

## An Evaluation of Climate Change and Water Scarcity as a Causative Factor of Political Instability in the Middle East Region: The Case of Syria



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**ABSTRACT:** The Middle East region has been thrown into a conundrum of conflicts in recent decades, with most of the countries in the region been affected by one conflict or the other. Notable among the conflicts was the Arab spring, which led to the fall of most dictatorial regimes in the region. Others include the conflicts in Yemen, Iraq, Syria, Palestine, among others. The true causative factors of these conflicts are still an ongoing debate. Some scholars link the conflicts to economic reasons, others see it as struggles for democracy, some point to religion, while some identify external proxy actors for been responsible for the unending conflicts in the region. It is predicated on this background that this paper seeks to trace the root(s) of the conflicts in Middle East region, and Syria specifically. The paper links the genesis of the conflict in Syria to the exacerbating effects of climate change and water scarcity, which resulted to the worst global drought in 100 years, affecting world major food producing countries. The drought drove food prices, especially major staples in the Middle East region, bread, and wheat to an all-time high. The development in turn spiked violence in the Arab world, “the Arab spring”, which also coincided with the beginning of the conflict in Syria. The paper identifies the inappropriate handling of the conflict by the Syrian government, and the involvement of external proxies as some of the factors that has made the conflict to linger for more than a decade.

**KEYWORDS:** Climate change, water scarcity, political instability, Middle East Region, Syria.

### 1. INTRODUCTION

There has been no issue on the front burner that has generated interest and debate in the 21<sup>st</sup> century like the issue of climate change (Maslin 2019). This has been understandably so as a result of the boomeranging effects so to speak that the phenomenon has negatively unlash, and will continue to affect our environment, politics, economics and security (Bernzen, Jenkins and Braun 2019). Though with all the overwhelming evidence that abound of the effects of climate change on almost every sphere of human life today, many still see it as a hoax, and “*hyper-patriarchal societal metaphorical*” (Hadfield 2020, Magstadt 2020). One of the realities of climate change is the fact that it has brought about a drought situation, which has made arable land less available for crop production, most especially in the Middle East, making the Middle East the most food imported region in the world (Hanna 2020). For instance the Euphrates and the Tigris two of the biggest rivers in the Middle-East are the most fastest drying rivers in the world, which is further worsened by less than 166mm precipitation average per year in the region (Adamo, Al-Ansari and Sissakian 2020).

At the economic level, the world has been estimated to have loss in the region of \$3.54 trillion due to effects from extreme weather events, and there seems to be no respite in sight as the Global Climate Index (GCI) has continue to painted a very gloomy picture of the vulnerability of events that will come in the nearest future (Eckstein et al. 2019). The situation seems to be further aggravated because of rising global population and increase pressure on the already overstretched resources. As at 29<sup>th</sup> June 2019, the global estimated population was pegged at about 7,712,497,251, with an estimated birth rates of 383,656 births a day, representing a net change per a day of plus 224,496 (Smith and Archer 2020). Furthermore, obnoxious human activities, such as deforestation, carbon emission; leading to the destruction of the ozone layer and the stratosphere, excessive mining activities, bush burning among others have all greatly contributed to the worsening situation of climate change (Kellogg 2019). It is worth mentioning that despite the arguments back and forth on climate change, science have been able to clear the doubts, by establishing some empirical nexus between climate change and some of the realities humanity is currently witnessing (Dessler and Parson 2019). For instance, it has been established that climate change is responsible for the more than 100 times spells of heat that has been witness in Europe currently, such as has never been experienced in the region for more than a century (Eckstein et al. 2019).

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Deducing from the above, the Middle East and North Africa (MENA) region as an integral part of the global architecture cannot excuse itself from the harsh realities of this development, hence it is a transnational issue with no borders. The effects of this development is already manifesting itself in the region, with extreme weather conditions, such as drought, water scarcity on the scale that has hitherto unwitnessed in the last 100 years in the region (Shahi 2019). Consequently, the Middle East and North Africa (MENA) region as a result of these effects have been hit hard with, food shortages and mass migration; which has been directly linked to one of the reasons for the turmoil and high level of instability in the region, (Ash and Obradovich 2020). Furthermore, findings show that the Middle East and North Africa (MENA) is extremely fragile to swings in food supplies and prices (Jawad, Jones and Messkoub 2019, Evans 2009). This could be understandably one of the root causes of the Arab Spring. The above fact is validated by reports that climate change induced drought in China, Argentina, Ukraine, Russia and storms in Australia, Brazil and Canada who are known to be the big wheat producing nations was responsible for pushing up the food scarcity situation in the Middle East, which ultimately resulted in the Arab Spring (Sofuoğlu and Ay 2020, Johnstone and Mazo 2011). From Syria, Jordan, Yemen, Iran, Iraq the story seems to be the same, hence the need to adequately brace up to address these challenges to prevent the region from total sliding into a bunch of failed states.

Though accepted that climate change has been largely responsible for the political instability in the Middle East and North Africa (MENA) region, there is however a strong debate of other factors such as interest of the west as represented mostly by America and Russia, economic factors as it relates to oil and arms sales, lack of democratic structures and authoritarianism regimes prevalent in the region, population explosion of the peoples of the region, political Islam, among others. This paper shall therefore be arguing all these facts and shall be using Syria as a synopsis to demonstrate how these issues have directly or indirectly been a replica of the political instability situation of the rest of the Middle East and North Africa (MENA) region.

### **2. CLIMATE CHANGE, THE MIDDLE EAST AND MATTERS ARISING.**

One of the biggest challenge associated with climate change is migration, the climate situation has created a migration situation with thousands of people moving from drought prone areas to areas with more prospects of finding water and environment for survival (Luetz and Merson 2019, Reuveny 2007). Though, this issue is believed to not have been well managed by the various governments, hence the migrants have been easily exploited and converted as machineries are enlisted easily by many of the several militant groups operating in the region, such as the Islamic State of Iraq and “*sham*” Syria (ISIS), Taliban, Al-Qaida (Gunaratna 2019). Anderson in his opinion disagree with the above submission, he believes the main motivation of the participant’s in these groups is about personal conviction in fighting western ideologies and domination as seen in Afghanistan, Iraq etc, but not necessary as a result of been coerced (Anderson 2020).

Another issue is the collapse of state in the region, this can be seen in already disintegrating states in the region, such as Syria, Yemen etc. However there has been a strong disagreement from some school of thought, who alluded this development to lack of strong democratic institutions in these states, which has led to agitation and the associated tension that is leading to the failure of the states (Ozgul 2020b). This school of thought further believe that the end of authoritarian regimes and institutions of democratic governments will see a reversal of the trend in the region (Ezrow 2020). But the big poser is, have other countries elsewhere with existing democracies been completely insulated from state failures or existence of internal reangling?

Water scarcity is another serious issue in the region because of climate change. Take for instance a situation whereby 75% of the waters in the Middle East is just concentrated in Iran, Iraq, Syria and Turkey (Hameed et al. 2019). This alone is viewed as a big treat to the stability of the region. Though many see this development as a blessing in disguise, arguing that it is unifying factor rather than an issue to create division among the peoples of the region, they have cited the sharing of water resources of the Jordan river with Israel and Palestine as a perfect example (Fisher et al. 2002).

### **3. CLIMATE CHANGE VS POLITICAL INSTABILITY.**

A report released by the Centre for Climate and Security in 2015 referred to the multiplied risk of climate change as “*exacerbating other treats to security*” (Daoudy, 2020). According to Podesta and Odgan, even though scientist and analyst may give their predictions and analysis of climate change, the geopolitical effects of climate change are determined by political, economic, and social factors (Podesta and Ogden 2008). Supporting this position, Friedman posits that because of globalization and interdependence, the interrelationship between the issues of climate change, migration, security and political instability becomes the “*new norm*” in international conversation (Friedman 2002). Shahi has alluded to the historical link between drought and indeed climate change as a responsible factor for political instability in the Middle East (Shahi 2019). Furthermore, the collapse of great kingdoms and cities of the Middle East such as the old Kingdom of Egypt, the Akkadian, the Negev empire and others have been scientifically linked to drought and water scarcities as a result of climate change (Bar-Oz et al. 2019, Shahi 2019).

Conceding to the above facts, but there is still the need to explore other factors, such as population explosion of the region and its consequences. Population is the basic indices used in planning development and growth, wherein, an increase in population without a corresponding availability of essentials of such as jobs, housing, and health care could become a curse rather than a blessing

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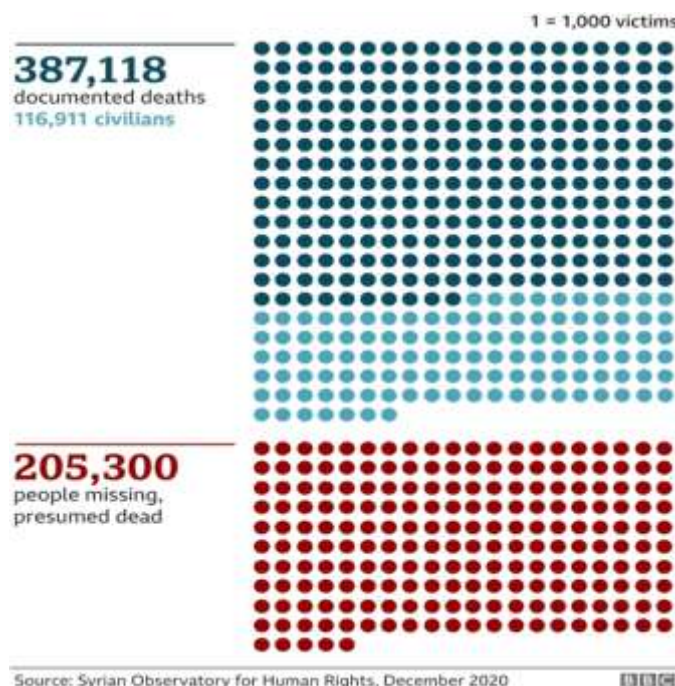
(Weeks 2020). Example the large population of China today, with good planning could be cited as a good example of population been a blessing, but this cannot be adequately said to be the case for countries of the Middle East (Khan et al. 2020). There has been a high increase in the Middle East region in the last decade without a corresponding development in infrastructure as a result of unfavourable conditions such as drought and water scarcity, sanctions, conflicts (Wolf 1996).

Chronicling from the above, it gives us a clear picture that with the current realities on ground, the Middle East cannot obviously enjoy a reasonable level of political instability. The rise of Taliban, Hezbollah, Al Qaeda, ISIS can be linked to the fall-out of this development, hence an idle man and mind is a devil's workshop. Furthermore, it is important to also take a lot at the role of economic factors into the political instability in the Middle East. Take for instance America's interest in Iranian oil in the 70's made Eden, an Iran town almost a country in a country, and but the two countries became arch enemies when things seem to felled apart (Foran 2019). In Iraq, the activities of American has come to be viewed with great suspicion (Abdulrahman 2019). If not for the convenience and undercover activities for the exploitation of the large oil deposit in the country.

### 4. THE CASE OF SYRIA

When the death of the Alyn the young Syrian boy who died on a Turkish beach while his family was trying to flee from Syria went viral around the world, the *National Observer* a Canadian newspaper proclaimed in its report "this is what a climate refugees look like" (Dinshaw 2015). Since the end of the second world war, humanity has never seen a worst humanitarian crises of the magnitude in Syria, with over 470,000 killed and more than half of the Syrian population been displaced (Ahmed and Raman 2019). It was part of the off shot of the Arab spring, which began as a result of a trigger by a Tunisia vendor Muhammad Bouazizi on December 17<sup>th</sup> 2010, and eventually hit Syria by the month of March 2011, (Kerr and Larkin 2015). Though in Syria it all began like a very peaceful protest in the town of DARA in March 2011 in demand for the release of the school children who were arrested, and reportedly tortured by the Bashir Assad regime for writing on their school wall; the popular slogan of the Arab Spring "the people want the dawn fall of the regime" (Ozgul 2020a). This action would come to snowballed into an uncontrollable flam of violence, and till date Syria is yet to know peace.

According to Syed, Assad never believed that the Syrian people would ever rebel against a typical Pan-Arabis, anti-imperialist fighter, anti-Israel etc was completely proven wrong, (Ahmed and Shahabuddin 2019). But when one takes a critical look, all these developments are still traceable to the Arab spring, which was because of the upsurge in the prices of basic food items; like bread, wheat, and all these were because of the drought and storms that hampered production in major producing countries of the world as earlier mentioned in this paper. Though there has been contra view to this position, some school of thought holds the opinion that it was simply a struggle between the opposition in Syria to enthrone a democratic government to replace the dictatorial regime of Assad and nothing more (Beaujouan 2020). To others, the crises can be seen from a historical perspective dating back to the ottoman empire, when Syria fell to the ottoman Turk in 1516, and the ensuing instability and transition from one super power to another (Daoudy 2020).



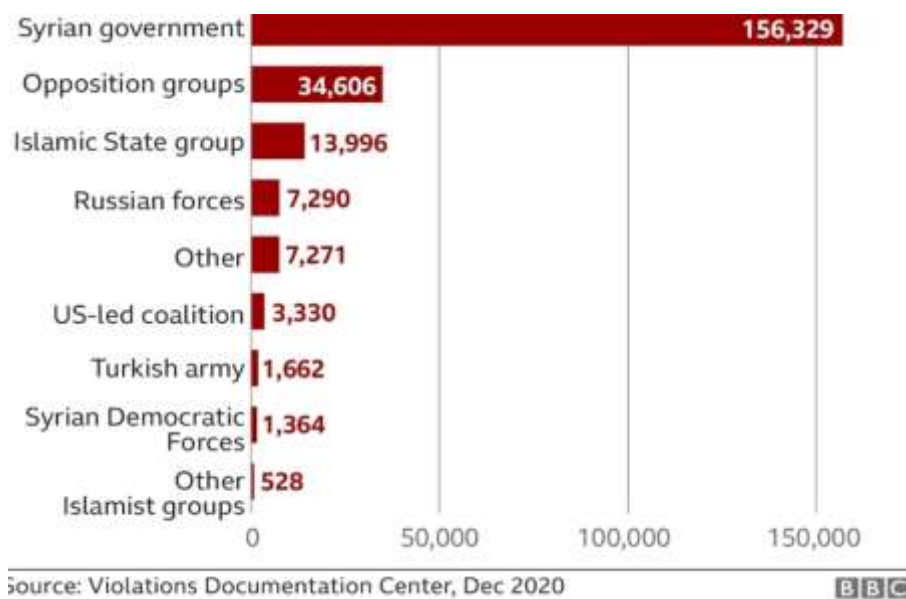
**Figure 1:** Documented deaths and missing people in the Syrian conflict.

**Source:** More than 500,000 people are believed to have been killed or missing, and the missing people are also presumed dead.

**NB:** The figure varies depending on the source.

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On another flank, there is this argument that an appreciable progress was made in Syria in all fronts, be it political economic, and socially under the British, French and up till its independence in 1946 (Uslu 2020). Governments in Syria were never known to last more than a year, but the story changed when Hafez Al-Assad took power in 1970, he since then tried to provide stability in the country, using the then (USSR) and Iran (Bendimered 2020). When the senior Assad died in 2000, his son Bashar who was trained in the west, equipped western liberalism wanted to change the country positively, but stiff opposition from the conserved Ba'ath party he couldn't achieve much, and before long took the brutal way of his father (Kerr 2020). Since then, Syria has nosedived up until now, and the recent manifestation in Syria is after all expected, as it was a time bomb in waiting (Karim and Islam 2016). Involvement of belligerent actors, the Syrian case cannot be exhaustively discussed without the viewing it from an international perspective. Many have argued that rather than attribute the crises to climate change, it is rather the international power play/politics between majorly the United States of America, Turkey, Saudi Arabia, Qatar etc on one hand, and Russia that continue to aggravate the crises in Syria (Hetou 2018). For instance, it is believed that the demonstrators in Syria in the first instance were backed politically and militarily by Israel and the United States of America (Erllich 2014).



**Figure 2:** Documented deaths of civilians and combatants in Syria, by groups responsible.

Fact also emerged that the free Syrian Army (FSA) which is a group of defecting army officers fighting the Assad regime was supported by USA, Turkey, Qatar, Saudi Arabia with the sum of \$15 million to help them fight the Assad regime (Ahmed and Shahabuddin 2019). In addition to the above, it is on record the several innuendos of the Americans in the Arab world, by changing regimes and governments, which most often do not care whether the change they instigated ends up in peace or has rather torn the people apart, as seen in the cases of Libya, Iraq, Afghanistan etc (Anderson 2020). Though in recent times, the American government has been tactically moving away from much of America's bigger involvement in the Arab world, as can be seen in the fall-out in Afghanistan negotiation of peace with the Taliban's, the pull out of Syria, the reduction of American forces in a number of military bases in the Middle East among others (Cooley and Nexon, 2020; Riesman, Glazer and Denney, 2020). Interestingly, the Syrian story however seems to be a little different from the other stories of Tunisia, Egypt, Yemen etc. In Syria, the regime of Bashar Assad has continued to survive for more than ten years with the help and support of their traditional allies Russia (Ahmed and Raman, 2019).

The unfolding situation all can't be exhaustively considered without looking into the lens of the effects of climate change which has thrown the once flourishing farming and nomadic tribes of this country into and without available land for farming activities in the wake of an increasing population of the country (Gleick, 2014). It is also important to note the climate change coincident that justifies the argument that the civil unrest in Syria is a direct result of climate change. Available data shows that 1998-2012 which was the world's most dried period in over 5000 years, was the period directly preceding the start of the Syrian civil war (Thalheimer and Webersik, 2020). The story line that tension in Syria is substantially a direct result of climate change is further evident in Leonardo Di Caprio documentary "Before the Flood" in 2016 (Daoudy, 2020).

### 5. CONCLUSION

The paper has been able to identify that climate change is real, and a global crisis that needs concerted efforts by all to tackle before it puts humanity into extinction. Furthermore, the paper was able to trace the origin and some of the factors that have been responsible

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for the worsening climate change, which are but not limited to deforestation, excessive carbon emission into the atmosphere, excessive mining activities, increases in population and pressure on very limited natural resources such as water etc. The paper has been able to establish a link between climate change, water shortage in the region and ultimately the worsening food shortages and tension in the region. The paper has been able to establish that the region is the highest food importing region in the world, which is obviously unsustainable over time amidst increasing population, decline in water supply, and less arable land for farming activity. The paper further agrees that climate change and eventual surge in food prices was responsible for the Arab spring uprising of 2010, and has continue to be the major reason for the plethora of political crises and tension in the region, as can be seen in Syria, Yemen, Iraq, Iran, Gaza, etc. Other factors such as external interference in the region have been noted to be one of the contributing factors of tension in the region. The paper is finally rounded up by critically analysing the Syrian situation and establishing some clear nexus with climate change, which link the civil war in the country directly to the period that was recorded as the world driest period in 500 years, and the applied effect to other countries of the region.

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