

French Nuclear Explosions in the Algerian Sahara Between 1960 -1966 AD and International Reactions

¹**Dr. HOUTIA Mohammed**

¹University of Ahmed DRAIA Adrar, Algeria,

Email: mohammedhoutia@univ-adrar.edu.dz

²**Dr. Boussalim Salah**

²University of Ghardaia, Algeria,

E-mail: boussalim.salah:@univ-ghardaia.dz

Received:20/07/2025

Accepted: 05/02/2026

Published: 06/07/2026

Abstract:

The French nuclear detonations in the Reggane region (Hamoudia) of the Algerian desert are considered one of the silent crimes against humanity that continue to have a devastating impact on the environment. This catastrophe began with the detonation of the first bomb on February 13, 1960, the power of which exceeded four times that of the Japanese Hiroshima bomb. This event was followed by mixed international reactions condemning those nuclear tests and their aftermath.

Key words: French nuclear detonations, crimes, Reggane, effects of the explosions, international stances.

- Introduction:

French colonial crimes remain a stain on the forehead of a nation that has long chanted slogans of respecting human rights through its revolutionary principles: Liberty, Equality, and Fraternity. These principles, however, remained mere ink on paper and never touched reality in its colonies, foremost among them Algeria. France committed massacres against its people and employed various hellish methods to crush any attempt that might disrupt its plans and repressive policies.

French colonialism persisted in exploiting all means to achieve its goals. Among those crimes that can neither be forgotten nor erased from memory are the French colonial nuclear tests in Reggane. Claiming it was the "Desert of Thirst," France chose the Hamoudia region as a suitable ground to detonate its nuclear bomb, aiming to secure entry into the global nuclear club and conduct scientific research.

At the scheduled time of 7:04 AM on February 13, 1960, the nuclear bomb "Gerboise Bleue" (The Blue Jerboa) was detonated. More than 42,000 Algerians were used as human guinea pigs to measure nuclear radiation. This was followed by the remaining "Jerboa" tests—White, Red, and Green—along with thirteen (13) surface explosions in Reggane, leaving catastrophic and lasting effects on the environment and all its components (humans, animals, and plants).

- The Historical Background of the Nuclear Detonation:

The possession of nuclear weapons guarantees a distinguished status for nations. Consequently, some countries formed what is known as the "Nuclear Club," while others managed to acquire nuclear weapons and benefit from nuclear technologies outside this club.

Meanwhile, another group of nations possesses highly advanced nuclear capabilities that qualify them to acquire nuclear weaponry. The first nuclear detonation over the cities of Hiroshima and Nagasaki by the United States of America signaled the dawn of a new era in international relations: the era of the nuclear arms race.

- French Nuclear Detonations Under Israeli Cover:

- Scientific and Technical Reasons: The reasons for cooperation stem from a set of scientific and technical issues, summarized as follows:

- The French side's need to produce heavy water, purchase Dostrovsky's patent, and acquire expertise in extracting uranium from phosphate ores, as well as benefiting from Israeli expertise in missile capabilities.
- Gaining access to leaked American expertise flowing through Israel, whether through cooperation agreements with the United States or other means provided by Zionist entities, Jewish and Zionist scientists, and other channels. This was particularly crucial in the fields of nuclear fusion reactions—which were mastered by Jewish scientists in the United States—or through cooperation with South Africa to obtain uranium and develop missile production, or with Germany, alongside Israeli expertise in the missile field and the development of nuclear-warhead carriers and nuclear submarines.
- Securing Zionist funds worldwide to support France's economic situation.

- Political Reasons: We summarize them as follows:

- Israel's support for France regarding the Algerian issue, as well as its participation in the Tripartite Aggression against Egypt during the 1956 Suez War.
- Legitimizing the existing cooperation between French and Israeli scientists. Both countries had not signed the nuclear test ban treaty, and this cooperation aimed to counter the embargo imposed by the United States and the Soviet Union on both parties regarding the proliferation and possession of nuclear weapons, as well as acquiring nuclear fuel, its raw materials, and its technologies.
- The participation of a large number of French Jews in the French Resistance against Nazi occupation, and the migration of many French Jewish scientists to Israel after its establishment. Added to this was the role of Jewish immigrants from North Africa, especially Algerian Jews who migrated either to France or Israel, forming a pressure lobby to finalize extensive cooperation.
- The sympathy of the French Socialist Party leadership, foremost among them Léon Blum himself, toward Israel.

French-Israeli cooperation was not merely shaped by the strategies of both parties toward possessing nuclear weapons alone; rather, it extended to achieving their joint policy aimed at preventing Arabs from possessing weapons of mass destruction (WMDs) through a series of aggressive and military interventions to destroy any Arab nuclear project¹.

- The Location of Reggane:

¹ *Abdel-Kadhem Al-Aboudi, Yarabie Reggane: France's Nuclear Crimes in the Algerian Desert, Oran: Dar El-Gharb for Printing, Publishing and Distribution, 2000, pp. 73, 75*

Reggane is located in the far southwest of Algeria and is one of the districts (Daïras) of the Adrar Province. It is considered the last major station on National Highway No. 6. It is bordered to the north by the Zaouiet Kounta district, to the south by the Tamanrasset Province and the Bordj Badji Mokhtar district, to the east by the Aoulef district, and to the west by the Republic of Mauritania. Its area is estimated at 124,298 km²¹.

In 1957, the Hamoudia region—located 65 km from Reggane—was chosen as the main base to monitor the execution of nuclear tests. Consequently, the task of constructing its primary facilities was assigned to the Second Division of the French Army. No sooner had the construction ended than the nuclear base grew to house more than ten thousand workers, including 3,500 Algerians, most of whom were brought from detention centers or nearby residential areas.

The French nuclear base was named the Saharan Military Nuclear Testing Center (CSEN: Centre Saharien d'Expérimentations Militaires). It was divided into two sections: the Technical and Administrative Services and the Military Framework in Reggane, while the military command was headquartered in Hamoudia, which was tasked with direct oversight of operations, conducting technical tests, and monitoring radiation².

France violated the sanctity of both the land and humankind with crimes beyond comparison. It deliberately pursued a policy of systematic blackout regarding the true number of victims, the progression of the tests, the quantities of waste left behind by the nuclear detonations, and the burial operations of radioactive waste. It concealed related statistics and banned objective scientific publishing to suppress information needed for scientific research to trace environmental impacts and assess the real and future damage facing the region and its vital components. What was officially announced was the detonation of four surface bombs, summarized as follows³:

- Gerboise Bleue (The Blue Jerboa):

Some witnesses recall that prior to detonating the atomic bomb, French military personnel conducted a census of buildings and inhabitants. On the day of the detonation, they ordered them to leave their homes and seek shelter under mere blankets. France did not stop there; it used 150 prisoners, pregnant women, children, and the elderly as human subjects. It also utilized specimens of various animals for this purpose, including camels, goats, dogs, rabbits, cats, 600 rats, as well as some reptiles, insects, birds, and plants⁴. This first test was postponed several

¹ Amar Djeflal et al., *The Use of Internationally Prohibited Weapons: Nuclear Weapons as a Model, El Biar: National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2007, p. 57*

² Touati Dahmane, Meglati Abdallah, and Remoum Mahfoud, *The Liberation Revolution in the Touat Regions 1956–1962, Adrar: Publications of the Moulay Slimane bin Ali Association for the Protection of the Liberation Revolution Monuments, 2004, p. 107*

³ Abdel-Kazim Al-Aboudi, "French Nuclear Testing and the Risks of Radioactive Pollution on Health and the Environment in the Short and Long Term," *Journal of Sources (Majallat Al-Masadir)*, No. 1, 1419 AH - 1999 AD, p. 184.

⁴ Abdel-Kazim Al-Aboudi and Baba Ahmed Mohamed Bay, "The Health and Environmental Situation in the Regions of Reggane and In Ekker, 50 Years Before and After the French Nuclear Detonations in the 1960s," *Proceedings of the Second International Symposium on the Impacts*

times due to bad weather. On Saturday, February 13, 1960, the first French atomic bomb detonated at 07:04:20 AM local time¹.

According to Professor Yves Rocard, the bomb of February 13, 1960, named 'Gerboise Bleue' (the Blue Jerboa), was a failure. The measurement results conducted on the ground by the testing department at ground zero proved to be disappointing, contrary to what was officially announced. The dispersion of radioactivity did not proceed as planned. Furthermore, there were light southeastern winds that carried radioactive dust which was halted at the time of the explosion's limits, according to General Charles Ailleret. Consequently, a warning was issued regarding the presence of radioactivity in Hamoudia, at the advanced firing center located 15 kilometers from ground zero.

- Gerboise Blanche (The White Jerboa):

The detonation of Gerboise Blanche occurred on April 1, 1960, and was conducted on a concrete ground pad. Its consequences were extremely dangerous and highly polluting to the environment. A crater with a diameter of 50 meters and a depth of 10 meters was observed, dug out by the explosion and later filled with sand. This explosion caused massive contamination .Gerboise Rouge (The Red Jerboa):

According to Professor Rocard, the bomb detonation took place on December 27, 1960, atop a tower, where the altitude was reduced to 50 meters, and the blast yield was estimated at about 3 kilotons.Gerboise Verte (The Green Jerboa):

The detonation occurred on April 25, 1961, atop a tower under highly ambiguous political circumstances².

Here is the professional English translation of the provided text, formatted for clarity and maintaining the academic structure:

- Internal and External Reactions to the French Nuclear Detonation:

A. The Position of Algeria:

Following the nuclear detonation, the Minister of Information in the Provisional Government of the Algerian Republic (GPRA) declared:

"The French atomic explosion carried out in our Sahara on February 13, 1960, is yet another crime to be added to the list of French atrocities. It is a crime against humanity and a defiance of the global conscience, which expressed its sentiment in a resolution adopted by the United Nations General Assembly... This crime by France bears the hallmark of colonial deception, contemptuous of all human values.

Together with all the peoples of the earth, we denounce the action of the French government, which exposes African nations to the dangers of atomic testing. We recognize that the French bomb carries a specific message: one of intimidation and threat directed at the liberation movements in Africa. The atomic explosion in Reggane adds nothing to France's power, as the

of Nuclear Testing in the World: The Algerian Desert as a Case Study (Algiers: Publications of the National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2011), pp. 71–72.

¹ Victor Malo Silva, *Reggane My Love, Algeria: Éditions Aden, 2013, p. 149*

² Amar Mansouri, *El-Djeich Magazine, No. 59, pp. 37, 39*

use of brute force is the only policy Africa has ever known from France. Rather, the Reggane explosion strips France of whatever remaining reputation it might have held in the world¹.

Similarly, on March 31, 1961, Ahmed Tawfik El-Madani commented from the League of Arab States, saying: "The issue of the French atomic bomb explosion directly affects Algeria first, then Morocco, followed by the rest of Africa, and indeed the entire world².

B. Reactions of Arab States

- **Yemen:** President Ali Saleh Abdullah expressed his strong condemnation of the French nuclear detonation in the Sahara to an Egyptian radio correspondent, stating: "I join the voice of Yemen with that of Algeria and all independent Arab nations to denounce the action perpetrated by France against Algeria. I also declare that Yemen stands ready to support the Algerian people, leveraging its military capabilities for this cause. The Yemeni people are fully prepared to make sacrifices to ensure respect for the Arab nation³.
- **Egypt:** The United Arab Republic condemned the French government's aggression against Algeria. Dr. Abdel Qader Hatem, Minister of Culture and National Guidance, stated in a broadcast by the Middle East News Agency: "As long as French nuclear testing constitutes a clear act of aggression against the human race, its aspirations, and its future, it is deemed a flagrant violation of the rights of the Algerian people⁴.
- **Iraq:** Baghdad Radio broadcasted a statement from the Iraqi Media Agency by the official spokesperson for the Iraqi Ministry of Foreign Affairs, which noted: "The nuclear test conducted by France on Algerian soil sparks astonishment and deep concern, not only across the region but worldwide. This atomic test is a clear violation of Algeria's sovereignty and the security of its people. Furthermore, it constitutes a defiance of peace-loving nations and a challenge to the aspirations aimed at ending the nuclear arms race—a race capable of triggering a nuclear war. Consequently, the Iraqi government and its people cannot but declare their absolute solidarity with the government and people of Algeria, standing by them in all steps deemed necessary to defend their nation and fortify their sovereignty."
- **Morocco:** Following the detonation of the bomb, Morocco terminated the diplomatic agreement signed with France on May 28, 1956. This termination meant that the French government would no longer represent Morocco in countries where Morocco lacked embassies. Additionally, the Moroccan ambassador to Paris was recalled⁵.
- **Libya:** In the capital, Tripoli, the Libyan government submitted a strongly worded protest memorandum to the French Embassy against the nuclear detonation in the Algerian Sahara. Meanwhile, Libyan Prime Minister Dr. Mohieddin Fekini sent a

¹ *El Moudjahid*, 22/02/1960, p09

² *Ahmed Tawfik al-Madani, Memoirs of a Life of Struggle, Special Edition, Vol. 3, Algiers: Alem El-Maarefa for Publishing and Distribution, 2010), pp. 736-737*

³ *Bouazza Boudersaya, op. cit., p. 282*

⁴ *Chafia El Abdellaoui and Souad El Haddad, French Nuclear Tests in Algeria: Studies, Research, and Testimonies, 1st ed., El Biar: Publications of the National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2000, p. 30*

⁵ *Shafia Al-Abdallawi and Souad Al-Haddad, op. cit., p. 30*

telegram to Mr. Ahmed Ben Bella, expressing his government's solidarity with Algeria's legitimate stance in opposing these tests on its territory.

- **Lebanon:** Daily Lebanese newspapers expressed profound resentment and condemnation regarding France's detonation of the nuclear bomb in the Algerian Sahara. The newspaper *Al-Ansar* published a prominent headline titled "*The French Crime*," stating that French persistence in conducting nuclear tests serves as definitive proof that the De Gaulle government remains anchored in outdated imperialist ideologies.

C. Reactions of African States:

- **Guinea:** Conakry Radio announced that Guinean-French relations would not endure if France persisted with its policies in the Algerian Sahara by continuing its nuclear testing.
- **Ghana:** President Kwame Nkrumah took a firm and bold stance against the French test by issuing an order to freeze the assets of all French citizens in Ghana until the full consequences and environmental impacts of the atomic detonation were determined. Public outrage was equally intense in the Ghanaian capital; massive crowds staged demonstrations throughout the streets of Accra, expressing their deep anger over French policies on African soil. Protesters carried anti-French banners, some of which read: "*The world wants food, not bombs*" (*Le monde veut la nourriture, non des bombes*). These widespread demonstrations were led by representatives from all social strata, including farmers, women, workers, and politicians, who collectively delivered a strongly worded letter of protest to the French Ambassador to Ghana.
- **Uganda:** The primary ruling party, the Uganda People's Congress (UPC), organized a popular demonstration in the capital, Kampala, to protest the French nuclear tests in the Algerian Sahara. A large crowd of approximately five hundred (500) protestors marched toward the French Embassy in Kampala, where they gathered and threw eggs at the embassy building to express their outrage over French violations against the Algerian people—specifically regarding the most dangerous event the African continent had witnessed: France's detonation of a nuclear bomb in the Algerian Sahara.
- **Ethiopia:** The *Voice of Ethiopia* newspaper wrote: "If France wishes to defy international public opinion and insists on continuing its nuclear tests, it should do so on its own territory, not on the African continent."

D. International Reactions

- **Japan:** The Japanese government in Tokyo formally protested to the French government regarding the ongoing nuclear testing in the Algerian Sahara. This protest was delivered by a representative of the Japanese Embassy in Paris directly to the French Ministry of Foreign Affairs.
- **Belgium:** In the capital, Brussels, approximately 15,000 protestors marched through the streets to voice their anger against French nuclear testing and to demand disarmament. A large number of Belgian political and trade union organizations participated alongside several foreign bodies. The demonstrators marched through the capital carrying banners hostile to French nuclear testing.
- **Bulgaria:** The ruling Communist Party in the capital, Sofia, expressed its indignation over the French nuclear tests in the Algerian Sahara. It categorized the act as a blatant defiance of the policy of neutrality pursued by the Algerian government. Through this

action, Bulgaria argued, France had defied international public opinion, the Algerian people, and all African nations, thereby reviving memories of its old colonial policies toward its former territories¹

- **Great Britain:** The UK viewed the event positively, believing that it could accelerate the Geneva negotiations aimed at limiting nuclear testing.
- **Germany:** West Germany described the news of the test as positive, noting that France's possession of atomic weapons would strengthen the North Atlantic Treaty Organization (NATO).
- **The Netherlands:** An official spokesperson for the Dutch Ministry of Foreign Affairs extended congratulations regarding the technical capabilities of French scientists. The spokesperson asserted that no nation could deny France the right to possess atomic weapons as long as no international law existed to prohibit such a right.
- **United States of America:** The Pentagon welcomed the test and praised the security and precautionary measures taken by France to ensure the safety of the region and the security of its inhabitants(!?). On February 17, 1960, President Dwight D. Eisenhower stated during a press conference that the French test was a natural development, expressing hope that the negotiations on limiting the nuclear arms race would reach a successful resolution.
- **Israel:** The scientific newspaper *Davar* wrote that the French test was joyful news for France and highly significant for the entire Western world.

On February 16, 1960, twenty-six nations convened to form an administrative committee tasked with managing the measures required to express global opposition to the French atomic bomb detonated in the Algerian desert. The committee was chaired by Mr. Abdel Rahman Adel of Sudan and comprised nine nations: Sudan, Morocco, Algeria, Tunisia, Japan, Lebanon, Ceylon (now Sri Lanka), Guinea, Ethiopia, and Afghanistan. It was assigned the responsibility of studying the possibilities of convening the UN Security Council and exploring methods to secure the majority required to call for an extraordinary session of the United Nations General Assembly.

However, during its meeting on February 19, 1960, this committee failed to influence the international community because the United Nations lacked the legal frameworks to regulate or prohibit nuclear testing. Furthermore, NATO backed the actions taken by the French authorities against the Algerian people.

This prompted Czechoslovakia, through its delegate Karel Kurka, to accuse France of obstructing the Disarmament Conference. Kurka was supported in this stance by the delegates of Bulgaria (Milko Tarabanov), India (Arthur Lall), Ethiopia (Imru), and Poland (Blusztajn). Canada also intensified its rhetoric, expressing absolute rejection of all nuclear testing worldwide, a position mirrored by the delegate of the Soviet Union (Semyon Tsarapkin)².

- **Conclusion:**

Based on the aforementioned, it is evident that French colonialism attempted to conceal the facts regarding the atrocities committed against the Algerian people through crimes involving the

¹ Bouazza Boudersaya, *op. cit.*, pp. 289-290.

² Chafia El Abdellaoui and Souad El Haddad, *op. cit.*, pp. 31-32.

deployment of internationally banned weapons. The nuclear detonations at Hamoudia represent but one link in this chain of criminal acts. France exploited a land that was not its own simply to gain entry into the global nuclear club, beginning with the detonation of the "*Gerboise Bleue*" (Blue Jerboa) bomb, which possessed a yield equivalent to three times that of the Hiroshima bomb, and continuing with a succession of atmospheric and underground detonations. These tests have left a devastating impact on the ecosystem, and to this very day, their toxic legacy continues to claim innocent lives.

Bibliography:

- Al-Aboudi Abdel-Kadhem, Reggane Yrabie: France's Nuclear Crimes in the Algerian Desert, Oran: Dar El-Gharb for Printing, Publishing and Distribution, 2000.
- Al-Aboudi Abdel-Kazim, "French Nuclear Testing and the Risks of Radioactive Pollution on Health and the Environment in the Short and Long Term," Journal of Sources (Majallat Al-Masadir), No. 1, 1419 AH - 1999 AD.
- Al-Aboudi Abdul-Kazim and Baba Ahmed Mohamed Bay, "The Health and Environmental Situation in the Regions of Reggane and In Ekker, 50 Years Before and After the French Nuclear Detonations in the 1960s," Proceedings of the Second International Symposium on the Impacts of Nuclear Testing in the World: The Algerian Desert as a Case Study (Algiers: Publications of the National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2011.

al-Madani Ahmed Tawfik, Memoirs of a Life of Struggle, Special Edition, Vol. 3, Algiers: Alem El-Maarefa for Publishing and Distribution, 2010.

- Chafia El Abdellaoui and Souad El Haddad, French Nuclear Tests in Algeria: Studies, Research, and Testimonies, 1st ed., El Biar: Publications of the National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2000.
- Djeflal Amar et al., The Use of Internationally Prohibited Weapons: Nuclear Weapons as a Model, El Biar: National Center for Studies and Research on the National Movement and the Revolution of November 1, 1954, 2007.
- Touati Dahmane, Meglati Abdallah, and Remoum Mahfoud, The Liberation Revolution in the Touat Regions 1956–1962, Adrar: Publications of the Moulay Slimane bin Ali Association for the Protection of the Liberation Revolution Monuments, 2004.
- Victor Malo Silva, Reggane My Love, Algeria: Éditions Aden, 2013.

Newspapers and Magazines:

- El Moudjahid, 22/02/1960.
- Mansouri Ammar, El-Djeich Magazine, Issue 59.