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RESEARCH PAPER

Successes and Failure of the Joint Comprehensive Plan of Action in Reducing Iran's Nuclear Proliferation: An Analysis

¹Zain Ali *, Dr. Bilal Bin Liaqat and ³ Dr. Anwar Ali

- 1. BS International Relations, Department of International Relations, Government College University Faisalabad, Punjab, Pakistan
- 2. Assistant Professor, Department of International Relations, Government College University Faisalabad, Punjab, Pakistan
- 3. Assistant Professor, Department of Political Science, Government College University Faisalabad, Punjab, Pakistan

*Corresponding Author: zainalikamboh71@gmail.com

ABSTRACT

The main purpose of this study is to elucidate the role of Joint Comprehensive Plan of Action (JCPOA) in reducing Iran's Nuclear Program. The JCPOA was an agreement between the EU, Russia, China and P5+1, as well as Iran. This research discusses its successes and failures. The JCPOA allowed Iran and the United States to restore diplomatic connections and begin talks on ending their nuclear arms development. Even so, Iran violated the terms of the deal in 2018 and retaliated by growing its nuclear program, reducing IAEA inspectors' authority and letting more uranium become enriched. The efforts of the US backed by the JCPOA have been slowed because of international tension and higher support for Iran to develop nuclear arms. This qualitative study elaborates the different actions taken to minimize the conflict. The study recommends that the U.S. and Iran resume their participation in the JCPOA, making new commitments to sustain the agreement's stability into the future.

KEYWORDS Iran Nuclear Program, United States of America, JCPOA, IAEA

Introduction

Signed on July 14, 2015, the Iran nuclear deal links Iran, the P5+1 members, the European Union, UK, France, Russia, China and Germany. The deal is intended to keep Iran from making nuclear weapons, limit its nuclear program and help the economy by lifting sanctions. Both sides worked together for more than ten years to reconcile Iran's needs for peaceful atomic power with fears about spread of nuclear arms. Running additional centrifuges, possessing enriched uranium and increasing the uranium enrichment level are all prohibited by the agreement. Historians regard the treaty as a major event in the effort to prevent nuclear proliferation (Izewicz, 2018).

First, the JCPOA allowed Iran and the United States to restore diplomatic connections and begin talks on ending their nuclear arms development. Even so, Iran violated the terms of the deal in 2018 and retaliated by growing its nuclear program, reducing IAEA inspectors' authority and letting more uranium become enriched. The events in Iran in 2010 and the years that followed worried the world about Iran's nuclear weapons program and disturbed Middle East peace, raising tensions between Iran and Israel and encouraging increased hostilities with Saudi Arabia (Muzaffar, et. al., 2017).

The success and outcomes of the Iran and US nuclear deal known as the JCPOA have led to both opposition and supporters. Its purpose was to lengthen Iran's nuclear timelines, introduce fresh monitoring and lessen the chance of nuclear proliferation nearby. According to the IAEA, Iran meets the requirements set by the agency, proving

the agency's usefulness for stopping proliferation. Some people think the JCPOA is only a temporary solution due to eventual sunset clauses that would drop sanctions automatically (Jansen, Fazzi, & Douwes, 2020). Politicians believe that the JCPOA did not stop Iran from growing its influence in Syria, from developing new ballistic missiles or from aiding proxy groups. Groups hoping to fix flaws in the JCPOA must either update it or think of other arrangements for both nuclear and non-nuclear concerns.

The efforts of the US backed by the JCPOA have been slowed because of international tension and higher support for Iran to develop nuclear arms. Many members of the alliance in Europe, with the US in the lead, are having difficulties keeping the deal because they fall between Iran and the US. Matters are made more complicated for Iran by political pressure at home, the war in Ukraine, China's desire for more territory and Israel's resistance to any deal that lets Iran keep its nuclear abilities (Wohlfeld, 2018).

The study looks at how the JCPOA has worked to find out how it has affected global efforts to prevent nuclear proliferation and ensure security. It includes highlights of positive events and notes where Iran falls short, as well as areas to watch, when discussing diplomatic policy, global agreement issues and Iranian tactics during talks. Findings should guide actions going forward, as negotiated approaches are useful in addressing global safety issues.

Literature Review

In "Nuclear Proliferation and Global Security: A Comparative Analysis of State Responses to Iran and North Korea's Nuclear Programs" explain that This study provides a comparative analysis of international responses to the nuclear programs of Iran and North Korea within the broader context of global security. The problem, however, lies in the inconsistency, selectivity, and limited effectiveness of these responses in achieving long-term denuclearization and regional stability. The study is anchored in the theoretical frameworks of realism and constructivism, which help explain both the strategic motivations of the states involved and the normative expectations of the international system (Ihedioha & Badru, 2025).

In "The Proliferation of Weapons of Mass Destruction: The Iran Nuclear Deal" explain that The proliferation of Weapons of Mass Destruction (WMDs) poses a significant threat to global peace and security, making it a critical area of focus in international relations. Employing theoretical framework and empirical review methods, this paper used Liberal Institutionalism (LI) and reviewed more than twelve (12) studies to examine four key objectives. The paper examined the role of international relations in curbing WMD proliferation, with a specific focus on the Iran Nuclear Deal, officially known as the Joint Comprehensive Plan of Action (JCPOA). The study also explored the multilateral negotiations that led to the JCPOA, emphasizing the intersection of diplomacy, power dynamics, and global governance in addressing WMD threats (Saraki & Oladele, 2025).

In "Reigning in the Iranian Nuclear Threat: The Unviability of a JCPOA Revival and the Need for a New Game Plan" explain that This paper explores the evolving dynamics of U.S. policy towards the Iranian nuclear threat by tracing the historical trajectory of U.S.-Iran relations from collaborative efforts during the Qajar and Pahlavi dynasties to the adversarial post-1979 Islamic Revolution era. Additionally, even if a JCPOA revival were possible, there is reason to believe it would be largely ineffective;

(3) Future U.S. policy should be regionally engaged, prioritizing diplomacy while leveraging the Intelligence Community (IC) and weighing covert action authorities as short-term shaping mechanisms to create the conditions for a long- term deal (Duarte, 2024).

In "Risks, successes, and failures in United States nuclear weapon policy" explain that this thesis evaluates the successes and failures from past United States nuclear weapon policy and discusses the modern-day risks that resulted from either past policy developments or changes in the modern nuclear environment. Cognizant of the implications of their growing nuclear stockpiles, the United States and Soviet Union reached several agreements restricting nuclear weapons (Milligan, 2024).

The report "An Examination of Nuclear Non-Proliferation Policy: Implications for States (South Africa, Iran, and South Korea) with Nuclear Weapons Development Programs" provides Thorne's research explores the impact of non-proliferation rules on South Africa, South Korea, and Iran, focusing on diplomatic pressure, economic needs, and security factors. He examines Iran's nuclear activities, risk assessments, strategic operations, regional defense, and potential future implementation challenges. Thorne's study highlights the need for economic incentives and effective monitoring systems for non-proliferation policies. This research highlights key priorities in the Middle East and global institutions preventing nuclear weapons distribution (Thorne, 2023).

Willa, 2021 "The Future of JCPOA under the New Administrations of Iran and the US." explores The Joint Comprehensive Plan of Action (JCPOA) faces unpredictable future due to political changes between Iran and the US. Iran's nuclear policy depends on domestic political factors, while US foreign policy towards Iran remains unstable. The Biden administration aims for JCPOA revival, but faces hurdles due to Iran's request for sanctions relief, uncertainty about Iran's ballistic missile initiative, and regional opposition (Willa, 2021).

Jansen, Fazzi, & Douwes, 2020 The research study examines the impact of Track II diplomacy on the nuclear relations between Iran and the US, leading to the 2015 agreement. The study uses primary materials from the U.S. government and interviews with Peter Jones, a former Canadian diplomat who participated in Track II diplomacy. It finds that Track II diplomacy significantly contributed to the US's successful agreement with Iran, as participants gained better knowledge of each other's diplomatic positions. However, more research is needed to evaluate every participation form and assess its impact on significant international political events (Jansen, Fazzi, & Douwes, 2020).

Izewicz, 2018 "The Iran nuclear deal two years on: future unclear and getting worse" The Joint Comprehensive Plan of Action or JCPOA achieved formal agreement between Iran and E3/EU+3 countries consisting of United Kingdom, France, Germany and United States and Russia and China and European Union on July 14th 2015. These negotiations spanned almost two years to produce an extremely detailed document which extends beyond a hundred pages when including its annexes. Throughout a period of 10 to 15 years Iran will maintain its capability to refrain from nuclear weapon development while the international community eases its restrictions. A complex institutional structure together with the most strict IAEA verification system in its history secures implementation of the agreement (Izewicz, 2018).

Wohlfeld, 2018 in this "What future for the Iran nuclear deal?." examines The Joint Comprehensive Plan of Action (JCPOA) faced challenges due to rising tensions between

Iran and the US, leading to the US withdrawal in 2018. Iran reduced compliance, enlarging uranium refining capabilities and reducing interaction with the IAEA. European nations and international organizations attempted to maintain the agreement, but did not provide enough relief for Iran's economic issues. Diplomatic progress requires multiple foreign nations to establish trust and manage Iranian interests in the Middle East (Wohlfeld, 2018). Rezaei, 2017 in this book "Iran's nuclear program: A study in proliferation and rollback" provides Iran's nuclear ambition development has been influenced by political and ideological factors. International initiatives, including economic blocking, diplomatic pacts, and covert military operations, have been used to control Iran's nuclear activities. The Joint Comprehensive Plan of Action temporarily halted nuclear development, but its vulnerabilities, non-compliance history, and regional opposition highlight its weaknesses.

Theoretical framework

The research analyzes how successful and unsuccessful the Joint Comprehensive Plan of Action (JCPOA) has been in controlling Iran's nuclear program through the lenses of realism and regime theory. According to realism, when national security matters most, states consider agreements with others less significant. The country's departure, violations by Iran and the unfulfilled obligations of European participants demonstrate this idea. According to regime theory, cooperation among countries and their institutions are important in determining how nations cooperate and set operational rules. The JCPOA was founded to oversee Iran's nuclear program, while abiding by the rules set up by the IAEA's verifying system. Regime theory supports the importance of international agreements by introducing systems that advantage global governance groups. Yet, the status of the JCPOA may not remain stable since there are weak systems for checking nations, entry and exit clauses are flexible and important obligations between leading nations are binding.

Material and Methods

A qualitative research methodology is used to assess whether or not JCPOA nuclear denuclearization was accomplished in Iran. Using this method, researchers look closely at the difficulties and regional aspects of applying and localizing the JCPOA. The study gathers most of its information from official government statements and agreements, reports issued by the International Atomic Energy Agency and similar organizations, documents and news, as well as studies and academic results. Analysis of qualitative diplomatic documents, as well as reviewing and comparing texts and talking to experts, will give a broad view of how the JCPOA affected Iran's nuclear program. When businesses want to make complex international agreements, using qualitative research offers detailed explanations that surpass the numbers gathered quantitatively. The research is based on this approach to understand how successfully the deal controlled Iran's nuclear actions and determine the effects of US withdrawal on relations with other participating countries. Such reviews of related documents allow researchers to explain both the historical and current effects that made the JCPOA significant. This process uses both objective research approaches and multiple source proofs to avoid any inaccuracies in the findings. This study uses suitable research methods to explain how data is gathered, processed and understood. The documentary research approach makes this study reliable by checkable results that can be examined by others who research nuclear non-proliferation and international relations and diplomatic studies.

Results and Discussion

The Joint Comprehensive Plan of Action (JCPOA) and Its Successes

Key Provisions of the Agreement

JCPOA was carefully put together to deal with international concerns about Iran's nuclear efforts and offered Tehran relaxing of economic sanctions. The agreement was meant to ensure that all Iran's nuclear work was peaceful and open to monitoring, cutting the risk of nuclear weapons in the Middle East. It looks at the central elements of the JCPOA, covering uranium enrichment limits, how and what is checked and sanctions that are frozen or removed (Yaseen, et. al., 2023; Serim, 2022).

Uranium Enrichment Limits

The JCPOA set tough limitations on what Iran could do with its stock of uranium. Before the deal was signed, Iran collected a large stockpile of enriched uranium and some of it was as much as 90% enriched (Amini et al., 2023).

Inspections and Transparency Mechanisms

The JCPOA included special systems for inspections that allow each country to monitor compliance with its nuclear rules. For the first time, Iran allowed the International Atomic Energy Agency (IAEA), the world's nuclear verification leader, to access all its nuclear plants

Sanctions Relief

Because of its observance of the JCPOA's nuclear provisions, Iran benefited from wave-by-wave removal of nuclear-related sanctions. UNSC members agreed to end financial and other sanctions directed at Iran's banking, oil and financial sectors (Babar et al., 2021). The JCPOA was set up to allay the world's worries over Iran's nuclear program by easing sanctions in return for Iran's compliance. The decision to place limits on uranium enrichment, design intensive inspection methods and impose phased sanctions relief was considered a good choice for the two sides (Behzadidoost et al., 2021).

Timeline of Implementation

Steps of implementing the Joint Comprehensive Plan of Action (JCPOA) were arranged in order and led to important milestones and difficulties. Provisional application started in October 2015 and the full contract was launched in January 2016. At that time, Iran satisfied the requirements of the deal by cutting back its enriched uranium reserves and decommissioning part of its nuclear program. The IAEA continuously supervised and confirmed on paper that Iran was following all the mentioned terms (Ghaderi, 2022).

Iran saw good progress in the first stages of carrying out the review. By the start of 2016, Iran reported meeting all of its obligations, as it reduced its enriched uranium by half, removed most of its extra centrifuges and reclassified the Fordow facility as a center for research. The IAEA found that Iran followed the first steps set out in the deal and released confirming reports. At that stage, the United States, European Union and the United Nations removed the nuclear sanctions they had put on Iran (Gohari et al., 2022).

Successes of the JCPOA

JCPOA played an important role in non-proliferation diplomacy and though opinions on its continued effectiveness remain mixed, it succeeded in major achievements. These agreements helped both to shrink the Middle East's chance of nuclear proliferation and to show that working together can fix difficult topics. The important impacts of the JCPOA are explained in the next sections (Djuyandi et al., 2021).

An obvious and quick result of the JCPOA was the significant fall in Iran's quantity of enriched uranium under watch. Before the agreement came into force, Iran had gathered over 10,000 kilograms of uranium, enriched to levels that were too high for peacefully using. The presence of all that uranium means Iran could quickly create enough uranium for nuclear arms. Under the agreement, Iran had to reduce its stockpile to just 300 kilograms which is fewer than 2% of what it had before. It was important for making sure Iran could not get the things needed to quickly make nuclear weapons.

Failures And Challenges Of The Jcpoa

In 2018, the U.S. pulled out of the deal but then brought back sanctions on Iran. Among the biggest problems for the Joint Comprehensive Plan of Action (JCPOA) was the unilateral decision by the Trump administration in May of 2018 to withdraw from the agreement. Deciding to leave the agreement completely changed the direction of the JCPOA and threatened to destroy its multilateral cooperation. Among the concerns, the main ones for the U.S. were worries about Iran's missile system, its role in regional wars and the limited time period before some sanctions and restrictions against Iran's nuclear program would expire. The Trump administration thought the JCPOA missed crucial points about core threats to the region and the United States (Mousavian, 2023).

Retreating from the JCPOA sparked much debate since the U.S. promised during discussions that the deal would involve major European, Russian and Chinese partners, too. The European Union and others who signed confirmed they would follow the terms to limit Iran's nuclear program and ease sanctions against the country. Not only did the United States' decision in 2018 rupture talks with Iran, it also unsettled many nations, lowered the standing of the deal and raised questions about the future security of other multilateral accords.

With the United States pulling out, there were fast and important results. The Trump administration put fresh economic sanctions on Iran that prevented the country from exporting oil, doing banking business or using financial services. The goal of the sanctions was to make Iran less connected to the international economy and persuade it to talk again about its nuclear program as well as its missiles and influence in the Middle East, issues that the U.S. has long been concerned about but excluded from the JCPOA. Severe sanctions introduced into the economy made life even more difficult for Iran which was already reeling from earlier restrictions (Mohiuddin & Razali, 2025).

Despite the U.S.'s exit, China, Russia and the European Union moved to save the JCPOA. They wanted to keep trade staying alive and prevent Iran from losing its economic rewards as approved by the agreement. At the same time, American sanctions made it very difficult for Iran to continue to keep up with the rules set out in the JCPOA (Mousavian, 2023).

Iran Starting to Move Past the Guidelines Set by the JCPOA

After the 2018 American pullout from the JCPOA, Iran initially honored the agreement but said it would not abide by its main conditions when they re-imposed sanctions brought economic challenges and the Europeans did not offer the promised help. By not complying, Iran changed the nature of the JCPOA, moving to reduce cooperation in a way that could push the deal to its limits and raise alarms about possible nuclear weapons build-up once again.

The first time Iran moved away from the deal was in May 2019 when Tehran announced it would not stick to all the restrictions it had agreed to under the JCPOA. As a result, Iran said it will not follow the restrictions on uranium enrichment and heavy water production. Iran was only allowed to enrich uranium to 3.67%, far below the needed 90% for weapons and was limited to holding 300 kilograms of enriched uranium by the deal. Such steps were taken to stop Iran from rapidly creating nuclear weapons. Yet, since there were no more economic rewards for compliance once the agreement was made and the U.S. left, Iran started reducing its compliance (Mirza et al., 2022).

At the start of 2020, Iran demonstrated it was not happy with the agreement's progress. Tehran said it had enriched uranium to a level of 4.5%. Although this level remains below the level required by weapons, it was over the 3.67% allowed by the nuclear deal. Iran's allegation that it had raised enrichment levels was notable, since it had been more than a year since it breached any limits set by the JCPOA. The decision was generally understood as Iran acting out against the sanctions from the United States which had badly hurt its economy and meant Tehran couldn't use the full benefit of the agreement.

Only Briefly Considered - Concerns Other Than Nuclear Issues Are Left Out

While the JCPOA concentrated only on Iran's nuclear program, several other threats to stability were not addressed. The accord was focused on reining in Iran's nuclear program and making its actions watchable, but it did not aim to change the main challenges driving the politics of the Middle East. The missile program in Iran became the biggest bone of contention for the United States and its Middle East partners such as Israel and Saudi Arabia(Eslami & Kemie, 2023).

The U.S. and its partners had long worried that Iran's a missile program, especially the development of ballistic missiles, could end up including nuclear technology, elevating Tehran to an even greater regional threat. Yet, the JCPOA did not take care of this topic directly, so an important area was not included. The nuclear-limiting deal did not include controls over areas that could make the region unsafe such as building missiles or other ways to deliver nuclear weapons.

No definite plans are made after 2030

Many said one of the weaknesses of the JCPOA was its dependence on sunset clauses which allowed restrictions on Iran's nuclear program to be lifted after 10 to 15 years. Their introduction led many nations to wonder how long the agreement would last and if Iran would eventually get nuclear weapons. Since the sunset clauses limited Iran's nuclear actions for a set duration, anybody watching over time started to believe that the steps taken in the deal were only temporary.

According to critics in the United States, the agreement lacked strength because it only delayed Iran's nuclear programs while never resolving the nuclear weapons issue. According to these clauses, at the end of a specified period, Iran could restart some of the nuclear activities it wasn't allowed during the deal. As a result, once these clauses finish, Iran can enrich uranium more, build more advanced centrifuges and build up its supply of nuclear materials, all with fewer global restrictions. As a result, the chance that Iran could construct nuclear arms rapidly once the conditions were lifted threatened the purpose of the JCPOA (Serim, 2022).

Regional Criticism and What Israel and Saudi Arabia Mean

Israel and Saudi Arabia, who saw the JCPOA as dangerous to their country's security and overall geopolitical plans, opposed the agreement strenuously. They felt the deal only dealt with Iran's nuclear efforts and did not try to tackle the country's impact across the region. Both countries feared the JCPOA would have consequences: an increased chance of Iran winning control over the Middle East and a reduced chance of stopping Iran's nuclear program.

Prime Minister Benjamin Netanyahu was one of the loudest critics of the new nuclear deal from Israel. He said the agreement only limits Iran's nuclear program for a few years before the "sunset clauses" are lifted. According to him, the JCPOA was made mainly to let Iran keep its nuclear program, so that it could easily begin to develop nuclear weapons when the agreement ended. Officials in Netanyahu's government stated frequently that the JCPOA could not stop Iran from eventually making a nuclear weapon since the Iranian program could result in an attack on Israel.

The Impact of the JCPOA on Iran's Nuclear Proliferation

Risk Analysis After the JCPOA

Experts consider the nuclear deal signed in July 2015, known as the JCPOA (or Joint Comprehensive Plan of Action) a major advance in nuclear non-proliferation (Chubin, 2010). The agreement was created to confront a critical issue for the world in this century: Iran's chance to develop nuclear weapons (Samore et al., 2015). Iran entered into the JCPOA with the P5+1 countries China, France, Russia, the United Kingdom, the United States and Germany to limit its nuclear operations in order to get help with the crippling economic sanctions it was facing (Katzman & Kerr, 2016). With the sanctions, Iran's economic condition worsened, so it was unable to participate fully in international trade (Mousavian & Toossi, 2017).

Has Iran Specialists Executed its Nuclear Plan Peacefully or Continued to Pursue Weaponry?

Whether Iran keeps trying to build nuclear weapons or simply uses nuclear power for peaceful energy is still a main subject in global diplomacy to oversee the country's nuclear activities (Chubin, 2010). From the very beginning, Iran has said it is using nuclear technology only for peaceful purposes, mentioning that the NPT allows it to develop nuclear capacity for these activities (Rezaei, 2017). Yet, Iran's nuclear activities and plants have grown even more extensive after the JCPOA, indicating Greece may be trying to develop nuclear weapons (Katzman & Kerr, 2016).

The Period of the Nuclear Program Preceding the JCPOA

In the years before it, the international community was most concerned about Iran's nuclear program (Chubin, 2010). The nation always insisted that it wanted to build a peaceful nuclear energy program with civilian uses. Yet, many Western nations, along with other countries, expressed doubt about Iran's nuclear programs (Bahgat, 2006). Because Iran wouldn't fully assist the IAEA and did not reveal some of its nuclear work, many worried about what its true goals were (Katzman & Kerr, 2016). Failing to allow access and to share sensitive data was a direct breach of the NPT which Iran has agreed to uphold.

Experts questioned Iran's intentions in the meantime, in large part because of advancements in their nuclear program (Samore et al., 2015). By the time talks for the JCPOA started, Iran had developed its nuclear technology a great deal. The country had developed a network of nuclear sites, among them an underground enrichment plant at Fordow and collected an abundance of centrifuges that could make uranium highly enriched, close to the level needed for weapons (Rezaei, 2017). It became clear that these facilities were not suitable for a peaceful nuclear project, since it required only very little enriched uranium. Because of these facilities and especially the protected underground plants, nations around the world questioned Iran's reason for making nuclear weapons (Timofte, 2021).

Risk escalation in the Middle East was tackled by using the JCPOA which carefully limits Iran's nuclear activities (Izewicz, 2018). The treaty limited Iran's centrifuges, set a limit on how much enriched uranium it could hold and made its nuclear facilities available for inspections by officials from other nations (Katzman & Kerr, 2016). The intention of these measures was to keep Iran from acquiring in a short time the knowledge needed to produce nuclear weapons and to keep its nuclear work within functions for peace (Wohlfeld, 2018). Lately, Iran's support for these limits has become uncertain, mainly due to the new geopolitical climate and the U.S. pulling out of the deal in 2018 (Mousavian, 2023).

Questions over Iran's capability to hurry production of nuclear arms and the disagreements over the nation's real aims Breakout capacity shows the period it would seem a country like Iran needs to make enough nuclear material for weapons (Katzman & Kerr, 2016). JCPOA was set up to give Iran a much longer time to make nuclear fuel if it comes to that. It was estimated weeks before the agreement that, all things being equal, Iran could create enough material for a bomb within several months (Rezaei, 2017). According to the JCPOA, Iran had to reduce its uranium enrichment power, so it would take them more than a year to make weapons-grade uranium (Samore et al., 2015).

Although Iran has declared it does not plan to make nuclear weapons, its steps since the U.S. left the JCPOA have raised concerns that it may be able to do so again (Mousavian & Toossi, 2017). Since Iran has once again enriched uranium beyond the 3.67% agreed as part of the JCPOA, it is approaching the level needed for nuclear weapons. If Iran follows through with building weapons, having a 20% pure uranium stock pile means it can do so more quickly (Izewicz, 2018). Even though Iran's uranium is below the 90% required for weapons, it means Iran could soon increase its enrichment which might allow it to breach its peaceful promises at short notice.

How IAEA Inspections Help Create Transparency

Ensuring that Iran's nuclear program remains peaceful depends in large part on the work of the International Atomic Energy Agency (IAEA). As part of the JCPOA, Iran pledged that the IAEA could gain access to its nuclear sites, observe the country's enrichment efforts and make sure Iran was stick to all the conditions of the deal (Mousavian & Toossi, 2017). It was thought that the IAEA's monitoring made it easier for others to confirm Iran's compliance with the NPT and JCPOA (Samore et al., 2015).

Yet, as the JCPOA weakens and Iran fails to cooperate enough, the system's monitoring opportunities have decreased (Katzman & Kerr, 2016). After the U.S. pulled out of the JCPOA, Iran has started to limit what information IAEA inspectors can gather. In specific, Iran has refused the agency entry into certain locations and has restricted its capacity to supervise key nuclear steps, for example, the building of advanced centrifuges and creation of enriched uranium (2023a). Although Iran has not removed any IAEA inspectors, the new restrictions have given people reason to worry about Iran's openness and its pledge not to spread nuclear weapons (Izewicz, 2018).

Iran's Nuclear Strategy Since the JCPOA

Since the Joint Comprehensive Plan of Action (JCPOA), Iran's nuclear policy has completely changed (Chubin, 2010). The JCPOA was first a successful example of diplomacy, permitting Iran to manage its nuclear program at a low level while dealing with global reports of nuclear proliferation (Katzman & Kerr, 2016). That year, Iran and the P5+1 worked out an agreement which limited Iran's nuclear programs in exchange for a reduction in international sanctions (Samore et al., 2015). Thanks to the agreement, Iran could still work on nuclear energy, but under strict agreement to not develop nuclear weapons (Wohlfeld, 2018).

Nations are now leaning towards Nuclear Shaping

Nuclear hedging describes the new approach to its nuclear program Iran followed after the JCPOA ended (Mousavian & Toossi, 2017). A country hedges with nuclear power by preparing itself to produce nuclear weapons swiftly, but maintains no obvious nuclear weapon programs (Katzman & Kerr, 2016). This way of acting benefits Iran in different ways: it can adapt, it defends against foreign interference and it signals its desire to build nuclear weapons at any time, without becoming a nuclear power (Chubin, 2010).

Thanks to the U.S. pulling out of the JCPOA, Iran now holds on to the facilities that would allow it to quickly become a nuclear weapons power if its safety required it (Mousavian, 2023a). The renewal of high-level uranium enrichment and the placement of advanced centrifuges by Iran proves its line of hedging (Izewicz, 2018). Iran insists its nuclear activities are innocent, but what's happening now indicates that Iran is prepared to weaponize if the current political and security conditions support such a change.

A Nuclear Deterrent for a Region Full of Risks

Competition between Saudi Arabia and Israel and occasional clashes among countries in the Middle East, are what make this region significant for Iran (Samore et al., 2015). While Israel hasn't clearly stated it, most believe the country has nuclear weapons and Iran sees Israel as one of its biggest threats (Chubin, 2010). Because of Israel's high technology and strong links with the United States, Iran's security issues are even more difficult (Katzman & Kerr, 2016). As a consequence, Iran's nuclear strategy can appear as a way to deter Israel from striking it or having any influence over Iran (Mousavian & Toossi, 2017).

Apart from Israel, Saudi Arabia has started to express its worries over Iran's nuclear program. If Iran goes forward with its nuclear program, Saudi Arabia has said it might also develop nuclear technology (Wohlfeld, 2018). As a result, there are worries that many Middle Eastern countries will rush to create nuclear weapons which would only increase instability in the area (Izewicz, 2018). Iran builds its nuclear program both as a defense against invaders and as a counter to the nuclear arsenals of its nearby rivals (Mousavian, 2023). Keeping nuclear weapons allows Iran to keep the region well balanced, since no one country can easily take control (Rezaei, 2017).

Iran's Plans for Reentering the JCPOA

Iran has said several times it is prepared to join the JCPOA again when the time is right (Mousavian & Toossi, 2017). What Iran wants most is for the sanctions aimed at oil, the banking system and trade to be fully lifted (Izewicz, 2018). As a result of U.S. sanctions, Iran now has extreme difficulty taking part in international trade and using financial institutions worldwide (Katzman & Kerr, 2016). Because of this, Iran believes that first lifting the sanctions will assist in repairing its economy and guarantee the future deal's success (Rezaei, 2017).

On top of this, Iran is demanding that it be protected from changes to its economic situation as a result of U.S. actions after the deal (Mousavian, 2023). After the U.S. left the JCPOA on its own in 2018, Iran is now suspicious of any future attempts by the U.S. to back out of the deal or put sanctions in place without agreement. As a result, Iran is asking for commitments that any fresh deal will benefit its economy for years to come and ensure its interests are defended if the U.S. changes leaders.

Conclusion

The 2015 JCPOA agreement between Iran and the P5+1 (China, France, Russia, the UK, the US and Germany) focused on cutting down Iran's access to nuclear weapons by easing financial sanctions. It was considered important for relaxing sanctions and stopping anything that suggested Iran could develop nuclear weapons. The JCPOA was meant to help manage global worries about Iran joining the ranks of nuclear states and its secret nuclear projects in the past.

At first, the deal brought about important positive results. According to the agreement, Iran suppressed its uranium stockpiles, stopped using some centrifuges and gave the IAEA unfettered access to its reactors. These steps had the effect of putting off Iran's ability to produce a nuclear weapon, adding a year or more of time for the world to act if Iran became noncompliant.

The JCPOA had only modest results because it did not last long after the U.S. pulled out in 2018. Thanks to fresh U.S. sanctions under the "maximum pressure" approach, Iran lost much of the economic progress it should have seen from the deal. So, Iran stopped following all the terms of the agreement, began making enriched uranium and installed better centrifuges. As a result of these steps, many analysts now worry that Iran is moving toward the ability to create nuclear weapons.

Recommendations

The study recommends that the U.S. and Iran resume their participation in the JCPOA, making new commitments to sustain the agreement's stability into the future. Both sides ought to understand and accept greater openness and responsibility together.

It has become clear that the agreement must include reliable assurances, so that changing administrations will not alter its terms. An improved system for verification is needed so that any sanction relief will only be given if Iran continues to obey non-proliferation norms.

Before anything, the JCPOA was an agreement between the EU, Russia, China and P5+1, as well as Iran. As a consequence, it has been proven that seeking answers from two nations is not enough and multilateral cooperation is still vital. Whether the JCPOA will last depends on Russia and China, global powers who can have an impact on how Iran is dealt with. When decisions are reached with all relevant nations, everybody's interests are protected and making a country act contrary to the agreement becomes less likely.

One major difficulty for the JCPOA to work is Iran's part in regional disputes and its hefty ambitions in the Middle East. Moving forward with Iran's nuclear program, the new negotiations ought to touch on the country's actions across the region. Addressing Iran's nuclear activities and human rights at the same time would help comfort nearby countries, strongly focused on such matters, including Saudi Arabia and Israel. Improving security in the region should focus on implementing cooperation, by means of confidence-building, weapons-limitation deals and clear explanations of every country's military capacity. Such an approach could help reduce conflict and make Iran and its nearby countries more trusting.

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