

The Quality of Scientific Research in Light of The Requirements of The National Committee for The Implementation of the Quality Assurance System in Algeria

جودة البحث العلمي في ضوء متطلبات اللجنة الوطنية لتطبيق نظام ضمان الجودة في الجزائر

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Abstract

The study seeks to evaluate the quality of publication in the domain of scientific research at the University of Adrar according to an evaluation study in 2021 by adopting the standards of the national reference for quality assurance, with the university having a policy of publishing its scientific product by providing capabilities, valuing research and transferring its results.

The study found that the evaluation of the domain of scientific research was less than the average, which amounted to 1.82 out of 4, the field of valuing scientific research was rated 1.93 out of 4, and the field of scientific relations and partnerships was rated 1.69 out of 4, and the field of organizing, structuring and developing scientific research was 1.81 out of 4, it recommended that the fields of research should be identified and arranged to meet the needs of social and economic environment

Keywords: Publication Quality, Evaluation Criteria, Quality Assurance, Scientific Research.

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ملخص

تسعى الدراسة لتقييم جودة النشر بميدان البحث العلمي بجامعة أدرار وفق دراسة تقييمية سنة 2021 باعتماد معايير المرجع الوطني لضمان الجودة، بامتلاك الجامعة سياسة نشر لمنتجاتها العلمي بتوفير الإمكانيات وتمتين البحث ونقل نتائجه.

توصلت الدراسة إلى أن تقييم ميدان البحث العلمي أقل من المتوسط بلغ 1.82 من 4، حقل تمين البحث العلمي تقييمه 1.93 من 4 وحقل العلاقات والشراكات العلمية 1.69 من 4، حقل تنظيم وهيكله وتطوير البحث العلمي 1.81 من 4، أوصت بضرورة تحديد مجالات البحث وترتيبها لتلبية احتياجات المحيط الاجتماعي والاقتصادي.

الكلمات المفتاحية: جودة النشر، معايير التقييم، ضمان الجودة، بحث علمي.

1. INTRODUCTION

The domain of scientific research in higher education institutions is the most important focus of university activity and formation, which was confirmed by the order of priorities in the new national reference for quality assurance. The requirements and needs of its social and economic community, the system of quality assurance of higher education in the field of scientific research aims to continuously improve existing practices and quality control)El Arradji N.H(2015 ‘..

This system can also be considered as a tool used by the university institution to assure itself and the stakeholders that the minimum commitment has been achieved (Berrouche, 2012).

It also constitutes an indispensable basis as it is linked to all kinds of economic and social development. Rather, the national reference obligated higher education institutions to take into account the research requirements of the community and the university's external partners, as the university moved from traditional scientific research represented in publication in periodicals, magazines and research and development projects to study and analysis The environment in which the university is active.

The standards adopted in examining and scrutinizing the extent to which Algerian universities are committed to applying the requirements of the new quality reference confirm that the ministry has realized the necessity of setting unified standards for universities that enable them to diagnose and know their flaws in the field of scientific research. Quality in higher education (Al-Abadi H.F., 2008).

It is known that quality assurance depends on the principle of continuous improvement, as the Ministry knows that there will be resistance to change in the methods of evaluation and auditing, since these standards are mandatory for the university and subject the university to self-evaluation in a first stage, in a second stage the university is subject to external scrutiny by a ministerial committee trying to diagnose the status of the institution

In this context, the Algerian university system realized the need to adhere to the standards of the quality assurance system in higher education, and the goal is not the literal application of the standards of the national reference. It is still recent, and through many discussions, workshops and international forums, it recommended the need to carry out reforms to raise the quality of service according to standards. Which came after the Ministry

of Higher Education organized an international conference on quality assurance in higher education that was considered as a breakthrough to embody the idea of implementing quality assurance in Algerian university institutions, to form a specialized team of Algerian academic competencies with the support of international experts in the field of quality assurance.

On May 31 2010, the work of the band was demarcated by the decision to establish the National Committee for the Application of Quality Assurance in Higher Education and Scientific Research, where its tasks are:

- Supporting higher education institutions by regulating their practices.
- Spreading the culture of quality by adopting quality application tools at the level of university institutions.
- Structuring the quality assurance cells and appointing and forming officials for these cells in order to prepare a quality reference .

Study problem:

The study attempts to identify the contribution of the national reference for internal quality assurance in higher education to identify deficiencies and reveal imbalances related to the field of cooperation with the social and economic environment through a comparison between the self-assessment process in the years 2020 and 2021, by answering the problem: What is the contribution of the national reference to quality assurance from raising What is the quality of scientific research at Adrar University in the 2021 assessment compared to the 2020 assessment?

Study hypotheses:

- 1.The national committees in charge of quality assurance in Algerian institutions prepare university institutions to implement the standards of national reference.
- 2.The National Reference Standards were able to assess the quality of scientific research at Adrar University in the 2020 assessment.
- 3.Adherence to the standards of quality assurance in the field of scientific research succeeded in raising the quality of research and scientific activities at Adrar University in 2020 compared to the 2021 assessment?

The importance of studying:

The importance of this study is related to the modernity of the national reference for quality assurance in higher education institutions in Algeria, which we are trying to clarify the necessity of applying quality assurance standards in the field of scientific research to identify the most important

imbalances and shortcomings resulting from non-compliance with the application of quality standards, and to clarify the importance of the self-evaluation process and improvement program that tries to During which the National Committee for Quality Assurance in Algerian Higher Education Institutions raises the quality of performance of university institutions in various domains.

Study Objectives:

The study seeks to achieve several objectives, which are:

- Presenting the most important actors in the framework of quality assurance.
- Presenting the content of the new national reference for internal quality assurance in higher education institutions within the framework of developing a strategy for scientific research
- Evaluation of the field of scientific research following the requirements of the new national reference for quality assurance at the Algerian University in the framework of a comparison between the 2020 and 2021 assessments to determine the extent to which intentional quality standards are applied at Adrar University.

Methodology of the study:

To achieve the above-mentioned objectives, the descriptive approach will be adopted in the theoretical part of the study to identify effective organizations to ensure the quality of higher education in Algeria and to introduce new benchmarks for quality assurance in higher education in Algeria, and the analytical approach will be adopted to determine the extent of the commitment of the University of Adrar to apply the Education Quality Standards higher in the field of scientific research at the University of Adrar by analyzing the results of the self-assessment achieved.

The limits of the study

- Spatial limits:** Prosecutor's offices and faculties of the University of Adrar in addition to the assistant directors of the General Secretariat.
- Deadlines:** The study took the years 2020 and 2021 as deadlines for the field study procedures.
- Study sample:** It was selected from the research community, the University of Adrar, which is the department in charge of scientific research, both vice-deans for scientific research and postgraduate for the faculties, in addition, the post-diploma interest and the research valuation department of the vice-president in charge of higher education in the third

phase, university qualification, and scientific research, as well as higher education in post-graduation laboratories and complex.

Previous Studies:

Previous studies on this subject did not take into account the new national reference for quality assurance, and this is because of its novelty. We will mention some studies related to the topic, including:

Saleh and Faisal (2016), entitled “The quality of scientific research for faculty members and its impact on the development of teaching content in accounting departments - an applied analytical study on the University of Sirte - aimed at knowing the role played by the quality of scientific research for faculty members in developing the teaching content, and it concluded that The independent variable (the quality of academic research for faculty members) contributes to the explanation of 98% of the changes that occur in the dependent variable (development of the teaching content of the accounting departments’ courses) and revealed a strong statistically significant relationship in the positive direction between the quality of scientific research for faculty members And the development of the teaching content of the curricula in the faculties of the university (Agnih A.S., 2016).

Tahsin Ahmed Al-Tarawneh’s study (2012), entitled “Scientific Research Ethics and its Role in Improving the Outcomes of Graduate Studies”, aimed to clarify the ethics of scientific research and its role in the outputs of studies and to identify the difficulties facing graduate students, and reached results including that there is consensus in various codes and ethical charters On the need to adhere to the scientific secretariat, as well as to benefit from the outputs of graduate studies from theses and theses, I concluded that there is no clear mechanism to link research in theses with the topics that should be focused on in research to rationalize development decisions (T.A, 2014).

The study of the departure of Muhammad Faraj, Sheikh Basma Saleh, entitled "Scientific Researcher Skills", aimed at shedding light on the skills of scientific research and how it can be carried out professionally and skillfully, the skills that a scientific researcher must have and how they can be acquired, clarifying the relationship The seriousness between skills and the researcher, trying to emphasize the role of skills and scientific research, recommended that institutions pay attention to raising the efficiency of researchers and try to increase their expertise through training courses, seminars and programs specialized in this regard (Rahil M.F., 2012).

Study by Abeer Mahfouz Muhammad Al-Madawi (2014), entitled "Scientific Research in Saudi Universities: Challenges and Future Directions." Scientific research is constantly evolving despite the challenges and revealed the existence of many obstacles, the most important of which are neglecting the results reached by researchers, poor funding, inappropriate scientific atmosphere, and different standards between universities to evaluate and publish research (A.M.M., 2014).

Comment on previous studies: These studies were conducted on educational institutions in the field of scientific research, where this study shares this point with previous studies, and what distinguishes this study is that it tries to determine how the standards of the national reference for quality assurance in Algeria as a new model through which the Ministry is trying The commandment to raise the quality of scientific research in Algerian universities is an attempt to find an approach by recognized international standards

2. The Evolution of The Quality Management System in Algeria:

2.1. Organization of the Quality Assurance Cell:

Quality Assurance The set of procedures and mechanisms that allow ensuring the quality of programs and practices is represented by the Quality Assurance Cell in higher education institutions (.C.S., 2012), which came within the framework of reforming the higher education system, consisting of faculty members and administrators, headed by an official of the Internal Quality Assurance Cell. It is keen to identify the heads of its committees within the framework of the cell's work, and since internal quality assurance represents a set of internal practices aimed at following up and improving the quality of the university institution's operations (.F., 2013), the cell is keen to define a work program that it seeks to put into effect to improve university practices within the implementation of its responsibilities, which are in a (S., 2015) :

- The cell serves as the interface between the university institution and national assessment bodies.
- Ensures follow-up of the national action program in light of the continuous improvement of the quality of training programs, research, institutional work, and continuous training of its members in the field of quality assurance (Ben Oum Saad N.E.I., 2019).

-The internal evaluation function for all areas stipulated by the National Committee for the Application of Quality Assurance in Higher Education by adopting a set of criteria for the development of quality management in higher education institutions, especially those related to the latter field.

2.2. Requirements and standards for improving quality practices in Algeria

In the context of developing a system to ensure the quality of higher education in Algeria, a law was issued in 2008, which introduced the idea of evaluating Algerian university institutions for the first time (n°08-05, 2008), which came to amend the law that includes directing higher education and scientific research and to continue reforms (99-05, 1999). A ministerial decision was issued (167, 2010), which included the establishment of a national committee to implement the quality system in Education and scientific research, made up of experts and university professors, aims to support the development of quality assurance practices within higher education institutions (Kihli A.S., 2017); And follow-up and activate quality assurance practices based on a self-assessment procedure to develop tools and mechanisms for quality assurance in Algerian university institutions, as the National Committee for Internal Quality Assurance sought to prepare a national reference that includes various criteria that measure the extent to which university institutions are committed to applying best practices.

2.3. Fields and references related to quality assurance in the field of scientific research

By examining the content of the National Quality Assurance Reference, we note that the National Quality Assurance Committee (CIAQES) gave a clear priority to the field of scientific research, as it came in second place after the field of training. From this basis, the university focused on the self-evaluation process as one of the mechanisms for implementing the quality assurance system based on Three fields that summarize what the university institution needs to raise the quality and output of its scientific research.

On this basis, the fields are divided into fields that express options related to the university's priorities. These fields are also divided into references, which translate the value determined by the university institution into an activity. The references are divided into standards, which are considered as qualitative and quantitative elements that allow the

assessment of the reference level. We also find evidence that It allows the actual achievement of the standard, the level of its achievement, and the quality of its performance ((CIAQES), 2016).

2.3.1. Organizing, structuring, and developing scientific research:

It is related to the establishment by the institution of bodies charged with the development of research, where it determines its priorities in research and puts the appropriate means into practice through:

-The institution determines its priorities in research and puts the appropriate means into practice, meaning that the institution must identify and arrange the research areas.

-The institution evaluates strategic thinking for an internal evaluation in relation to research, the institution must define a framework through which it determines the modalities of internal evaluation in relation to research.

-The institution organizes scientific research according to its priorities, meaning that the institution must establish an appropriate and appropriate program for research.

-The institution guarantees the function of monitoring methodological, scientific, and technological developments ((CIAQES), 2016, p. 11).

2.3.2. Scientific relationships and partnerships:

This means that the institution must determine the modalities of a partnership between it and the various partners, the institution is keen on the internal integration of research activities by adhering to a criteria, namely:

-The institution is keen on the internal integration of research activities, which means conducting research activities in a rational manner.

-The institution ensures the mobility of researchers at the national level ,researchers participating in research activities outside their institution.

-The Foundation guarantees the development of international partnerships in the field of research, meaning that the Foundation should encourage international cooperation.

-The institution should have agreements and research projects in cooperation with international institutions.

-Researchers jointly frame theses with their foreign counterparts ((CIAQES), 2016, p. 13).

-The Foundation publishes the results of research work by highlighting publications in national and international journals.

-The Foundation organizes and participates in national and international scientific events.

-The Foundation owns a website that responds to the standards and regulations in force through a window dedicated to the dissemination of scientific production and continuous updating of the site.

2.3.3. Valuation of scientific research:

The establishment pursues a policy of promoting research and transferring its results, i.e. it must benefit from research results and ensure the transfer of these results to the sector by:

-The Foundation integrates the results of research into initial training with the emergence of publications in national and international journals.

-The Foundation organizes specialized formation courses that include research results for the benefit of the user sector ((CIAQES), 2016, p. 14) .

-The institution contributes to the development of intellectual property, is the institution must help the researcher to carry out research which leads to patents .

-The Foundation is concerned with disseminating scientific culture to the public, which means that the Foundation must open-world culture to the general public.

3. METHOD AND TOOLS:

The method includes the steps and treatments used to respond to the research problem and try to find answers to the study's hypotheses. The researchers seek to ensure the validity and reliability of the study tool and seek to review all sources of information and methods used to find and interpret the results.

The Quality Assurance Cell in the various committees it contains supervises the self-evaluation process on the basis of the various fields in which the university institution exercises its functions. Strategic Planning Supervising and following up this process and ensuring its success.

3.1. Study tools:

To test the hypotheses, we used the self-evaluation mechanism, which would give a reliable and comprehensive assessment based on the audits and reviews supervised by the members of the cell in its various committees. After this, the head of the Quality Assurance Cell, together with the heads of the committees concerned, prepares the reports related to the results of the self-assessment. At the end of the process, the cell works on preparing an

improvement program to correct and control the shortcomings and deviations related to the application of evidence in the national reference, which the self-assessment process concluded is not implemented.

Scoring in the self-assessment process is done using the Likert scale, but with a score not from (1) to (5), but from (0) to (4), and this rating has been approved by the National Quality Assurance Committee, in particular, the score zero (0) to serve as a result and significant impact. The academic institution must either apply the activity with a specific score of (1) to (4), meaning that the activity is present or not completed, and accordingly, the grade is awarded a grade of (0).

Regarding the data and data collection, it was presented in the form of a set of tables and figures on the basis of what was imposed by the instructions of the National Committee. Therefore, the processing is carried out with the data with scores and self-report values. In addition to the percentages that explain and explain the division of evidence and standards in the field of scientific research.

3.2. Study data:

The sample studied came from the student community, which is represented in faculties, prosecutors, the University of Adrar, and Deputy Directors of the General Secretariat Study 2020 and 2021.

The steps mentioned in the National Committee for the application of quality assurance in higher education were adopted during the implementation of the applied study. It is a set of clearly detailed steps and practical steps through which managers of quality assurance units can complete and implement the self-assessment process (M., 2015).

When the final evaluation of the field of scientific research is reached by calculating the averages of the fields, and since the mean of the field represents the means of the benchmark, and the score of the benchmarks represents the means of the standards, and the assessment of the le criterion is the mean of the evidence.

The researchers focused on obtaining the study data through a field study at the University of Adrar by obtaining and compiling information and data on the subject of the study, which they are its deputy directors of the General Secretariat, its colleges or university prosecutors.

4. RESULTS AND DISCUSSION

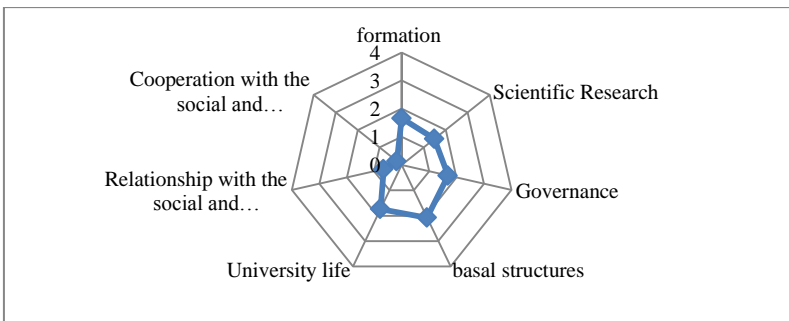
Tab 1. national reference for internal quality assurance in higher education

Domain	Field	References	The critic	Proofs
Formation	7	23	49	106
Scientific Research	3	17	32	55
Governance	5	27	53	180
University life	4	14	25	71
basal structures	5	17	19	38
Cooperation with the social and economic environment	3	11	19	40
Relationship with the social and economic environment	4	14	22	70
total	31	123	219	563

Source: ((CIAQES), 2016, pp. 2-41)

Table 01 represents the content of the national internal quality assurance framework, which includes seven areas: training, scientific research, governance, basic structures, university life, relationship with the social and economic environment, cooperation with the social and economic environment. These fields are divided into fields, the fields are divided into references, and those references are divided into standards, and at the final stage, the standards are divided into proofs .

Fig 1. The result of the self-assessment by all the national reference domains in 2020

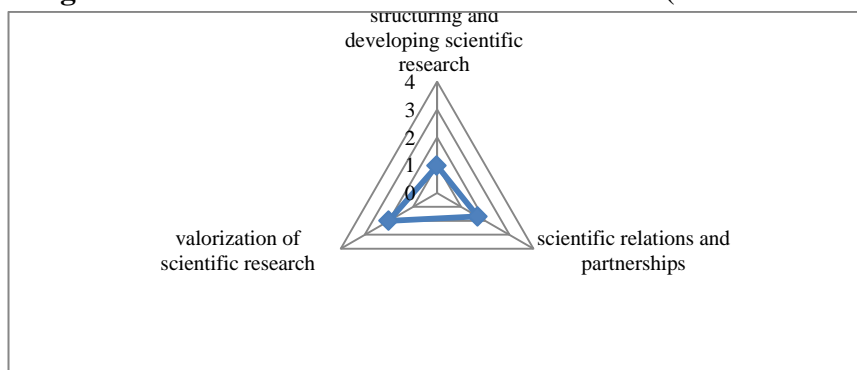


Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

It is noted in figure n ° 01 that all the areas making up the new National Quality Assurance Standard have received an assessment below average (the average is 4) with the exception of the area of basic structures, which

receive a score (2.13) out of (4), which is the highest rating in the field of scientific research. An estimated score (1.56) out of (4) is below average.

Fig 2. Domain Research Self-Assessment Result (Field-Based Analysis)



Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

In the 2020, that the third area of scientific research assessment obtains the highest score among the different areas representing the area of scientific research (2) out of (4). The second domain, scientific relations, and partnerships, scores (1.69) out of (4), while the first domain is the organization, structuring, and development of scientific research, which scores (0, 98) on (4), which is the lowest rating of a domain in the field of scientific research.

Tab 2. determining priority activities in field of scientific research (2020)

Proof not applicable	Non-applicable standards	Calculated points for references				Field	Domain
		$3 \leq CP < 4$	$2 < CP \leq 3$	$1 < CP \leq 2$	$CP \leq 1$		
14	5	0	1	3	5	R1	Scientific Research
24.13%	31.25%	0%	11.11%	33.33%	55.55%	R2	
2	2	0	0	4	0		
11.11%	12.5%	0%	0%	100%	0%	R3	
4	2	1	1	1	1		
6.89%	12.5%	25%	25%	25%	25%		
21 of 58	9 of 16	1	2	7	7	Total	
36.20%	56.25%	5.88%	11.76%	41.17%	41.17%		

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

that most of the references (14) out of a total of (17) obtained a score below the average of 82.35%, as well as seven (7) references out of (17) obtained a score below (1) with a rate of 41.17%, reflecting the score below average. Most of the references in the first domain "organize, structure and develop scientific research" obtained an evaluation of less than (1), or (5) out of a total of (9), which compensates for the first domain with a percentage of 55, 55%, and for the second area, 'scientific relations and partnerships' it was found that all references are (4) It obtained a below-average rating, and the number of unapplied evidence was estimated at (2) evidence out of a total of (18) at a rate of 11.11%, which is a very good percentage. As for the third domain, "Scientific research assessment" was balanced with the evidence that the four references were evenly distributed among the domains 25% for each domain, and the number of unapplied evidence (4) out of a total of (58) at a rate of 6.89%, which is an acceptable percentage which reflects the evaluation of the domain.

Tab 3. Classification of scientific research references (2020)

Total	References				Field	Domain
	3 ≤ NC < 4	2 ≤ NC < 3	1 < NC ≤ 2	NC ≤ 1		
9	-	R21	R 71- R51-R11	R31-R41-R61-R81-R91	R1	Scientific Research
4	-	-	R12-R22-R32-R42	-	R2	
4	R43	R33	R23	R13	R3	
17	1	2	8	6	3	Total

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

It emerges from table n°03 that most of the references making up the first field evaluate scientific research, either (8) out of a total of (9) reference having received an evaluation below the average (less than 2), or 88.88%, as for the second domain, scientific relations and partnerships with all references This domain, which is four in number, received an evaluation below the average of 100%. As for the third domain, the evaluation of Scientific Research. Table (03) confirms the results of Table (02) in terms of the balance of its references.

Tab 4. Matrix ranking of scientific research references (2020)

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

Table (04) shows that most references in the field of scientific research classify the short or medium-term treatment matrix with (14) out of (17) with 82.35%, and we see that five (5) out of six (6) short-course references with a rate of 83.33% belong to the first field "organize, structure and develop scientific research" and this confirms the results of table n ° (2) and confirms the results of the figure no. (2) as this field was the weakest among the fields of scientific research, as well as the reference (B43) relating to the interest of the university in the diffusion of scientific culture to the public was ignored at this stage because it is less important and does not enter the

Short term references	Medium-term references	Important	priority level
- R91 -R81 -R61 - R41- R31 R13	-R12 - R71 - R51 - R11 R23 -R42 - R32 - R 22		
Long term references	References that are ignored	less important	
R33 -R21	R43		
Verifiability	Difficulties		
Degree of variability			

priorities of the establishment for the moment because of its strong evaluation. The two references (B21, B33) will be treated in the long term despite their feasibility, but because they are currently less important, for example, Reference (B33) "The institution encourages the creation and incubation of" related companies looking."

Tab 5. References to be processed in the domain of scientific research 2020

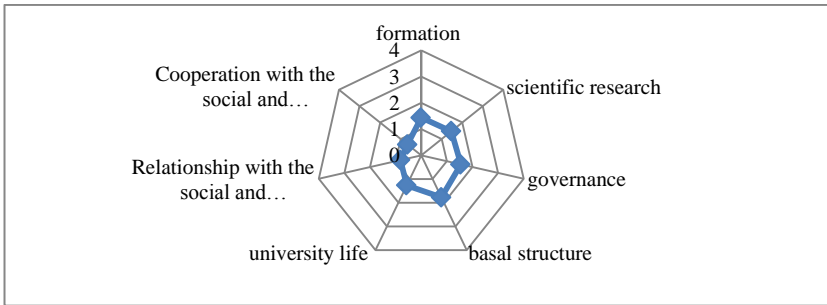
List of references to be treated				Field	Domain
out of activity	long term	middle term	short term		
-	R21	R71 - R51 -R11	R31-R41-R61-R81-R91	R1	Scientific Research
-	-	R12-R22-R32-R42	-	R2	
R43	R33	R23	R13	R3	
1	2	8	6	3	Total

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

It emerges from table n ° 05 that most of the references constituting the field of scientific research, which obtained an evaluation below the average, will be treated in the short and medium-term, and they are (14) out of the total (17) of the results of reference of table n ° (04). It is also noted that the referrals of the third area "Scientific research assessment" resulted also in

terms of the distribution of field referrals for processing purposes, and this confirms the result of the assessment of this area, where the highest rating was at an amount of (2) out of (4) compared to the first domain "organize, structure and develop scientific research" by (0.98) and the second domain. "Scientific relations and partnerships" with an estimated score of (1.69).

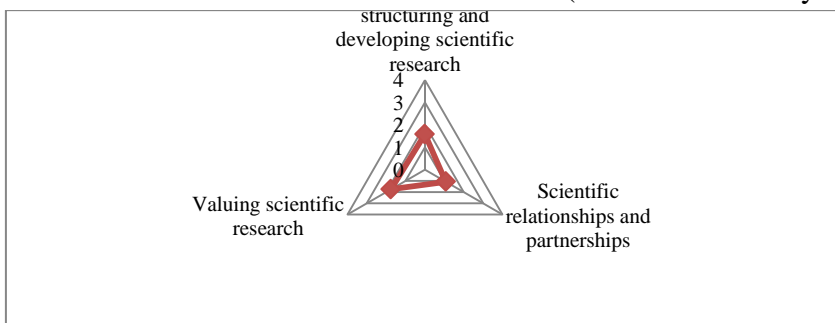
Fig 3. self-assessment according to domains of national reference, year 2021



Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

that all domains received a below-average rating, where the highest rating for the domain of the basic structure was (1.78) out of (4), this which is also the highest rating in the 2017 assessment, and the area of cooperation with the social and economic environment obtained the lowest rating (0.66) out of (4) As for the research area scientist understudy, its evaluation was estimated to be (1.47) out of (4). a decrease compared to 2017, of 5.76%, and comes in the third position, since it progresses in the ranking of two places compared to the assessment of 2017, where it was the fifth among the national reference domains La new quality assurance at Adrar University.

Fig 4. Domain Research Self-Assessment Result (Field-Based Analysis)



Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

From Figure N° 04, it can be seen that the third area of scientific research assessment scores highest among the different areas representing the area of scientific research (1.75) out of (4), while that the second domain, scientific relations, and partnerships, obtains a score of (1.08) out of (4), while the first domain is the organization, structuring, and development of scientific research, which obtains a score of (1.58) out of (4), which is the lowest rating of a domain in the field of scientific research.

Tab 6. identifying priority activities in the field of scientific research, 2021

Proof not applicable	Standards not applied	Calculated points for references				Field	Domain
		3 < NC ≤ 4	2 ≤ NC < 3	1 < NC ≤ 2	NC ≤ 1		
10	9	2	1	1	5	R1	Scientific Research
24.13%	31.25%	22.22%	11.11%	11.11%	%55.56		
8	4	0	0	1	3	R2	
%44.44	%36.36	0%	0%	%25	%75		
2	1	0	1	2	1	R3	
%28.57	%20	%0	25%	%50	25%		
55 of 20	33 of 10	2	2	4	9		
36.36%	30.30%	11.77%	11.77%	23.52%	52.94%		Total

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

It is noted from Table n° 06 that most of the references, which are (13) out of (17) were rated below the average of 76.47%, and nine (9) out of (17) references scored less than (1) with 52.94%. And the evaluation of most of the references of the first domain "Organizing, structuring and developing scientific research" received an evaluation lower than (1), or (5) out of (9) with 55.56%, and for the second "Scientific relations and partnerships" field, all the references, of which there are four (4), obtained a score of 55.56%. the applied evidence is estimated at (8) out of (18) evidence in the second area at 44.44%, which is a high and negative percentage, while the third area is "evaluation of scientific research", although whether it is the best A rating among the field of scientific research is (1.75) out of (4), but its rating is below average, so the number of unapplied evidence is (2) out of a total of (7) with a rate of 28.57%, which is an acceptable percentage.

Tab 7. Classification of scientific research references.

Total	References				Field	Domain
	3 < NC ≤ 4	2 ≤ NC < 3	1 < NC ≤ 2	NC ≤ 1		
9	R21-R71	R61	R81	R91-R41-R11 -R51-R 31	R 1	Scientific Research
4	-	-	R42	R32- R 22 -R 12	R 2	
4	-	R23	R33 - R13	R43	R 3	

17	2	2	4	9	3	Total
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Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

that most of the references of the first domain, which are (5) out of a total of (9) references, obtained a score below the average of 55.55%. domain, all references in that domain scored below the average of 100%, of which three References received a score below one of 75%, which is a low rating, confirming the assessment result of this domain (1.08) out of 4. As for the third domain, although being the best rated (1.75), it included three references out of four whose assessment was below the average of 75%.

Tab 8. Classification matrix of scientific research references, year 2021

References processed in the Short term	References processed in the medium term	Important	priority level
- R91-R51- R41 - R31 -R11 R43- R32 -R22 -R12	R33-R13-R42-R81	less important	
References that will be treated in the long term	References that are ignored		
R23 -R61	R71 -R21		
Verifiability	Difficulties		
Degree of verifiability			

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

that most of the references in the field of scientific research organized their short-term matrix processing with a total of (09) out of (17) with 52.94%, which confirms that the evaluation of these references is less than 1. The most notable on this point is that among the nine references which In the short term, six (6) references belonging to the first domain "organize, structure and develop scientific research" will be addressed, and it is noted that two references were ignored, namely the reference (B21) "The institution has bodies to conduct and monitor research" with an estimated evaluation of (3.33) out of (4) where the University of 'Adrar has constituted the organs of the basic organs which carry out and monitor research activities, and reference (B 71) "The establishment develops a policy of training in research and by research" with an overall score estimated at (4) on (4) because it is here that the University of Adrar provides the establishment of a research training policy By integrating second-year (Master) and third (Ph.D.) students into research teams.

Tab 9. References to be processed in the domain of scientific research.

List of references to be treated				field	domain
out of activity	long term	medium term	short term		
R71-R21	R61	R81	R91-R51-R41 -R31 - R11	R1	Scientific Research
-	-	R42	R32 - R22 -R12	R2	
-	R23	R33-R13	R43	R3	
2	2	4	9	3	Total

Source: Prepared by researchers based on documents from the Quality Assurance cell of the University of Adrar

that most of the references constituting the field of scientific research, which obtained an evaluation below the average, will be treated in the short and medium-term, and they are (9) out of a total of (17) references, which confirms the results of table n ° (8) the results of table n ° (04) It is also noted that the references of the second field, "Scientific relations and partnerships", which are four references, all are below the average, including three benchmarks with an assessment of less than one in 75%, and this is a weak result confirming that the assessment of this benchmark was the lowest among all the domains of the field of scientific research.

5. CONCLUSION

This study achieved the following results:

-Scientific research domain rating was found to be (1.47) in the 2021 rating compared to the 2020 rating, where it was (1.56) out of (4), a decrease of 5.76% Despite this decline, the field of scientific research has risen to third place after the fields of basic structures and university life.

-The decrease in the evaluation of the valuation domain of scientific research from (2) in the 2020 evaluation to (1.75) in the 2021 evaluation, where the percentage decrease was estimated at 12.5%.

-The field of scientific relations and partnerships was the weakest in the field of scientific research since the number of unapplied evidence having obtained a score of (0) was estimated at (8) out of (18) evidence of 44,44% in the 2021 assessment while there were only two in the 2020 assessment Among the proofs, out of a total of (18) proofs, a score of (0) was obtained with 11, 11%, and this is a negative increase which affects the evaluation of the field of scientific research.

-The field of organization, structuring, and development of scientific research has experienced a notable increase, reaching (1.59) in the 2021 balance sheet compared to the 2020 balance sheet where it reached (0.98), an estimated increase of 38.36%, and this area had the largest increase compared to the other two areas.

-The field of scientific relations and partnerships saw a marked decrease in the results for 2021 since it reached (1.08) compared to the results for the year 2020 when it reached (1.69), i.e. a decrease of 36.09%, and this field was the main reason for the decline in the general appreciation of the field of scientific research.

-The study revealed that the field of valuation of scientific research amounted to (2) out of a total of (7) proofs with a rate of 28.57% in the evaluation of the year 2021, while it was estimated in the 2020 assessment as (4) out of a total of (7) evidence with a percentage of 57.14 This decrease to 50% is a good thing, confirming that some evidence has been addressed by the work program prepared by the Quality Unit of the University of Adrar to remedy the gaps and imbalances appearing in the 2020 report.

-The assessment revealed that the evidence that was not applied in the 2020 assessment, which scored (0) out of (4) is (21) evidence of (55) evidence, which is the total evidence from scientific research by 38.18%, and in the 2020 assessment there was a slight change, and the number of unapplied evidence (20) out of a total of (55) evidence of 36.36 %, where there was a decrease of 1.82%, which is a positive indicator despite the modest improvement rate.

Recommendations

-Ensure that the university institution publishes the results of research work in order to be presented in national and international journals, as stipulated in the standard (R 241).

-Work on the application of the standard (R191), which stipulates that the university is required to ensure the monitoring and follow-up of technological developments by activating the functions of the body which supervises this task, and to provide a report on a regular basis that includes a set of recommendations for researchers to consider in accordance with the Evidence Guide (R1911).

-The University of Adrar should guarantee and encourage the development of international partnerships in the field of scientific research, which would help promote scientific research at the Algerian University, by activating the agreements concluded with many international universities.

-Ensure the mobility of its researchers at the international level, and for its researchers to jointly supervise theses with their foreign counterparts, in accordance with the text of the standard (R233).

-Work to establish a system by which the methods of internal evaluation of research activities are determined by creating a committee responsible for periodically evaluating research activities at the University of Adrar, and by creating a database that is periodically updated containing all the useful information in order to determine the indicators of research activities and this in accordance with the standard (R131).

-The University of Adrar should establish an appropriate and appropriate program for the research activities through which it tries to work to ensure that the research orientations of the university are compatible with its scientific research priorities, and this is what the standard (R 141) stipulates.

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