

*Preventive Archaeology: Reality and Prospects*

**1- Imene BOUHEROUD\*, (Abdelhamid Mehri University of  
Constantine 2-Algeria)**

*imene.bouheroud@univ-constantine2.dz*

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**Abstract:**

Since achieving independence, Algeria has embarked on the nationalization and enhancement of diverse energy and cultural assets. In an effort to safeguard its cultural heritage, the nation has undertaken numerous archaeological excavations. Despite these efforts, these measures have proven inadequate for preserving the subterranean treasures, necessitating the exploration of alternative approaches, particularly against the backdrop of the nation's post-war development and social challenges. This situation precipitated a period of intense partisan sectarianism, referred to as the "Black Decade," which significantly disrupted archaeological research and stymied the advancement of scholarly inquiries.

In response, the authorities, in collaboration with the Ministry of Higher Education, pioneered a new academic discipline known as preventive archaeology. While this field is nascent in Algeria, it is well-established in other regions globally. This study examines the introduction of this discipline in Algeria, its current state, and its future prospects through the following inquiries: What constitutes preventive archaeology? What is its present status? What are the anticipated benefits and future directions for this field?

**Keywords:** Development works, Preventive Archaeology, Projects, Archaeological excavation, Cultural heritage, Preventive excavation, Protection.

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**\*- Correspondent author**

ملخص:

سعت الجزائر منذ الاستقلال تأمين و تثمين مختلف ممتلكاتها الطاقوية والثقافية ،ولحماية مورثها الثقافي أنجزت حفريات أثرية في مختلف ربوع الوطن ،لكن هذا لم يكن كفيلا بحماية الموروث المكنوز تحت الأرض ما جعلها تفكر في حل بديل لحمايته خاصة في ظل التطور والتنمية التي تعرفها البلاد بعد أن خرجت من حرب خلفت لها الدمار والآفات الاجتماعية، لتصطدم بحرب أخرى حزبية مذهبية او ما يعرف بالعشرية السوداء ،هذه الأخيرة التي أثرت على الابحاث الأثرية، فعرقلت عجلة الابحاث ما حتم على السلطات القائمة على القطاع بالتنسيق مع وزارة التعليم العالي فتح تخصص جديد عرف بعلم الآثار الوقائي كون هذا التخصص ذو صلة وطيدة مع أشغال التنمية والمشاريع الكبرى هذا التخصص الجديد في بلادنا والقديم في بعض دول العالم حيث عرف في هذه البلدان تقدما وتطورا ملحوظا تعمل الجزائر على مواكبتها وللتعريف بهذا التخصص والآمال المرجوة منه ارتأينا طرح الأسئلة التالية ، فما هو علم الآثار الوقائي؟ وما الواقع الذي آل إليه؟ وماهي الآفاق المرجوة منه؟

كلمات مفتاحية: أشغال التنمية، علم الآثار الوقائي، مشاريع، حفريات أثرية، تراث ثقافي، حفريات وقائية، حماية.

**- Introduction:**

Following its independence, the Algerian government has been proactive in safeguarding its resources, encompassing both natural and cultural assets. This led to the nationalization of energy resources and the valuation and classification of cultural properties. However, mere classification proved insufficient, prompting the exploration of additional strategies such as conducting archaeological excavations at sites initially identified by colonial powers.

These activities expanded and intensified but were not sustainable, primarily due to the civil strife during the 1990s. This tumultuous period gave rise to a strategic shift towards preventive archaeology, particularly in the recent five years following the cessation of a prolonged ethnic conflict. This emerging science, which prioritizes the protection of unexplored and vulnerable cultural heritage from the impacts of ongoing developmental projects, is vital as the nation recuperates from a decade-long crisis.

As Algeria confronts the challenges of road construction and urban development, which are integral to contemporary progress, it is imperative to delineate the characteristics of this burgeoning science, which, while ancient in the West, is still finding its footing in Algeria. The country has exerted considerable efforts to excel in this specialty, yet it has not fully achieved its potential. This introduction seeks to address several pivotal questions: What is the essence of this science? What efforts have been made by the Algerian state to thrive in this domain? What are the obstacles that have hindered the continuity of this scientific discipline?

In our exposition, we aim to elucidate the fundamental aspects of preventive archaeology, its objectives, and guiding principles. Furthermore, we explore various projects and agreements pertinent to this field and highlight the preventive excavations carried out at

Martyrs' Square. This site stands as a seminal scientific endeavor in the realm of preventive archaeology in Algeria, especially significant as the excavation persisted until the realization of the Central Station of the Algiers Metro.

## **1- Concept of Preventive Archaeology:**

### **1.1- Concept of Preventive Archaeology, Definition:**

Preventive archaeology is a strategic initiative aimed at safeguarding archaeological heritage from the potential harms of development projects.<sup>1</sup> It is not merely another branch within the broad spectrum of archaeology, nor does it function as an independent entity dedicated to the global or local protection of cultural heritage.<sup>2</sup>

Instead, it represents a proactive approach embedded within national strategies, explicitly designed to safeguard cultural and archaeological heritage. It also signifies a contemporary ideological shift in the domain of archaeological heritage protection, extending beyond mere rescue operations to require the involvement of relevant entities.

### **1-2- Concept of Preventive Archaeology, According to Legislators:**

Although the Algerian legislators have not provided a definitive and explicit concept of preventive archaeology, the state has embraced this approach as a method for protecting cultural heritage. This commitment is reflected in the adoption of the ICOMOS conventions initiated in the early sessions of 1963, when the Cultural Committee of the Council of Europe was commissioned to generate a compelling report on the protection and enhancement of historic buildings, archaeological sites, and, more broadly, the cultural heritage at risk of imminent threats across Europe.

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<sup>1</sup> European Preventive Archaeology Papers of the EPAC Meeting, Vilnius, 2004, National Office of Cultural Heritage / Council of Europe, 2007, p12

<sup>2</sup> Belkandouz, Nadia, "Preventive Archaeology: Its Concept and Directions," Journal of Archaeological Studies, Volume 14, Number 01, 2016, p71.

## **2- The Importance of Preventive Archaeology:**

The value of preventive archaeology is underscored by its capacity to conserve cultural heritage that is otherwise vulnerable and likely to vanish due to sustainable development projects. This is particularly evident in the degradation observed during the construction of the East-West National Highway, which posed significant risks to archaeological sites. Most sites along this route were compromised, with only a select few benefiting from rescue excavations.

These urgent excavations not only facilitated the preservation of archaeological artifacts but also allowed the continuation of the highway project by mitigating potential disruptions.

## **3- Principles of Preventive Archaeology:**

Preventive archaeology has its own set of priorities and principles, which are severely lacking in our country. These must be considered in order to establish it as a new, independently standing science.

### **3.1- Theoretical Principle:**

It is crucial to acknowledge and uphold the intrinsic value of cultural and archaeological heritage, particularly in the face of ongoing national developments such as road construction, and the expansion of transportation and housing sectors. These sectors represent insidious threats to our cultural heritage.

### **3-2- Legislation:**

The legislative framework in Algeria concerning the protection of cultural heritage, including punitive measures, is currently inadequate. Article 04-98, for instance, has become outdated and necessitates revision to align with the country's evolving needs. Moreover, international laws, though recognized, are seldom enforced or practiced within the nation.

### **3-3- Institutional Building:**

There is a pressing need to establish dedicated institutions that specialize in preventive archaeology. These institutions should focus on the funding and advancement of this field, taking cues from Western practices to stay abreast of contemporary challenges and safeguard cultural heritage against development-related threats.

### **3-4- Financial Funding:**

Funding remains a significant challenge in the realm of archaeology, particularly for preventive archaeology. Despite its importance, this field has yet to secure dedicated institutional support or recognition as a distinct scientific discipline or strategic approach for the protection of cultural heritage. This is evident despite the presence of two research centers under the Ministry of Culture: the National Center for Archaeological Research and the National Center for Prehistoric Research.

### **4-The Beginnings of Preventive Archaeology in Algeria:**

The genesis of preventive archaeology in Algeria was significantly influenced by international conventions and collaborative efforts aimed at safeguarding cultural heritage. The foundational moment occurred in November 1968 when UNESCO endorsed a set of recommendations designed to preserve cultural properties imperiled by public development projects.<sup>3</sup>

This initiative was further solidified by the European Convention signed on May 6, 1969, in London. Recognized as the inaugural European treaty focusing on the protection of archaeological heritage, this convention was ratified by twenty-one countries and underscored the collective responsibility to shield archaeological sites from potential destruction.<sup>4</sup>

Subsequently, the Cultural Heritage Convention, addressing all forms of threats including those from developmental projects,

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<sup>3</sup> Belkandouz, Nadia, "Preventive Archaeology: Its Concept and Directions," *Journal of Archaeological Studies*, Volume 14, Number 01, 2016, p71.

<sup>4</sup> Hadrach, Charifa, "Strategy of Preventive Archaeology After Twenty-Five Years of Application - An Analytical Study," *Forum of Archaeological Heritage Journal*, Issue Six, p165.

advocated for the adoption of systematic strategies for heritage protection. In 1990, the International Convention on the Management of Archaeological Heritage, orchestrated by ICOMOS, acknowledged that developmental endeavors posed the most significant threat to cultural heritage.<sup>5</sup>

This recognition paved the way for the Malta Convention on January 1, 1992, which played a pivotal role in defining the principles of preventive archaeology and establishing its scientific underpinnings.<sup>6</sup> In 1988, the European Council initiated a "Selected Committee of Experts on Archaeology and Planning," charged with the responsibility to review and articulate the consensus reached based on the unique needs of European archaeological heritage.<sup>7</sup>

Notably, the Vilnius Convention, convened in 2004 in Lithuania, laid down the foundational principles of preventive archaeology, aiming to fortify cultural heritage against the hazards posed by developmental projects.

### **5- Objectives of Preventive Archaeology:**

The primary aim of preventive archaeology is to safeguard the cultural heritage that lies buried beneath areas undergoing urban expansion and various developmental projects, such as the construction of roads and dams.<sup>8</sup> Beyond this explicit goal, preventive archaeology also serves more nuanced purposes. One key objective is to mitigate the unemployment challenges faced by archaeologists by integrating them into major construction projects, thereby creating new job opportunities.

Additionally, preventive archaeology acts as a bulwark against those who threaten cultural heritage, including smugglers and indiscriminate explorers of artifacts. Such individuals often cause

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<sup>5</sup> Abdel Baki, Ibrahim, "Cultural Heritage in the Contemporary Arab City," Center for Planning and Architectural Studies, p116.

<sup>6</sup> Willems, Willem J-H, "On the Genesis of the Malta Convention," *Archéopages: Archaeology and Society*, Special Issue, February 2008, p126 [Online] Available at: <http://journals.openedition.org/archeopages/888>

<sup>7</sup> European Preventive Archaeology, op. cit, p13.

<sup>8</sup> SOUQ, F., "Expert Report on the Archaeological Evaluation Project: Lalahoum (Icosium) Euro-Maghreb Workshop," pp. 81-83.

irreparable damage to cultural heritage out of ignorance or in pursuit of profit, thus obscuring historical identities and complicating research efforts by destroying stratigraphic layers and demolishing significant features that are otherwise known exclusively to archaeologists.

## **6- Conferences, Agreements, and Exchange of Expertise:**

To ensure the success of this project, the Algerian state, led by the Ministry of Higher Education and Scientific Research and the Ministry of Culture, has implemented several initiatives, internships, and international agreements, which can be summarized as follows:

### **6-1- The Euro-Maghreb Workshop 2004:**

The event took place in Algiers on November 27-29, 2004, with the participation of representatives from UNESCO, the National Institute for Preventive Archaeology Research, Paul Valéry University (Montpellier, France), and the National Center for Archaeological Research in Algeria, along with researchers from Spain, Italy, Tunisia, Morocco, and Mauritania.<sup>9</sup>

The conference was held under the theme "Heritage, Regional Development, and Preventive Archaeology." The aim was to reaffirm each party's desire to keep pace with and adapt to the developments in cultural heritage in general and archaeological heritage in particular, both locally and internationally, in the context of urban expansion and development. The seminar concluded with a primary goal of mastering and controlling the strategies of preventive archaeology and establishing its principles, particularly in Algeria and generally in the participating countries.<sup>10</sup>

### **6-2- The International Meeting at the University of Tlemcen, 2004:**

In December 2004, Abi Bakr Belkaid University in Tlemcen hosted a pivotal scientific meeting that gathered distinguished members from the National Institute of Preventive Archaeology Research, esteemed professors and researchers from Paul Valéry University in Montpellier, France, esteemed representatives from the

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<sup>9</sup> Ibid, pp. 81-85.

<sup>10</sup> Filali, Jazia, "Strategy of Preventive Archaeology in Algeria," previous article, p155.

French Embassy in Algeria, along with a diverse academic assembly from Tlemcen including students, professors, and administrative staff.

This significant gathering culminated in the formulation and ratification of a cooperative agreement between Abi Bakr Belkaid University and the National Institute of Preventive Archaeology. This agreement, spanning from 2007 to 2010, was designed to facilitate collaborative training endeavors targeting professors and students within the Archaeology Department.<sup>11</sup>

### **6-3- Training of Algerian Ministry of Culture Officials in France:**

Under a collaborative framework established between the Algerian Ministry of Culture and the Interregional Base in Nîmes, France, a training initiative in 2007 catered to officials from the National Agency for Archaeology and Protection of Sites and Historic Monuments (formerly) along with their counterparts from the Central Administration of the Algerian Ministry of Culture. The training program, conducted in southern France, encompassed both theoretical and practical field sessions, extending over a month at the Interregional Base in Nîmes.<sup>12</sup>

### **6-4- Training of University of Tlemcen Professors in France:**

In accordance with the agreement referenced previously, two professors from the Archaeology Department at the University of Tlemcen engaged in a specialized training program from March 27 to April 25, 2007, at the same venue in France. This program was dedicated to imparting the foundational principles of preventive archaeology.<sup>13</sup>

### **6-5- Hosting INRAP Officials to Train Archaeology Students in Tlemcen:**

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<sup>11</sup> National Institute of Preventive Archaeological Research (France) and Abou Bekr Belkaid University (Tlemcen), Framework Agreement on Cooperation in Training and Scientific Research in Archaeology.

<sup>12</sup> Filali, Jazia, "Preventive Archaeology in Algeria: An Analytical Study of its Preliminary Initiatives," Master's thesis in Preventive Archaeology, Department of History and Archaeology, Faculty of Archaeology, Abou Bekr Belkaid University, Tlemcen, 2011, p31.

<sup>13</sup> Filali, Jazia, "Algeria's Experience in Preventive Excavation," Journal of Archaeological Studies, Volume 14, Number 01, 2016, p83.

As a component of a bilateral agreement between the University of Tlemcen and the Interregional Database, a delegation of three officials from the National Institute of Preventive Archaeology Research was hosted at the University of Tlemcen. From March 15 to March 29, 2007, this team provided a comprehensive training session lasting fifteen days, aimed at enriching the educational experience of students in the Archaeology Department.

#### **6-6- Introduction of a New Specialization at Algerian Universities Known as Preventive Archaeology:**

Stemming from a series of workshops and meetings both domestically and internationally, the specialization of preventive archaeology was officially integrated into the curriculum of the Archaeology Departments at both the University of Tlemcen and the University of Algiers 02 at the Institute of Archaeology. Notably, the latter institution celebrated the graduation of a cohort of eight doctors specializing in preventive archaeology.

As part of an overarching strategy by the Ministry of Higher Education and Scientific Research to standardize and align academic specializations, four primary specializations in archaeology were maintained: Prehistoric Archaeology, Ancient Archaeology, Islamic Archaeology, and Conservation and Restoration, with the latter specialization leading to the establishment of the National School for the Conservation of Cultural Properties.

#### **7- Role of the National Institute of Preventive Archaeological Research in France in Establishing the Foundations of This Science:**

The National Institute of Preventive Archaeological Research in France has been instrumental in shaping the discipline of preventive archaeology, a field in which it is recognized as a global pioneer.<sup>14</sup> The

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<sup>14</sup> Tazkrit, Fatiha, Baba Abdel Razzaq, "Preventive Archaeology Between Protecting Archaeological Heritage and Continuing Development: Case Study of the Preventive Excavation

Institute's contributions are particularly noteworthy in its collaborative efforts with the Ministry of Culture and through its role in the preventive excavation at Martyrs' Square.

This significant dig revealed aspects of the history of the Lower Casbah and the ancient city of Icosium, Algiers<sup>15</sup> This excavation represents a dynamic equilibrium between the discovery and conservation of heritage and the economic development needs of Algeria, particularly highlighting the significance of this site to both residents and visitors of the capital.

## **8- Preventive Diagnoses in Algeria:**

This process was conducted through two diagnostics; the first was carried out at the current Central Station at Martyrs' Square in the capital, conducted in two phases: the first in 2007 and the second in 2009. The second diagnostic began in early 2010 at Mechouar Citadel in Tlemcen, as part of the preparations for the historical landmarks to host Tlemcen as the capital of Islamic culture for the year 2011.

### **8.1 Martyrs' Square (Currently a Metro Station) in the Capital:**

This diagnostic was performed by a joint team, combining Algerian experts and their counterparts from the French National Institute for Preventive Archaeology. The collaboration led to highly significant discoveries, following which an agreement was established between the Ministry of Culture and the aforementioned institute. This agreement resulted in a preventive excavation that uncovered historical features dating back to various civilizations that have passed through the Algerian peninsula.

### **8.2 Mechouar Citadel in Tlemcen:**

This diagnostic process was managed by Algerian officials under the oversight of a central inspector from the Ministry of Culture, starting at the end of 2009 and continuing until February 2010.<sup>16</sup>

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at Martyrs' Square," Algerian Journal of Security and Development, Volume 10, Issue 01, January 2021, p722.

<sup>15</sup> Filali, Jazia, "Strategy of Preventive Archaeology in Algeria (An Evaluative Study of its Preliminary Initiatives)," Forum of Archaeological Heritage Journal, Issue Six, p157.

<sup>16</sup> INRAP, Final Report on a Training Course in Preventive Archaeology in Montpellier, France, by Belhadje Maarouf (MC) and Rezki Chergui (CC) for the academic year 2006/2007.

Conducted in the central courtyard of the former colonial military hospital (previously a military barracks), the diagnostic work uncovered water basins adorned with colored ceramic tiles. These findings were subsequently restored and are now part of what is recognized as the "Royal Palace.

## **9- Preventive Archaeological Excavations in Algeria:**

### **9.1 Marcadal Site in Cherchell:**

This site was part of a local pilot project known as "Archaeology and Heritage Rescue Cherchell," under a joint initiative between the National Agency for Archaeology and Protection of Sites and Historical Monuments and the French National Institute for Preventive Archaeological Research.<sup>17</sup>

Although the National Agency was dissolved in 2005 and succeeded by the National Office for the Management and Utilization of Protected Cultural Properties, the project aimed to conduct diagnostic and archaeological explorations at the Marcadal site in the coastal city of Cherchell. This initiative also leveraged leading French expertise in the field.

### **9.2 Lalla Setti Peninsula in the Lower Casbah (Algiers Capital):**

In the process of developing a four-story commercial center covering an area of 4,775 m<sup>2</sup> in the Wadi Quraysh municipality of the Lower Casbah of Algiers, significant archaeological discoveries were made. These explorations unearthed Lalla Setti Island and Ayalah Square, dating from the Ottoman period, along with other significant archaeological finds.

The project involved a collaborative team of Algerian and French researchers who conducted laboratory analyses of the artifacts and compiled a comprehensive scientific report on the findings. This allowed the development project to proceed while carefully avoiding disruption of the site, which holds considerable historical significance for the capital.<sup>18</sup>

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<sup>17</sup> Official Journal of the People's Democratic Republic of Algeria, Volume 2005.

<sup>18</sup> Archives Service of the Municipality of Wadi Quraysh.

### **9.3 Martyrs' Square Excavation in the Capital:**

During the extension of the Algiers Metro line, significant historical artifacts were discovered at the designated location for the central station and the line's terminus at Martyrs' Square. This discovery prompted an immediate halt to construction activities by the supervising Ministry of Transport and Algiers Metro, the company overseeing the project.

A collaborative team from the National Center for Archaeological Research and the French National Institute for Preventive Archaeology was assembled to conduct extensive archaeological explorations. These investigations delineated the historical periods associated with the site and mapped its spatial boundaries across an estimated area of 3000 m<sup>2</sup>. The excavation, which spanned from 2013 to 2015,<sup>19</sup> posed significant challenges due to its location within the densest urban area of the capital.

### **10- Challenges of Preventive Archaeology in Algeria:**

Preventive archaeology, like other scientific disciplines, encounters several challenges, including:

- Funding Problem:** Sufficient funding is crucial for supporting the basic needs of excavation teams, such as equipment, lodging, and sustenance.
- Legal Fragility:** The absence of definitive legislation outlining the roles and responsibilities of preventive archaeology complicates the establishment of this science's fundamental characteristics.
- Archaeological Finds:** Without a dedicated institution to manage this specialty, valuable archaeological finds are often mishandled or lost. Research teams are responsible for excavating, documenting, and delivering finds to supervisory bodies, typically cultural directorates, which lack appropriate facilities for storing these artifacts. Furthermore, the integration of these finds into museums without

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<sup>19</sup> Stiti K, and Souq F, Preliminary Report, Stabilization of Data from the North Well Area (zones 04-05), Algeria: Ministry of Culture of Algeria and INRAP Mediterranean.

detailed scientific evaluation diminishes their potential contribution to the archaeological community.

•**Scientific Quality:** The timing of archaeological excavations is often constrained by the schedules of associated development projects, placing researchers under pressure to expedite their analyses, which can lead to unintentional errors or oversights that may distort the archaeological record.

•**Disappearance and Vanishing of Archaeological Sites:** Sites located in areas without monitoring are particularly vulnerable. Developers may fail to report finds to avoid construction delays, influenced by the legal principle of preemption, which prioritizes public development over private rights. Consequently, decisions are often made to proceed with development projects at the cost of preserving archaeological sites.

#### **11- The Current State of Preventive Archaeology in Algeria:**

- Absence of legislation that establishes the foundations of this specialty in Algeria, despite the country's ongoing sustainable development and major projects.
- Lack of an institution dedicated to adopting this specialty, creating jobs, and simultaneously protecting the buried cultural heritage.
- Closure of the specialty under the law of aligning specializations adopted by the Ministry of Higher Education and Scientific Research.
- The majority of graduates in preventive archaeology face unemployment, except for a few who have completed their education at the doctoral level, and they are numerable on one's fingers.
- Monopolization by the National Center for Archaeological Research over all rescue or preventive excavations.

#### **12- Conclusion:**

The Algerian state is actively engaged in efforts to secure and protect its archaeological sites, particularly those that remain buried and possess exceptional value to humanity. These endeavors have

catalyzed the adoption of preventive archaeology, a contemporary scientific approach that is intrinsically linked to the nation's development and urban expansion initiatives. However, despite the critical importance of this discipline, preventive archaeology in Algeria has not yet achieved the desired level of implementation envisioned by the authorities.

**- References:**

1. Abdel Baki, Ibrahim, **"Cultural Heritage in the Contemporary Arab City,"** Center for Planning and Architectural Studies, p116.
2. Archives Service of the Municipality of Wadi Quraysh.
3. Belkandouz Nadia, **"Preventive Archaeology: Its Concept and Directions,"** **Journal of Archaeological Studies**, Volume 14, Number 01, 2016, p71.
4. Filali Jazia, **"Strategy of Preventive Archaeology in Algeria (An Evaluative Study of its Preliminary Initiatives),"** **Forum of Archaeological Heritage Journal**, Issue Six, p157.
5. Filali Jazia, **"Algeria's Experience in Preventive Excavation,"** **Journal of Archaeological Studies**, Volume 14, Number 01, 2016, p83.
6. Filali Jazia, **"Preventive Archaeology in Algeria: An Analytical Study of its Preliminary Initiatives,"** Master's thesis in Preventive Archaeology, Department of History and Archaeology, Faculty of Archaeology, Abou Bekr Belkaid University, Tlemcen, 2011, p31.
7. Hadrach, Charifa, **"Strategy of Preventive Archaeology After Twenty-Five Years of Application - An Analytical Study,"** **Forum of Archaeological Heritage Journal**, Issue Six, p165.
8. SOUQ, F., **"Expert Report on the Archaeological Evaluation Project: Lalahoum (Icosium) Euro-Maghreb Workshop,"** pp. 81-83.
9. Stiti K, and Souq F, Preliminary Report, Stabilization of Data from the North Well Area (zones 04-05), Algeria: Ministry of Culture of Algeria and INRAP Mediterranean.

10. Tazkrit Fatiha, Baba Abdel Razzaq, "Preventive Archaeology Between Protecting Archaeological Heritage and Continuing Development: Case Study of the Preventive Excavation at Martyrs' Square," **Algerian Journal of Security and Development**, Volume 10, Issue 01, January 2021, p722.
11. Willems, Willem J-H, "On the Genesis of the Malta Convention," **Archéopages: Archaeology and Society**, Special Issue, February 2008, p126 [Online] Available at: <http://journals.openedition.org/archeopages/888>
12. European Preventive Archaeology Papers of the EPAC Meeting, Vilnius, 2004, National Office of Cultural Heritage / Council of Europe, 2007, p12.
13. ICOMOS, **International Charter on the Conservation and Restoration**, ICOMOS, Paris; SD.
14. INRAP, Final Report on a Training Course in Preventive Archaeology in Montpellier, France, by Belhadje Maarouf (MC) and Rezki Chergui (CC) for the academic year 2006/2007.
15. National Institute of Preventive Archaeological Research (France) and Abou Bekr Belkaid University (Tlemcen), **Framework Agreement on Cooperation in Training and Scientific Research in Archaeology**.
16. **Official Journal of the People's Democratic Republic of Algeria**, Volume 2005.