

## Destruction of Chemical Weapons Facilities in Syria

Mr. Nachiket Kondhalkar

*Mr. Nachiket Kondhalkar is a Biomedical Engineering graduate from Mumbai University and has a PG diploma in CBRN and National Security from the Department of Defence and Strategic Studies at Savitribai Phule Pune University.*

### Summary

The civil war in Syria exposed significant failures in global non-proliferation mechanisms. Despite Syria's 2013 accession to the Chemical Weapons Convention, chemical weapons were used repeatedly with limited accountability. Political deadlocks in the UN and limitations in the OPCW mandate have set a dangerous precedent for future conflicts and consequences for the use of chemical weapons. Following Bashar al-Assad's overthrow, Israeli airstrikes targeted suspected chemical weapons facilities to prevent their proliferation to extremist groups. While arguments can be made for violating the sovereignty of Syria, the destruction of these weapon stockpiles may have been for the best. This article highlights the erosion of trust in international arms control frameworks and the challenges of preventing chemical weapons proliferation in conflict zones.

### Background

The Syrian civil war, which began in 2011 during the Arab Spring has culminated in December 2024 with the rapid overthrow of President Assad's regime. Rebel forces have captured Damascus and completed an 11-day push to topple the government, while the former dictator of the country fled to Russia. Following Assad's fall, Israeli forces launched pre-emptive airstrikes on suspected chemical weapons facilities to prevent their proliferation to extremist groups. These strikes may be flouting the sovereignty of Syria but may have been for the good in the long run.

The Syrian Civil War exposed the limitations of international mechanisms like the Chemical Weapons Convention (CWC) and the UN Security Council, where political deadlocks and enforcement failures undermined accountability, leading to erosion of trust in global non-proliferation norms. Throughout the conflict, the Assad regime has faced numerous accusations of deploying chemical weapons against civilian populations. Allegedly upwards of 300 incidents of chemical weapons use have taken place but the Organization for the Prohibition of Chemical Weapons (OPCW) has only been able to confirm 17 of these instances after thorough investigations<sup>1</sup>.

Notably, the 2013 sarin gas attack near Damascus resulted in over 1,400 deaths, prompting international outrage. Despite Syria's accession to the CWC in 2013 and commitments to dismantle its chemical arsenal, reports persisted of chemical attacks, including the 2018 chlorine gas attack in Douma, which killed at least 43 civilians.

The OPCW's Fact-Finding Mission (FFM) and Investigation and Identification Team (IIT) conducted thorough investigations, attributing several attacks to the Syrian Arab Air Force. For instance, the IIT's third report, released in January 2023, concluded that the Syrian Air Force was responsible for the 2018 Douma chemical attack <sup>2</sup>.

In the wake of Assad's downfall, concerns have escalated regarding the security of Syria's chemical weapons stockpiles. Fears that these weapons could fall into the hands of extremist groups, prompted pre-emptive action by Israeli Defense Forces which targeted suspected chemical weapons facilities while conducting roughly 300 airstrikes across the country.

In order to understand the impact of these events, it is important to highlight the context within which these events are taking place.

### **The Arab Spring and the Onset of the Syrian Civil War**

In 2011, a wave of pro-democracy uprisings, known as the Arab Spring, swept across the Middle East and North Africa. In Syria, this movement manifested as peaceful protests demanding political reforms and greater freedoms under President Bashar al-Assad. The government's harsh crackdown on demonstrators, involving arrests, torture, and lethal force, escalated tensions, leading to the militarization of the opposition and the eruption of a full-scale civil war<sup>3</sup>.

The roots of Syria's internal conflicts can be traced back to the Sykes-Picot Agreement of 1916, a secret accord between Britain and France that divided the Ottoman Empire's Arab territories into spheres of influence. This arbitrary delineation methodically and intentionally disregarded ethnic, religious, and tribal boundaries, amalgamating diverse groups within newly formed national borders that were meant to be inherently unstable.

In Syria, this led to a complex tapestry of Sunni Arabs, Alawites, Christians, Kurds, and other minorities co-existing under a single national identity that was thrust upon them by external forces. The lack of cohesive national unity, compounded by historical grievances and power imbalances, sowed seeds of discord that would later surface during periods of instability<sup>4</sup>.

Broadly speaking, these fractured loyalties have given rise to multiple entities participating in the Syrian Civil War. Initially the Syrian Government Forces comprised Loyalists to President Assad, predominantly from the Alawite minority trying to retain power, were the strongest faction. However, as the movement grew, the Free Syrian Army (FSA) was formed. It was initially a coalition of defected military personnel and civilians advocating for democratic reforms. However once the conflict grew increasingly militant, Islamist Groups joined the fray including Jabhat al-Nusra (al-Qaeda's affiliate) and later ISIS, seeking to establish an Islamic state<sup>5</sup>.

In the Northeastern part of the country bordering Turkey, a Kurdish independence movement grew, primarily the Yekîneyên Parastina Gel (YPG) or People's Defence Units, which sought autonomy in Kurdish-majority regions. Apart from these entities, countries like Russia, Iran, Turkey, US, France, UK and Israel have been backing different groups at various points of the decade-long war making the already murky conflict utterly chaotic.

### **Chemical Weapons in the Syrian Civil War**

The Syrian civil war progressed along traditional lines, like other wars in the Middle East for two years after the conflict began. However, in March 2013, accusations began flying about the use of Sarin gas in Khan al-Assal city near Aleppo resulting in numerous

fatalities. This was only the first of many alleged instances where chemical weapons were said to have been used in the war. According to the Global Public Policy Institute, at least 336 chemical weapons attacks have taken place. Amongst these, blame for 98 per cent of them has been laid at the feet of the Assad regime, while ISIS has been blamed for the rest <sup>1</sup>.

The body responsible for investigating the use of chemical weapons is the OPCW, which has only been able to confirm 17 instances of chemical weapons use by the Syrian government. This has been due to bureaucratic red tape by multiple interested parties. As a result, the truth about the scale of chemical weapons use would be difficult to uncover when the OPCW was able to investigate only 77 of the 336 alleged instances<sup>6</sup>. However, there are some instances which stand out for the scale of the damage they inflicted on civilian populations.

- Khan al-Assal (19 March 2013): This was the first instance of chemical weapons use, and both the Syrian government and opposition accused each other of using sarin gas killing 26 people. The UN conducted investigations but faced challenges in attributing responsibility.

- Ghouta (21 August 2013): A large-scale sarin attack in the Damascus suburbs killed hundreds, with estimates ranging from 281 to 1,729 deaths. The UN confirmed the use of sarin but again, did not assign blame. Subsequent analyses and reports suggested the Syrian government's involvement.

- Khan Shaykhun (4 April 2017): A sarin attack in Idlib province resulted in over 80 deaths. The OPCW-UN Joint Investigative Mechanism attributed the attack to the Syrian government.

- Ltamenah (24, 25, and 30 March 2017): The OPCW's Investigation and

Identification Team (IIT) reported that the Syrian Air Force used sarin and chlorine in attacks on this town. While specific casualty numbers are not well documented, the use of chemical weapons was confirmed.

- Douma (7 April 2018): A chlorine gas attack killed at least 43 civilians. The OPCW's IIT concluded that the Syrian Arab Air Force was responsible.

While both Sarin and Chlorine gas were confirmed to have been used, other chemical weapons like Mustard gas, Phosgene and unspecified nerve agents have also been reported. These violations of international law have had devastating humanitarian impacts and have significantly deteriorated confidence in international bodies to uphold the values they claim to protect <sup>7</sup>.

### **Attacks on Chemical Weapons Facilities**

In late November 2024, the Hay'at Tahrir al-Sham (HTS) group took control of Aleppo and started a series of domino events. With the capture of Aleppo, the HTS and allied forces gained momentum and took the cities of Hama and Homs one after the other despite resistance from Russia and Iran. By 8 December, the Syrian Army withdrew from Damascus and fled Bashar al-Assad to Russia while Damascus was taken over by the opposition forces <sup>7</sup>.

Taking advantage of the chaos, Israeli forces physically moved troops across the border and began conducting targeted airstrikes on several key military installations in Syria. While these attacks were aimed primarily for dismantling the Air Force assets of the Syrian military, they also hit multiple sites that were suspected of housing chemical weapons. According to the IDF, these operations aimed to prevent the proliferation of advanced weaponry, including chemical

weapons, to hostile entities amid the ensuing power vacuum <sup>8</sup>.

Syria's chemical weapons programme has been a focal point of international concern, particularly following the 2013 sarin gas attack in Douma. Despite Syria's accession to the Chemical Weapons Convention (CWC) in October of that year, and subsequent declarations of disarmament, reports have persisted of undeclared stockpiles and continued production chemical weapons. The targeted facilities, including the Barzeh Research Center, have been previously linked to chemical weapons development. The OPCW has conducted multiple inspections at these sites with no significant results <sup>9,10</sup>. The Israeli airstrikes are a part of a broader strategy to prevent the proliferation of Syria's advanced weaponry, including chemical weapons, in the unstable post-Assad landscape.

### **Reactions to the Airstrikes**

The primary motivations for the Israeli bombings were a form of pre-emptive offensive non-proliferation. Israeli Foreign Minister Gideon Sa'ar stated that the strikes aimed to prevent such weapons from being acquired by adversaries, emphasizing that Israel's sole interest was the security of its citizens. The land offensive sought to create a "sterile defensive area" in southern Syria to enhance its border security <sup>11</sup>.

Israeli Defence Minister Israel Katz announced plans to establish this zone following the regime's collapse, with Israeli ground forces moving into a demilitarized buffer zone from the Golan Heights and taking over abandoned Syrian military positions. Furthermore, by targeting and destroying Syria's naval and air force assets alongside strategic weapons stockpiles, Israel can mitigate immediate security threats and prevent the resurgence of hostile military capabilities in the region <sup>12</sup>.

The international community's response to Israel's actions was mixed. The UN Security Council convened an emergency meeting to address the situation. Members expressed a commitment to preserving Syria's sovereignty and emphasized the importance of providing humanitarian aid to the affected population. Several Arab countries have condemned Israel's incursions, accusing it of violating Syria's territorial integrity. They called for respect for Syria's sovereignty and urged Israel to withdraw its forces.

The US has maintained its dogmatic support for Israel's right to self-defence. Secretary of State Antony Blinken acknowledged direct contact with the Syrian rebel group Hayat Tahrir al-Sham (HTS), emphasizing the importance of responsible governance and the security of chemical weapons stockpiles <sup>13</sup>.

The OPCW reiterated its commitment to ensuring the elimination of Syria's chemical weapons. The organization emphasized the paramount importance of securing all chemical weapons-related materials and facilities in the country.

Ahmad al-Sharaa, the de facto leader of Syria and head of HTS, criticized Israel's actions, stating that Syria was not interested in engaging in new conflicts despite the attacks. He emphasized the need for reconstruction and stability, advocating for diplomatic solutions and warning against military escalations.

### **Strategic Insights**

With the conclusion of the civil war in Syria, an interesting chemical weapons case study presents itself with respect to their use and the consequences of such actions. The war highlights how various actors—State and non-State—failed to uphold the standards of the Chemical Weapons Convention (CWC)



and interfered with the effective functioning of the OPCW.

While the Syrian government became a party to the CWC only after October 2013 Ghouta Sarin attack, its declarations of chemical weapon stockpiles have been misleading. Furthermore, the targets of these chemical weapons have often been civilian rather than military areas. Apart from abject disregard for its own civilians, the Syrian government also repeatedly faced accusations of delaying and obstructing the OPCW investigative teams.

These efforts were aided by the backing of Russia which repeatedly used its veto power in the UN Security Council to block Resolutions aimed at holding Syria accountable for chemical weapons use. On the other hand, Western powers like the United States, the United Kingdom and France who condemned the use of chemical weapons, also faced criticism for inconsistent enforcement of norms.

This international deadlock in the UN allowed for proliferation of chemical weapons to such an extent that non-State actors like ISIS were not only able to gain access, but also able to use chemical weapons. Unlike nation-states, non-State actors are not party to the CWC and create an extremely dangerous precedent with no legal recourse. The Syrian crisis exposed the limitations of existing treaties like the CWC in addressing violations by State actors, particularly when international enforcement mechanisms are undermined by political interests.

The OPCW as an independent international investigative agency did not have the mandate to assign blame till 2018. The creation of the Investigation and Identification Team (IIT) was a step forward, but the findings were often faced with political opposition. The OPCW has also faced persistent accusations of bias that have

undermined its credibility that even a Nobel Peace Prize was not able to preserve.

The Syrian civil war is a testament to an erosion of the taboo regarding chemical weapons use. The inability to decisively hold perpetrators accountable undermines the deterrent value of the CWC and sets a dangerous precedent for all future conflicts. The ideological deadlock that paralyses the UN Security Council via the veto power basically ensures that regardless of what the OPCW does, the enforcement of the CWC is not as stringent as it should be. Political interference, lack of consensus, and accusations of bias have tarnished the reputation of the OPCW in a way that the organization's ability to respond effectively to future chemical weapons crises may be hampered. It also exposes crucial weaknesses in international mechanisms for monitoring and verification in active conflict zones.

The pre-emptive bombing by Israel does violate the sovereignty of Syria, amongst a multitude of other issues. However, in the context of non-proliferation of chemical weapons, the destruction of these facilities may have prevented a long-drawn-out political deadlock that risked the exposure of these stockpiles to non-State actors. Destroying the bottle before the genie can be let out may have been in the best interests of not only Israel's national security but also the goal of non-proliferation of chemical weapons.

## Endnotes:

1. "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria", Global Public Policy Institute, 2019 at [https://gppi.net/2019/02/17/the-logic-of-chemical-weapons-use-in-syria?utm\\_source=chatgpt.com](https://gppi.net/2019/02/17/the-logic-of-chemical-weapons-use-in-syria?utm_source=chatgpt.com) (Accessed 16 December 2024).
2. "Third Report of the IIT", OPCW, January 2023 at <https://www.opcw.org/iit/third-report-iit> (Accessed 16 December 2024).

3. Ten years later: Was the Arab Spring a failure? *Harvard Gazette*, 3 February 2021 at <https://news.harvard.edu/gazette/story/2021/02/ten-years-later-was-the-arab-spring-a-failure/> (Accessed 16 December 2024).
4. H.U. Khan, *Syria: History, The Civil War and Peace Prospects*, 1 January 2017 at [https://www.academia.edu/38021274/Syria\\_History\\_The\\_Civil\\_War\\_and\\_Peace\\_Prospects](https://www.academia.edu/38021274/Syria_History_The_Civil_War_and_Peace_Prospects) (Accessed 16 December 2024).
5. I. Rabinovich, “The End of Sykes-Picot? Reflections on the Prospects of the Arab State System”, 2014 at [reflections-on-the-prospects-of-the-arab-state-system/?utm\\_source=chatgpt.com](https://reflections-on-the-prospects-of-the-arab-state-system/?utm_source=chatgpt.com) (Accessed 16 December 2024).
6. “OPCW Confirms Chemical Weapons Use in Syria”, Arms Control Association, 2021 at <https://www.armscontrol.org/act/2021-07/news-briefs/opcw-confirms-chemical-weapons-use-syria> (Accessed December 16, 2024).
7. M. Zafra, A. Rao, P.K. Dutta, et al., “Mapping the Overthrow of Assad’s Syria”, Reuters at <https://www.reuters.com/graphics/SYRIA-SECURITY/MAPS/myvmbxdgwpr>, 12 December 2024 (Accessed 16 December 2024).
8. “Israeli strikes on Syria will eliminate its air force ‘within a few days’.” *Syndicate JN*, 10 December 2024 at <https://nypost.com/2024/12/10/world-news/israeli-strikes-on-syria-will-eliminate-its-air-force-within-a-few-days/> (Accessed December 16, 2024).
9. Pike J. Barzah, / Barzeh / Berzé, 2018 at [https://www.globalsecurity.org/wmd/world/syria/barzah.htm?utm\\_source=chatgpt.com](https://www.globalsecurity.org/wmd/world/syria/barzah.htm?utm_source=chatgpt.com) (Accessed 16 December 2024).
- 10 *99th Syria Report*, CWC Coalition, 2022 at <https://www.cwccoalition.org/99th-syria-report-summary/> (Accessed 16 December 2024).
- 11 “Sa’ar confirms Israel hit chemical weapons sites and long-range rockets in Syria”, *The Times of Israel*, 9 December 2024 at <https://www.timesofisrael.com/saar-confirms-israel-hit-chemical-weapons-sites-and-long-range-rockets-in-syria/> (Accessed 16 December 16, 2024).
- 12 “Israel to establish ‘sterile defence zone’ in Southern Syria, claims it destroyed Syrian fleet”, *Firstpost*, 11 December 2024 at <https://www.firstpost.com/world/israel-to-attempt-to-establish-sterile-defence-zone-in-southern-syria-claims-it-destroyed-syrian-fleet-13843432.html> (Accessed 16 December 2024).
- 13 “Israel carries out dozens of air strikes across Syria, reports say”, BBC AB, December 2024 at <https://www.bbc.com/news/articles/c4gxplx5500> (Accessed December 16, 2024).