic ethics and deontology while tackling injustice, waste and other core values of the SDGs (Ghouati, 2016).

---

<sup>1</sup>[http://uis.unesco.org/sites/default/files/documents/uis\\_sd4\\_indicators\\_quickguide-fr-f-web.pdf](http://uis.unesco.org/sites/default/files/documents/uis_sd4_indicators_quickguide-fr-f-web.pdf)

## 5. QUALITY ASSURANCE IN HIGHER EDUCATION IN ALGERIA

The higher education sector has adopted Quality Assurance (QA) as an approach to achieving the SDG 4.3 as well as the qualitative objectives of the License-Master-Doctorate (LMD) reform implemented in 2004. The approach involved implementing evaluation strategies and methods to ensure the continuous improvement of management, teaching and learning, and research activities

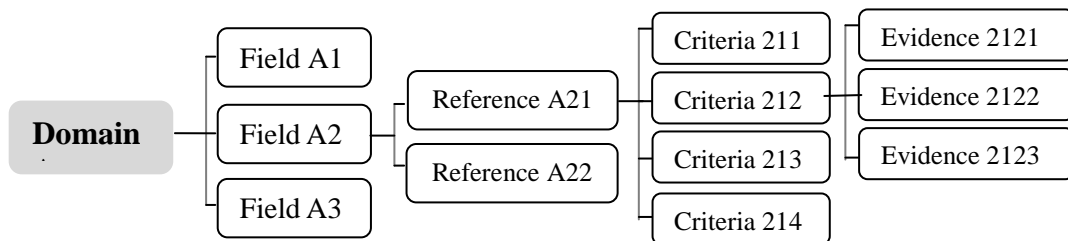
QA was implemented through a series of actions that established the legal and regulatory framework for the project. These actions primarily included:

- ✓ 2010: Creation of the Commission for the Implementation of Quality Assurance in Higher Education (CIAQES), tasked with developing and overseeing the implementation of a QA system in the sector;
- ✓ 2011: Appointment of Quality Assurance Managers (QAM) and establishment of Quality Assurance Units (QAU) in all HEIs;
- ✓ 2012-2013: Training of QAMs and awareness-raising activities on QA;
- ✓ 2014-2016: Creation and dissemination of the initial version of the National Quality Assurance Standard (RNAQES);
- ✓ 2017 : Initiation of institutional self-assessment in all institutions;
- ✓ 2018: External evaluation conducted in 18 establishments that had completed self-evaluations across the seven domains of the RNAQES;
- ✓ 2018: Development of institutional projects in all establishments;
- ✓ 2023: Elaboration of the revised version of the RNAQES.

## 6. SUSTAINABLE DEVELOPMENT AS A QUALITY ASSURANCE DOMAIN

The RNAQES provides guidelines for the implementation of a QA system and is structured into domains that address various institutional and functional aspects of establishments.

**Fig.2.**Structure of the RNAQES



**Source:** (Belimane, 2022)

According to the structure of the RNAQES, the domains are further divided into fields, each containing references that cover specific criteria. These criteria are associated with qualitative or quantitative evidence to support judgments.

The domains and fields define the scope of the self-assessment. Each reference corresponds to an objective pursued by the organization and criteria outline the specific actions or measures that need to be taken to meet these objectives. The evidence gathered provides support for the judgments(Lerari, 2016).

### 6.1. RNAQES -First version-

During the period 2013-2014, the first version of the RNAQES was drawn up by the QAMs under the supervision of the members of CIAQES. This version drew inspiration from the AqiUmed (Internal Quality Assurance in Mediterranean Universities) reference framework developed as part of a Euro-Maghreb TEMPUS project. This project brought together 14 universities, including three from Algeria<sup>1</sup>, and aimed to develop cooperation between HEIs in the northern and southern Mediterranean and, more specifically, to strengthen exchanges between universities in the three Maghreb countries (Morocco, Algeria and Tunisia) (CE, 2013).

The RNAQES was appropriated in 2015, then validated and officially adopted in 2016:

**Table 1:** Structure of the RNAQES (First version)

Domains	Fields	References	Criteria	Evidences
1. Training	7	23	49	108
2. Research	3	17	32	55
3. Governance	5	27	53	181
4. University life	4	14	25	71
5. Infrastructure	5	17	19	38
6. Relations with the socio-economic environment	4	14	22	70
7. International cooperation	3	11	19	40
<b>Total</b>	<b>31</b>	<b>123</b>	<b>219</b>	<b>563</b>

Source:(RNAQES, 2016)

In the first version of the RNAQES, social responsibility was encompassed within a single field of the "University Life" domain. The objective of this domain was to ensure an environment conducive to fostering productive relationships between the university and the socio-economic sector.

Below is the structure of Domain 04 of the RNAQES in its initial version:

**Fig.3.**Structure of Domain 4/ RNAQES Version 2016

**Field V4: Social responsibility (ethics, citizenship, equal opportunities, sustainable development, etc.)**

- **Reference V41:** The institution is involved in and encourages civic activities, exchanges and debates in society.
- **Reference V42:** The school ensures compliance with the principles and rules of ethics and professional conduct.
- **Reference V43:** The school is committed to the principle of equal opportunities.
- **Reference V44:** The school's facilities, equipment and practices take account of sustainable development (the environmental, social and economic dimensions)

<sup>1</sup>Higher Normal School of Technological Education (ENSET) of Oran, M'Hamed Bougara University of Boumerdès (UMBB), and Mentouri University of Constantine (UMC)."

**Source:**(RNAQES, 2016)

In the initial version of the RNAQES, sustainable development was referenced solely within the last reference of the SR field. Specifically, it was mentioned as an element to consider in the selection of facilities, equipment, and practices within establishments. This indicates a recognition of the importance of integrating sustainable development principles into the decision-making processes. However, it suggests that sustainable development may not have been explicitly emphasized across all aspects of institutional functioning.

## **6.2. RNAQES -Second version-: Focus on Sustainable Development**

In 2022, an ad hoc committee comprising approximately fifteen members of the university community was convened to undertake the revision of the standards. The committee included QAMs from various establishments to ensure that the new standard were more adaptable to diverse contexts. This revision process aimed to incorporate the insights and recommendations gathered from the self-assessments conducted between 2017 and 2018.

The committee diligently executed its mandate from September 2022, to February 2023(RNAQES, 2023):

**Table 2:** Structure of the RNAQES (Second version)

<b>Domains</b>	<b>Fields</b>	<b>References</b>	<b>Criteria</b>	<b>Evidences</b>
1. Training	06	14	53	182
2. Research & Innovation	03	16	58	160
3. Governance	05	23	59	208
4. Life in higher education and scientific research establishments	03	07	16	69
5. Infrastructure	05	13	22	70
6. Relations with the socio-economic environment	03	07	33	114
7. International cooperation	03	11	25	102
8. University social responsibility and sustainable development	03	13	43	136
<b>Total</b>	<b>31</b>	<b>104</b>	<b>309</b>	<b>1041</b>

**Source:**(RNAQES, 2023)

By comparing the tables (1&2), it's evident that the new version of the national standard strengthens the concepts of Social Responsibility and Sustainable Development. A notable enhancement is the addition of an entirely new domain titled "*University Social Responsibility and Sustainable Development*". This addition underscores the importance of integrating these principles into the fabric of higher education institutions.

Furthermore, the revision process has resulted in a reduction in the number of references by eliminating redundancies, streamlining the framework for greater clarity and effectiveness. Simultaneously, the number of criteria and evidence has increased, reflecting a more comprehensive approach to assessing institutional performance (RNAQES, 2023).

### **6.3. The new RNAQES domain: University social responsibility and sustainable development**

The new domain of the RNAQES, titled "University Social Responsibility and Sustainable Development," consists of three main fields. The first deals with the organization and policies related to social responsibility and sustainable development, the second focuses on social responsibility, and the third concentrates on sustainable development.

Below is the structure of Domain 08 of the RNAQES in its second version:

**Fig.4.**Structure of Domain 8/ RNAQES Version  
2023

**Field RS1: Organisation and structuring of university social responsibility and sustainable development**

- **Reference RS1.1:** The health care organisation defines its corporate social responsibility and sustainable development policy and puts in place the organisation and structures needed to implement it.
- **Reference RS1.2:** The health care organisation explains the content and challenges of corporate social responsibility and sustainable development to its internal stakeholders.

**Field RS2: Social Responsibility**

- **Reference RS2.1:** The school encourages the sharing of its civic activities with the surrounding community and society in general.
- **Reference RS2.2:** The health care organisation includes actions in favour of its stakeholders in its institutional policies and strategies as part of its corporate social responsibility.
- **Reference RS2.3:** The health care organisation ensures that the actions and behaviour of its stakeholders are guided by ethical principles and rules of professional conduct.
- **Reference RS2.4:** The institution ensures that equal opportunities for its students are respected.

**Field RS3: Sustainable Development**

- **Reference RS3.1:** The institution incorporates sustainable development into its training and research.
- **Reference RS3.2:** The school implements a sustainable development strategy based on three dimensions: social, environmental and economic.
- **Reference RS3.3:** The institution endeavours to strengthen social equity between the members of its community.
- **Reference RS3.4:** The school takes care and action to preserve and protect the internal environment.
- **Reference RS3.5:** The school participates in preserving and protecting the external environment.
- **Reference RS3.6:** The school involves its stakeholders in researching and implementing innovative ideas to reduce its energy and water bills.
- **Reference RS3.7:** The school participates in the sustainable economic development of its region.

**So**

**urce:(RNAQES, 2023)**

The newly revised national standard has been officially endorsed and made available on the MESRS website. This signifies the government's dedication to realizing SDG 4.3 and adhering to the UN's 2030 Agenda.

Following the publication of the updated national standard, self-assessment procedures are set to commence across all institutions in order to evaluate existing systems and practices, as well as to suggest and implement improvement measures.

## **7. CONCLUSION:**

In recent years, the Sustainable Development Goals (SDGs) and strategies for their achievement have been prominent topics in both national and international discourse. These goals impact all countries and are central to global development agendas.

The aim of this research was to explore and understand how the State is attempting to respond to the SDGs, particularly focusing on SDG 4, which emphasizes the provision of quality higher education. Employing a comprehensive and descriptive approach, the study involved analyzing literatures as well as institutional documents

To address the research question, we initially established a conceptual framework for key concepts such as environment, sustainable development and social responsibility. Subsequently, we examined how the higher education sector has endeavored to align with the SDGs by implementing quality assurance measures within its institutions.

However, it's important to acknowledge the limitations of our research. It primarily relies on descriptive and analytical methodologies. Therefore, there is a need to complement it with more in-depth studies, possibly including interviews with relevant stakeholders and conducting questionnaire surveys within HEIs. Such additional research endeavors would contribute to a more comprehensive understanding of the topic and provide valuable insights for policy and practice.

## **8. BIBLIOGRAPHY LIST**

- Arnould, P., & Veyret, Y. (2019). *Atlas du développement durable: Un monde en transition*. Autrement (Editions).
- Belimane, w. (2022). L'assurance qualité et la pratique de l'auto-évaluation dans l'enseignement supérieur en Algérie. *Thèse de Doctorat en Sciences de gestion*. Algérie: ENSM.
- Bost, F., & Sylvie, D. (2011). *Entreprises et environnement : quels enjeux pour le développement durable ?* Presses universitaires de Paris Nanterre.
- Brunel, S. (2018). *Le développement durable*. Presses Universitaires de France.
- CE. (2013). (Commission européenne) Le projet AqiUmed : Objectifs, mise en oeuvre, résultats et diffusion. Renforcement de l'assurance qualité interne dans des universités de la Méditerranée Algérie, Maroc, Tunisie. [https://www.umc.edu.dz/images/2161\\_livret-aqiumed.pdf](https://www.umc.edu.dz/images/2161_livret-aqiumed.pdf).
- Charlier, J.-E., & Croché, S. (2018). The effectiveness of the Homo sustainabilis production process. *Education et Societes*, 42(2), 13-29.
- Colin, R. (1992). Les stratégies économiques et financières de la protection de l'Environnement et du Développement durable : Enjeux et perspectives. *Revue de l'OFCE*, 40(1), 101-139.
- Del Bayle, J. L. (2000). *Initiation aux méthodes des sciences sociales*. L'harmattan.
- Diemer, A., Khushik, F., & Ndiaye, A. (2017). De l'Education au Développement Durable (EDD) aux Objectifs du Développement Durable (ODD), de nouvelles prescriptions pour les pays du Sud. *Revue Francophone du Développement Durable*, 7, 18-58.

- Djennadi, L. (2021). Finalités, contenus et démarches pédagogiques des écoles d'ingénieurs en Algérie face aux enjeux environnementaux. *Thèse de doctorat en Sciences de gestion & Sciences de l'éducation (co-tutelle)*. HESAM & ENSM.
- Flipo, F. (2007). *Le développement durable*. Editions Bréal.
- Ghouati, A. (2016). Education à l'environnement [Research Report]. Institut Maghreb Europe (Paris 8). <https://hal.archives-ouvertes.fr/hal-01342819>.
- Godard, O. (2015). *Environnement et développement durable. Une approche métaéconomique*. De Boeck.
- Hugon, P. (2005). Environnement et développement économique : Les enjeux posés par le développement durable. *Revue internationale et stratégique*, 60(4), 113-126.
- Jbara, N. (2017). Perspective historique de la responsabilité sociale des entreprises (RSE). *Revue multidisciplinaire sur l'emploi, le syndicalisme et le travail*, 11(1), 86-102.
- Lerari, M. (2016). *Guide l'auto-évaluation selon le référentiel national*. Algérie: <http://www.ciaques-mesrs.dz/documentation/04%20LERARI%20Guide%20de%20l'auto-%C3%A9valuation.pdf>.
- Mancebo, F. (2013). *Développement durable (2e édition)*. Armand Colin.
- Mulder, K. (2009). *L'ingénieur et le développement durable*. Avec la collaboration de Éric Francoeur. Presses de l'Université du Québec ; Université du Québec, École de technologie supérieure.
- Pestre, D. (2011). Développement durable : Anatomie d'une notion. *Natures Sciences Sociétés*, 19(1), 31-39.
- RNAQES. (2016). Référentiel National de l'Assurance Qualité dans l'Enseignement Supérieur (Version 1). <http://www.ciaques-mesrs.dz/documentation/RNAQES%20R%C3%A9d%20Ar-Fr%202%20sans%20photos.pdf>.
- RNAQES. (2023). Référentiel National de l'Assurance Qualité dans l'Enseignement Supérieur (Version 2). <https://www.mesrs.dz/wp-content/uploads/2023/06/RNAQ-ESRS.pdf>.
- Sauvé, L. (2014). Chapitre 5. Quels fondements pour une éducation écocitoyenne : Développement durable et Vivir bien : des propositions contrastées. Dans A. Diemer, *Education au développement durable: Enjeux et controverses* (pp. 119-136). Louvain-la-Neuve: De Boeck Supérieur.
- Tabaud, M. (2010). Les adaptations au changement climatique ou la re-découverte des acteurs et des territoires. *Quaderni. Communication, technologies, pouvoir*, 71, 7-25.
- Veyret, Y., & Arnould, P. (2008). *Atlas des développements durables: Un monde inégalitaire, des expériences novatrices, des outils pour l'avenir*. Autrement (Editions).