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**The prominence of nuclear threats in Tunisia**

The Republic of Tunisia is a country in Northern Africa. Bordered by Algeria to the west, and Libya to the southeast, it has been dealing with terrorism issues due to its porous borders. The suicide attack on a bus on November 24 2015 led the country to declare a state of emergency, which was extended on September 19 2016. Countering terrorism became a main concern for the Tunisian government. The country reached out to the international community for help, with the U.S. as its prime security partner. The country eventually became one of U.S. major non-NATO ally[[1]](#footnote-1). The same year, a National Counterterrorism Strategy was finalized, which aimed at fighting terrorism along four pillars: prevention, protection, follow-up, and response[[2]](#footnote-2). The instability in Libya gave rise to several terrorist groups, and Tunisia and Libya are currently working together to improve border security and regulate migration along the border. Nuclear terrorism however is less of a concern for Tunisia, since nuclear facilities are not widespread in the country. On the other hand, the severity of the terrorist threat makes the country vulnerable to nuclear terrorism, should nuclear facilities be implemented. It is therefore imperative to solve the issue of terrorism before thinking about developing nuclear facilities in Tunisia and exploiting nuclear energy, although nuclear energy could be an alternative that would help diversify Tunisia's energy sources.

**Nuclear energy as an alternative energy source**

Currently, Tunisia relies on natural gas, which accounts for 98.55% of its energy production. Fuel, gas and oil account for 0.08%, hydroelectricity 0.45%, and wind 0.92%. In 2014, Tunisia's gross energy production was 19 Terawatt hours. With an increasing power consumption and a decreasing natural gas reserves, Tunisia is seeking new energy sources to diversify its energy production. In 2031, the country's energetic demand is estimated to be 28.5 TWh, an increase of 50%. Therefore, the country is considering nuclear energy as an alternate source of energy. In 2006, a feasibility study was conducted in collaboration with the IAEA for the implementation of a nuclear program, but the study did not lead to any decision. The government is also evaluating the possibility of constructing a 600-1000 MWe nuclear plant that would cost 1.14 billion $US. The goal is that by 2023, nuclear energy would generate 13-20% of the country's energetic needs. So far, the conclusion about Tunisia's status in respect to nuclear technology is that "Tunisia has many years of experience in the field of peaceful uses of nuclear techniques and technologies" and that "the legislation and regulations in force in Tunisia reflect the existing nuclear activities," but "generally fail to meet the international standards." [[3]](#footnote-3)

**Tunisia and Iran**

When it comes to Tunisia's views on Iran's nuclear program, the population has a divided opinion, with 40% in favor of Iran acquiring nuclear weapons and 47% opposed[[4]](#footnote-4). Similarly, 42% of the Tunisian population is in favor of strengthening Iran's economic sanctions, while 48% are against it. On the other hand, former Tunisian President, Moncef Marzouki, voiced his support for the Joint Comprehensive Plan of Action established between Iran and the G5 plus Germany. A factor to keep in mind is that Tunisia and Iran are on good terms. Not only do they have similar views about conflicts occurring in the region, they also signed an agreement for cooperation in air, sea, and road transportation in 2006. In 2014, the first Iranian cultural week was held in Tunisia, as both countries signed two cooperation agreements in the fields of music and book translation, and both countries are now seeking for ways to strengthen their economic ties. Although Tunisia is supportive of Iran, it has nonetheless ratified the Non-Proliferation Treaty and is a member of the African Nuclear Weapon-Free Zone Treaty. Therefore, Tunisia could influence Iran to only use nuclear technology for peaceful purposes.

**Tunisia's means of fighting terrorism**

In response to the 2015 terrorist attacks, the Tunisian Congress passed a new counterterrorism law. The law modernizes Tunisia's security legislation and offers a better balance between human rights and fighting terrorism[[5]](#footnote-5). There are also two government bodies in charge of detecting and preventing terrorist acts: The Ministry of Interior and the Ministry of Defense. So far, they have been concentrating their efforts in military exclusion zones[[6]](#footnote-6) in mountainous regions near the Algerian border and part of the Libyan border, where illegal migrants and terrorists are likely to cross the border, since it is a buffer zone between the three countries. Security forces were considered more effective in 2015 compared to the previous year, as Tunisia made countering terrorism a priority. The country also possesses an Automated Fingerprint Identification System with fingerprints records for identification of criminals. Furthermore, the country also possess a strategy to counter the financing of terrorism. Its penal code allows the seizure of assets and property related to terrorism. Tunisia also made an effort to improve its socioeconomic conditions through economic development and educational programs in order to prevent radicalization which would lead to terrorist acts. The country also participates in multinational efforts to counter terrorism, such as the Arab League. Ultimately, Tunisia's efforts to counter terrorism seem to have some effects and its existing policies regarding the matter will serve as a solid base to fight nuclear terrorism, should the need arise. Concurrently, by eliminating terrorism, Tunisia also prevents the eventuality of nuclear terrorism.

**Nuclear non-proliferation and nuclear power**

So far, Tunisia has worked in collaboration with several countries for nuclear non-proliferation. In 2006, the country signed a cooperation agreement on peaceful use of nuclear energy with France. In 2015, a nuclear cooperation agreement was signed with Russia, concerning the transfer of Russia's nuclear knowledge of nuclear technology for peaceful purposes to Tunisia. A further intergovernmental agreement with Russia was signed in 2016. Tunisia was also praised by IAEA director general, Mr. Amano, for generously sharing its expertise in the nuclear field with other countries in Francophone Africa, by providing training and hosting technical workshops in cancer control and radiation protection for example. Presently, Tunisia does not possess nuclear weapons. Recognized as a Non-Nuclear Weapon State, it has also ratified the Comprehensive Test Ban Treaty, which prohibits all nuclear explosions, for civilian or military purposes alike. On the subject of nuclear power, Tunisia's approach has been to cooperate with more developed countries and exchange knowledge about nuclear technology. Before implementing nuclear facilities, the country wants to make sure that it is a viable solution by conduction feasibility studies.

**Tunisia on Iran's nuclear program**

Tunisia, being an example of peaceful use of nuclear technology, is more likely to look favorable upon the disarmament of Iran and the implementation of the Joint Comprehensive Plan of Action. It can also use its political and economic ties with Iran to incite the latter to abandon research on nuclear weapons.

**Solutions**

Tunisia already has an adequate plan of action to counter terrorism, and by eliminating terrorism, it would also reduce the eventuality of nuclear terrorism. Because the country is highly affected by radical movements originating in Libya, a better security along its borders is essential, as well as a closer collaboration with Algeria and Libya, who experience similar issues in their respective countries. In sum, the increase of security along Tunisia's borders will help reduce the number of potential terrorists that get smuggled in the country. Another solution that the country has already touched upon is the bettering of the country's socioeconomic conditions to prevent radicalization, by implementing educational programs and economical development. Indeed, education provides tools for critical thinking, and will make the Tunisian population less subject to being influenced by radical views. Education can also increase people's chances of acceding to a professional career, giving them a sense of purpose that they might have sought through radicalization otherwise. The bettering of the country's socioeconomic conditions also contributes to attenuate the feeling of frustration that a population might have in regards to their helpless situation.

Even though Nuclear Power can be a good alternate source of energy for Tunisia, it is not the only way to go. Indeed, solar energy also proves to be a viable solution for the country. Each year, the country has a sunlight radiation potential of 1800 kWh/m² per year in the North to 2600kWh/m² per year in the South. So far, the country's exploitation of renewable energy only accounts 6% of the capacity provided by its resources. In 2009, the Tunisian adopted the "Plan Solaire Tunisien" with the goal of producing 4.9 Gigawatt of renewable energy capacity by 2030, through the use of photovoltaic system, solar water heating systems and solar concentrated power units[[7]](#footnote-7). The total cost of the project is estimated at $2.5 billion, with funds originating from National Fund, public sector, private sector, and international cooperation. Another project that has been launched by the country is the Tunisian Solar Program, which aims at providing financial help for families to purchase Solar Water Heater. The program includes loans by the government, or a partial reimbursement covering up to 20% of the cost of Solar Water Heaters. Another project for solar exploitation, one of a very ambitious nature, is the installation of solar plants in the Sahara desert, which could generate a potential of 2.5GW of electricity on 100km2 of desert by 2018. However, that project is still at its fundraising stage.

When it comes to Iran's nuclear program, Tunisia could exercise a friendly pressure on Iran to incite the former to comply to the demands of the Joint Comprehensive Plan of Action, using its economic ties to the country. However, this might be a delicate matter, as Iran is pretty set on acquiring its own right to developing its own nuclear weapons and Tunisia would not want to endanger its relations with the former country.

1. Major ally that is not part of the North Atlantic Treaty Organization [↑](#footnote-ref-1)
2. Embassy of the United States, *Country Reports on Terrorism*. http://www.state.gov/documents/organization/258249.pdf (accessed November 7 2016)  [↑](#footnote-ref-2)
3. BELMABROUK, Hafedh. "Nuclear Power Profile of Tunisia" *Conference held in Vienna, 17-21 March 2013.*  [↑](#footnote-ref-3)
4. PewResearchCenter, *Global Views of Iran Overwhelmingly Negative.* http://www.pewglobal.org/2013/06/11/global-views-of-iran-overwhelmingly-negative/ (Accessed November 7 2016). [↑](#footnote-ref-4)
5. Embassy of the United States, *Country Reports on Terrorism*. http://www.state.gov/documents/organization/258249.pdf (accessed November 7 2016)  [↑](#footnote-ref-5)
6. Embassy of the United States, *Country Reports on Terrorism*. http://www.state.gov/documents/organization/258249.pdf (accessed November 7 2016)  [↑](#footnote-ref-6)
7. ZAFAR, Salman. "Solar Energy Prospects in Tunisia" http://www.ecomena.org/solar-tunisia/ (accessed November 7 2016). [↑](#footnote-ref-7)