# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN MULTIDISCIPLINARY EDUCATION

ISSN(print): 2833-4515, ISSN(online): 2833-453 Volume 03 Issue 05 May 2024 DOI: 10.58806/ijirme.2024.v3i5n06, Impact factor- 5.138 Page No. 721 - 730

# Correlation between Climate Change, Syrian Civil War, & Gender Based Violence

# Olivia Martin-Johnson

Founder & Editor-in-Chief, Feminism Explained Student at Georgetown University SFS '26

**ABSTRACT:** This paper examines the claim that the 2006-2010 drought in Syria directly correlates to the high numbers of genderbased violence cases experienced by Syrian women and girls. The effects from the drought had on mental health, security, and migration all resulted in reduced safety for the well-being of women and girls. The Syrian 2006-2010 drought is a cause of climate change and increased tensions leading to the Syrian Civil War. The problems brought by the drought included forced migration, increased poverty, and a disproportionate effect of gender-based violence towards women and girls.

## INTRODUCTION

The 2006-2010 drought in Syria, which is a product of climate change, had unfortunate negative consequences on the public such as poverty, malnourishment, and forced migration (Daoudy 2022). The claim made in this paper is that the rising tensions caused by the drought and the stress caused by the consequences of the drought directly increased the risk of gender-based violence. Studies have proven the fact that with the Syrian Civil War came an increase in danger for the safety and security of women and girls. This danger has been documented to occur within the household as well as outside the household.

This correlation between climate change and gender-based violence is dire and must be a priority today. With worsening climate change consequences, the negative effects on women will only continue to increase. According to a 2022 UN report on the impact of climate change and the protection of the human rights of migrants, 216 million people could be forced to move due to climate change by 2050 ("Report on the impact of climate change," 2022). Forced migration creates family tension and the need to move by foot through certain security checkpoints, both increasing gender-based violence.

Almost half of gender-based violence victims in developing countries never tell their story. In fact, only 7% of survivors actually report their experience to a professional (Palermo et al., 2013). For this reason, the situation must be taken seriously seeing different case studies throughout the globe. Understanding that there is an issue even if survivors do not come forward is crucial to helping vulnerable people.

This paper will aim to prove that the Syrian 2006-2010 drought, caused by climate change, directly increased gender-based violence experienced by Syrian women and girls. Firstly, the 2006-2010 drought in Syria will be explained and linked to climate change as well as increased tensions leading to the civil war. Next, the effects on people will be analyzed including forced migration and increased poverty. Afterwards, the increase in violence due to the war and due to migration/displacement will be discussed. To conclude, a claim will be made stating that climate change has a direct correlation to increased gender-based violence. An analysis of how women are affected by climate change as well as case studies from different regions throughout the world and relevant references will all be provided in this paper.

This paper will explain the correlation between climate change and gender-based violence by examining the Syrian drought, Syrian civil war, and gender-based violence experienced by Syrian women and girls.

# STUDY PROBLEM

Can the drought in Syria be labeled as a force of climate change (Bivins, 2020)? If so, does climate change have an effect on genderbased violence ("Gender based violence and its interaction with climate change," 2022)? Did the Syrian drought result in genderbased violence increase? These study problems guide the trajectory of this paper, attempting to connect climate change to genderbased violence by looking at the number of cases on the population affected.

# STUDY OBJECTIVES

The objective of this work is to find a connection between climate change and gender-based violence using Syria as the case study.

#### STUDY HYPOTHESIS

The drought in Syria does not correlate to the high numbers of gender-based violence cases experienced by Syrian women and girls. The effects from the drought on mental health, security, and migration are unclear in safety and well-being of women and girls. This paper will evaluate and attempt to disprove this statement, defining the correlation between the drought and lack of safety and security of women and girls.

## THEORETICAL FRAMEWORK AND PREVIOUS

From 2006-2010, Syria experienced the worse multiyear drought in almost 900 years (Holleis, 2021). With a decrease in average rainfall in an already semi-arid climate, the drought had catastrophic consequences to agricultural sectors and livelihoods. The drought was most severe in the north-east of the country, which according to the International Fund for Agricultural Development is the poorest region of Syria ("Enabling poor rural people to overcome poverty in Syria," 2009). This region typically produces over two thirds of the country's crop yields due to the majority of rainfall being in the region and on the coast of the Mediterranean Sea (Kelley et al., 2015).

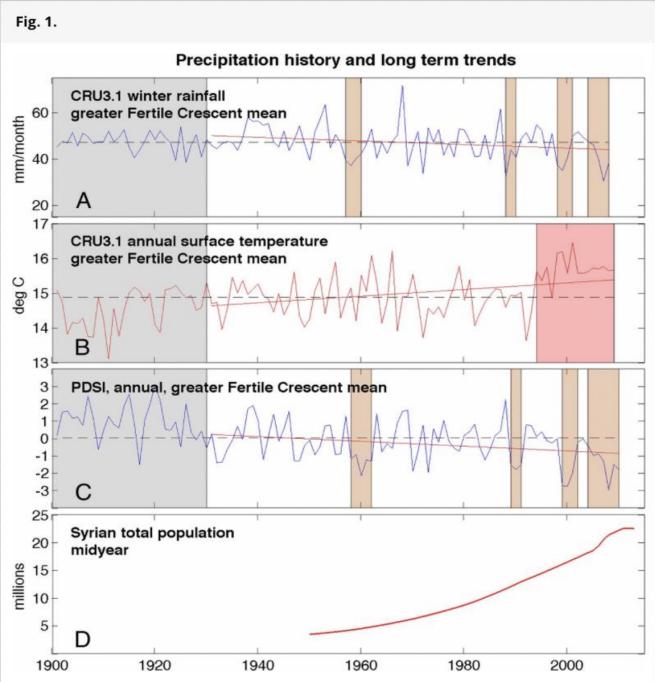
#### **Climate Change Classification**

A direct consequence of climate change seen in Syria is the decline of groundwater and rainfall as well as rising surface temperatures over a short period of time. Shown in Figure 1, year-to-year variability of rainfall has increased in the Fertile Crescent region, (the Fertile Crescent region includes the north and north-east regions of Syria). Figure 1A shows the decrease in mean precipitation and the increase in multi-year, (>3), droughts (shown as brown shading). Nearly all rain falls along the north and northeast regions, the Fertile Crescent, where the majority of food production takes place, because of the Mediterranean Sea coast (Kelley et al., 2015). This rainfall is crucial to Syria's food production, as two thirds of cultivated land in the country is rain fed, while the rest depend on irrigation and groundwater (Erian, 2011). With less rainwater, farmers had to resort to pumping groundwater for their crops. This exploitation and overuse of this groundwater has been blamed for the drying of the Khabur River, located in the northeast of Syria (Erian, 2011).

**Figure 1**B shows the sudden increase in surface temperature in the region ("U.S. gridded Palmer Drought severity index," n.d.). One example is Nebk, north of Damascus, an area that used to benefit from vines and wheat fields, has now turned to desert due to climate warming (de Chatel, 2014). The biggest increase in temperature occurred during 1994 through 2009, however the region has outpaced global mean surface temperature rise for over a century (Kelley, 2015). Increasing temperatures leads to more evaporation which depletes the moisture needed for certain crops such as wheat. Therefore, with less precipitation in the winter and more evaporation in the summer, soil moisture and water reserve have drastically declined. Figure 1C shows the Palmer Drought Severity Index and considers soil moisture change by looking at temperature and rainfall to indicate the change from normal to severe conditions (Sousa, 2011). Lower PDSI values indicate drier climate and greater possibility of drought ("U.S. gridded Palmer Drought severity index," n.d.).

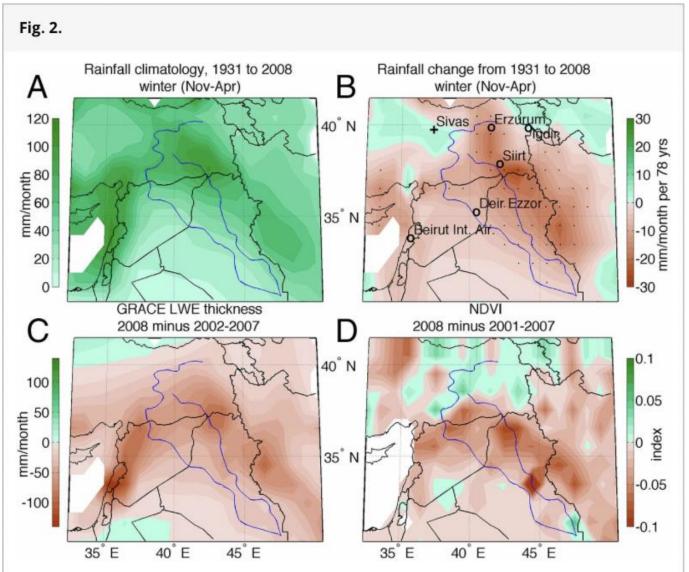
Figure 2 shows the change in rainfall, with drastic decreases during the drought. Figure 2A and 2B show that the pattern seen by statistically significant (P < 0.1) negative rainfall is similar to the climatological rainfall pattern ("U.S. gridded Palmer Drought severity index," n.d.).

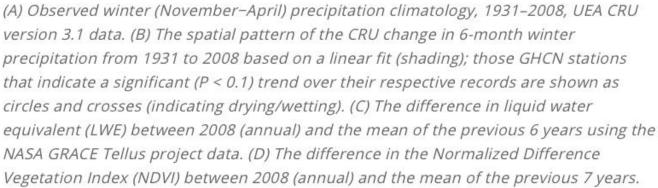
In the UN Paris conference on climate change in 2015, many politicians and commentators used the drought in Syria to advocate for limiting greenhouse gas emissions, attributing them to the issues seen in the country (Bivins, 2020). Models of the region's climate are more consistent with human-induced climate change patterns in comparison to natural variability models (Kelley, 2015). Models specifically show that as greenhouse gas concentrations rise, the region will continue to become drier ("Intergovernmental Panel on Climate Change," 2007). For these reasons, the drought experienced by Syria in 2006-2010 can be seen as a force of climate change.



(A) Six-month winter (November–April mean) Syria area mean precipitation, using CRU3.1 gridded data. (B) CRU annual near-surface temperature (red shading indicates recent persistence above the long-term normal). (C) Annual self-calibrating Palmer Drought Severity Index. (D) Syrian total midyear population. Based on the area mean of the FC as defined by the domain  $30.5^{\circ}N-41.5^{\circ}N$ ,  $32.5^{\circ}E-50.5^{\circ}E$  (as shown in Fig. 2). Linear least-squares fits from 1931 to 2008 are shown in red, time means are shown as dashed lines, gray shading denotes low station density, and brown shading indicates multiyear ( $\geq$ 3) droughts.

(PDSI, 2024)





(PDSI 2024)

# **Drought's Impact on People**

The 2006-2010 drought in Syria resulted in less crop yield, less accessible water, and more insecurity and instability. This led to the increase in food prices as well as loss of livelihoods, making people vulnerable, malnourished, and impoverished (Holleis, 2021). This was especially difficult for the north and north-east, which already had the most vulnerable population in the country ("Unprecedented rise in poverty rate," 2022). Crop yields deceased by at least two-thirds during this time (Holleis, 2021). A wheat farmer in Qamishle explained how he lost his job and was forced to move: "Farming stopped, and I sold plastic for a while, but it was not enough" ("Drought driving farmers to the cities," 2009).

The farming communities in the north-east region were the worst hit by the consecutive years of drought, a population that was already classified as vulnerable. Farmers felt the effects immediately, with small and medium scale farms suffered from near-zero

production, meaning almost all of their livestock herds were lost ("International Federation of Red Cross and Red Crescent Societies, 2009). As the drought continued, situations for the people worsened. Two consecutive years of no crops, lack of seeds for farmers, and lack of pasture required herders to sell or slaughter their cattle ("Drought assessment mission Syria," 2009).

From 2007-2008, prices more than doubled for wheat, rice, and feed ("Integrated Regional Information Networks," 2009). A director of the Syrian National Agricultural Policy Center stated that the drought, which depleted crop production, was the main factor which drove up food prices. Prior to the drought, agriculture in the country was responsible for 25% of gross domestic product in 2003. In 2008, in the middle of the drought and the driest winter yet recorded, agriculture share fell to 17% of gross domestic product, down almost half of what it was five years prior ("US Department of Agriculture Foreign Agricultural Service," 2014). Resources were further strained due to the increase in population. Shown in Figure 1D, the population of Syria grown from 8.9 million in 2002 to 13.8 million in 2010 ("US Census Bureau International Database," 2023). According to Syria Drought Response Plan by the United Nations, affected people's income has "decreased by 90% and their assets and sources of livelihood have been severely compromised" ("Syria drought response plan," 2010). Over the decade of conflict, high food prices have left families struggling to eat and survive. This UN report labels women and girls as the ones who eat last and eat least in situations of less food, putting them at a higher risk ("Situation for women and girls in Syria worse than ever before," n.d.). Increased poverty from the effects of the drought directly increased risk of domestic violence against women and girls (Woldetsadik, n.d.).

One of the most significant consequences created by the drought was forced migration. Large scale migration can be seen as a direct effect of the drought because of the collapse in agriculture production and loss of jobs. The United Nations response plan to the drought highlights the "dramatic increase in already substantial migration" seen as early as 2013. According to the Middle East and North Africa Disaster Management Coordinator for the International Federation of the Red Cross and Red Crescent Societies, the environment in Syria is no longer livable, as farmland has become desert, and the only solution is migration ("Syria: Drought driving farmers to the cities," 2009). An analysis by the United Nations Development Programme shows that 2 to 3 million people experienced extreme poverty from 2006-2009 and around 1.5 million people were displaced and relocated to the southern areas of the country all because of the drought's consequences (Bivins, 2020). Lack of jobs, inability to purchase food, and forced migration mean people have less to spend which increased poverty and crime. UNICEF has reported increase dropout rates from schools as families have migrated and they can no longer afford the cost of education or the loss of work help that students can contribute to the family's earnings. For these reasons, a lot of students have also been moved outside of the country alone families ("Syria drought response plan," 2010). Moreover, diseases have become more apparent due to lack of water and the use of water from unclean sources ("Syria: Drought driving farmers to the cities," 2009).

Drought-related loss of livelihoods displaced entire families ("Syria drought response plan," 2010). This sudden displacement has expanded already existing camps in the north-east region of Syria, specifically Mzeirieb near Dara'a. After 2008, many people were forced to relocate to the camp due to the inability to support themselves due to the drought's effects (de Chatel, 2014). According to a UNICEF assessment conducted in 2009, tent settlements near Damascus who fled the north-east region showed horrible living conditions including poor sanitation and mal nourishment greatly affected already vulnerable populations ("Syria drought response plan," 2010).

The forced migration in Syria directly contributes to increased social problems. Crime rates in the country where migrants have settles has risen due to the poverty created by the drought, according to locals ("Syria: Drought driving farmers to the cities," 2009). As the drought leads to a decreased access to food, water, education, jobs, and livelihoods, stress increases. The stress can be seen through physical harm which increases in the lack of these resources. Physical harm includes gender-based violence and intimate partner violence ("Ahead of the Brussels III Conference," 2019). With the tension that increased in homes and with forced migration disrupting life, women were the first to feel the effects.

#### **Increased Political Tension**

The drought directly contributed to the growing tensions leading up to the civil war. Said consequences include "decreased food intake, lack of capacity to sustain livelihoods, large-scale school drop-outs, and mass migration" ("Syria drought response plan," 2010).

Syria's protests in 2011, which ultimately fueled war sentiments, added to the migration and economic stress which people were under which motivated them to protest (Bivins, 2020). A UN Special Envoy for Syria from 2014-2018, stated that "climate disruption was an amplifier and multiplier of the political crisis that was building up in Syria" (Holleis, 2021).

The concept of the "threat multiplier," first developed by Johnstone and Mazo, discusses the increase in interactive effects on national issues. In an article written about the Tunisian and Egyptian revolutions, they argued that climate change played a role in the spreading revolts in the region. When looking at Syria, Femia and Werrel argue that climate change is a major factor that contributed to the rise of revolts in the region. Therefore, it is safe to say that the lack of effective agricultural and environmental governance contributed to political unrest (Kelley et al., 2015).

Although the drought is not fully responsible for the Syrian Civil War, it is a factor that increased tension. With pre-existing issues in the country including poverty, and scarce resources, the addition of the drought and its negative consequences added to the growing negative sentiment felt by some of the population (Holleis, 2021).

## HOW WOMEN HAVE BEEN AFFECTED BY SYRIAN CIVIL WAR

The conflict within Syria had a direct negative impact on women and girls, increasing gender-based violence. All types of sexual and gender-based violence has increased in the country both because of the conflict starting in 2011, but also prior due to forced migration from climate change ("Ahead of the Brussels III Conference," 2019). An interview placed in a UNFPA report on the status of women and girls in Syria explains the situation that young girls were raised in due to growing up in a war setting: "We [girls] were told not to leave our houses for fear of harassment, rape, and kidnap. I was told that child marriage was my only path to true safety" ("Situation for women and girls in Syria," 2022).

#### **Gender Based-Violence**

According to UNHCR, the majority of gender-based violence survivors around the world are women and girls. The United Nations' definition of gender-based violence is "any act that results in physical, sexual, or psychological harm or suffering to women... whether occurring in public or private life" (Kirkegaard, 2022). Gender-based violence takes form in "sexual violence, emotional or psychological violence, socio-economic violence, domestic violence, child marriage, and polygamous marriage" ("What is gender based violence," n.d.).

Pressures created from socio economic issues has led to an increase in gender-based violence such as abuse, intimate partner and domestic violence towards Syrian women ("Gender based violence and its interaction with climate change," 2022). Syrian women have reported to UNFPA that violence in the home has increased due to displacement and conflict ("Situation for women and girls in Syria," 2022). A Thomson Reuters Foundation survey by global experts labels Syria as the world's third most dangerous country for women ("Which are the world's 10 most dangerous countries for women," 2018). This is all attributed to the domestic violence, sexual abuse, and oppression that has increased due to the ongoing conflict (Varalli, 2023).

With the forced migration, women on the move were extremely susceptible to gender-based violence. Women on the move were targets for sexual slavery, as different groups would sell women to new recruits in exchange for funding for their activities (Varalli, 2023). According to UNHCR (United Nations of High Commissioner for Refugees) surveys, women say they hardly leave the house. Women and girls credit their limited movement outside the home to fear of sexual violence or harassment (Raistick et al., 2014).

Medical complications from gender-based violence include sexually transmitted infections, unwanted pregnancies, complications during pregnancy, complications from unsafe abortions, mental health such as depression, post-traumatic stress, anxiety, and suicide. Other linked complications to violence include children's survival, development, and schooling (Raistick et al., 2014).

Social stigma and repercussions of admitting gender-based violence results in very little amounts of reporting. Therefore, it is believed that gender-based violence in Syria is almost never reported (Caroline 2021). Gender-based violence survivors often to not report their trauma due to culture and fear of repercussions including social exclusion, stigma, honor killings, and more (Raistick et al., 2014). For example, once a woman is raped, her honor is violated. The patriarchal culture dictates that this means she is no longer fit for marriage. Therefore, women and girls who are victim to such violence are also social outcasts and a disappointment to their family for not getting married, not having desired children, and not having a man to depend on financially for her sake and her family's sake. Often, this results in honor killings: women are killed as their honor has been removed and they now bring dishonor to their families (Varalli, 2023).

According to UN Women, Syrian women and girls continue to experience risk of gender-based violence, forced and early marriage, and other issues inside Syria as well as in host communities throughout the region. UNFPA (United Nations Fund for Population Activities) Regional Director of Arab States, Dr. Luay Shabaneh, states that "the situation for women and girls in Syria and the region is worse now [2022] than it has been since the conflict began. They face enormous challenges, including mounting risks to their health and safety" ("Situation for women and girls in Syria is worse than ever before," 2022). Currently over 7 million Syrian women and girls, both in the country and in neighboring countries, are in needs of live-saving health services due to increasing numbers of women dying during pregnancy and childbirth from unwanted sexual violence ("Situation for women and girls in Syria is worse than ever before," 2022). According to a June 2023 UN report, 74% of people in Syria that are in dire need of nutritional assistance are women and girls.

#### Youth Marriages

The Syrian conflict has resulted in an increase of early and forced marriages, according to a UN published article on the gendered impact of the war. Marriages are more common for a couple of reasons: it gives more financial protection to a woman to be connected to a man, as well as financial protection for her family; it helps protect family reputation as increased risk of sexual violence may lead to overcrowded living arrangements and the inappropriately seen close proximity of young girls and boys; and it

is seen as a way to ensure that a young girl has the ability to have an honored marriage as safety in case she experiences physical violence and is no longer able to get married due to losing her virginity ("Ahead of the Brussels III Conference," 2019). Therefore, out of the misinterpretation of safety, families marry girls younger under different conditions. These dangerous conditions can also include marrying older men or marrying men that are unknown to the family or bride. This is due to lack of opportunities and the need of economic security that marriage promises, as well as safety and protection for young girls in contrast to not having someone look over them (Raistick et al., 2014). However, young girls marrying older men puts them more at risk for an abusive relationship (Varalli, 2023). According to a 2020 report used by the Syrian American Medical Society, 70% of surveyed women and girls in northwest Syria report that child brides were more likely to experience partner violence (Caroline 2021). Therefore, child marriages constitutes a large part of increased gender-based violence due to the Syrian conflict.

Families often result in marrying their daughters young in times of conflict as a form of protection. According to Save the Children, another reason for young Syrian girls to be in arranged marriages during the conflict is to facilitate their family's entry to another country. Girls who marry Jordanian men can help bring their family to a safer country ("Too young to wed," 2014). This mistake puts these girls at greater risk for violence with their partners as well as higher rates of illiteracy from withdrawal of schooling, sexual and reproductive health complications due to early pregnancy, and heightened psychological stress (Caroline 2021). In conflict and forced migration, the removal of children from schooling due to limited opportunities and education for women increases youth marriage (Bailey-King, 2018).

#### **Risk in Camps**

Gender-based violence continues to be a threat to Syrian women and girls despite their ability to flee Syria. In many cases, the situation has gotten worse in recent years due to lack of motivation and lack of ability to find work for men, heightening poverty and tensions in the household.

A survey taken by Syrian refugees in Lebanon reports that more than 70% of reported domestic violence incidents are perpetrated by family members and only one-third of survivors seek help ("Linking data analysis to programming series," n.d.). Although Syrian women and girls travel to escape violence, the reality of gender-based violence presents a greater danger as it follows them in their attempt to seek asylum. The director of Gender Equality programs at ABAAD, a UN ECOSOC (United Nations Economic and Social Council), accredited organization, said in an interview that Syrian refugees in Lebanon continue to experience high levels of interpersonal violence (Woldetsadik, 2018).

A study conducted in Azraq camp, a Syrian refugee camp in Jordan, by the national Gender-Based Violence Working Group and data collected by protection workers in the camp found that there is a real threat of physical violence posed on women and girls ("Gender-based violence risk assessment Azraq Camp," 2021). Gender-based violence was found to be the most dire issue based on conversations in focus group discussions. The group found to be most at risk of gender-based violence were young adolescent girls attending school. Before the COVID-19 pandemic, traveling to and from school as well as outside the school gates were target areas where girls were being harassed. A UN manager within the camp said, "some of the female youth stopped going to school because they suffered from sexual abuse on their way to school." For this reason, harassment is noted as a key reason for the high rate of female dropouts from school. Some girls stated that they chose to hide the fact they were harassed in order to continue being able to go to school. After the pandemic, harassment around school settings has decreased because of online schooling. However, harassment within the home has increased because of the loss of livelihoods and increased stress due to the COVID-19 pandemic. "Physical violence is happening a lot to women by their husbands," stated a Syrian adolescent boy ("Genderbased violence risk assessment Azraq Camp," 2021).

Besides school, women and girls face daily threats to their safety. Many residents of the camp simply sited the presence of men as a threat, especially in crowded places, giving them the opportunity to have physical contact with women and girls. A woman from the camp commented "there is no danger on the man, he is the danger." Other areas of danger include in roads that lacked sufficient lighting, or in bathrooms that do not have locks ("Gender-based violence risk assessment Azraq Camp," 2021).

The time of the COVID-19 pandemic resulted in heightened intensity of violence ("Gender-based violence risk assessment Azraq Camp," 2021). The COVID-19 2020 pandemic has increased gender-based violence threats. According to a report by UN Women on the impact of COVID-19 on women in Jordan, 62% of women reported feel that there is an increase in physical or psychological violence due to household tensions and/or increased food insecurity ("Rapid assessment of the impact of COVID-19 on vulnerable women in Jordan," 2020). COVID-19 also had a direct impact on an increase of child marriages.

With the increase of economic uncertainty due to the COVID-19 pandemic, the benefits of marriage seemed more appealing than ever, resulting in an increase according to women in the camp. Child marriage was noted as the second biggest danger to women and girls within the camp ("Gender-based violence risk assessment Azraq Camp," 2021).

#### CORRELATION BETWEEN DROUGHT AND GBV

With the research, statistics, and findings stated and referred to above, it is clear that the 2006-2010 drought in Syria directly correlates to the increase in gender-based violence experienced by Syrian women and girls within the country as well as those who

have been displaced. The series of events starting with the drought and leading to gender-based violence still being seen today show that slow onset climate change trickles down to consequences which negatively affect women. According to the Irish Consortium on Gender-Based Violence, women and girls are the group that are the highest at risk of gender-based violence as a result of climate related issues ("Gender based violence and its interaction with climate change," 2022).

## **Global Case Studies**

Climate change has been connected to an increase in gender-based violence in the past due to different areas of the world experiencing a cross over between the two. One case study in Peru shows the correlation between lack of water and vulnerability of women and girls. A report published by the United Nations in 2022 looks at a certain case study in Peru where "climate change exacerbated violence against women and girls" ("Climate change exacerbates violence against women and girls," 2022). The report looks at a 15-year-old girl from Peru who uses personal accounts to express the danger women face as a consequence of climate change. Many women and girls have gone missing, according to her, in search of drinking water, they are forced to go further out and deeper into the jungle to find water, which increases risk of violence.

Similarly, Bangladesh, a region that often experiences drought, has seen a large increase in violence against women and girls. The region of Bangladesh has experienced extreme climate-related disasters, including droughts. Droughts and lack of water means that water collection becomes more difficult, with people having to travel further. In Bangladesh, over 90% of households required women and girls to bear the responsibility of collecting water. Walking far distances increases the risk of gender-based violence ("Gender based violence and its interaction with climate change," 2022).

## ANALYSIS AND CONCLUSION

To start, the droughts effects on the population has directly made women and girls more vulnerable. The increase in prices due to the loss of crop production also directly affects stress and pressure experienced by the public. This resulted in forced migration, and household tension leading to an increase in gender-based violence. Specifically, the drought in Syria has led to a lack of resources including water, food, jobs, etc. Past findings state that resource scarcity results in increased gender-based violence because of stress in the family, displacement, and having to travel longer distances to find water or food or other resources all increases risk and vulnerability to assault (Soliman et al., 2022). When looking at Syria, we see that the lack of resources results in family displacement and increases stress.

According to Michelle Bachelet, UN High Commissioner for Human Rights, women who are displaced are at greater risk of gender-based violence ("Climate change exacerbates violence against women and girls," 2022). And according to UN Environment, 80% of people displaced by climate change are women ("Women bear the brunt of the climate crisis," 2021). Therefore, these two statements when read in conjunction state that climate change, which displaces women at a larger rate than men, results in a greater risk of gender-based violence.

The Syrian drought, a result of climate change, has been the driving force of a large displacement of people. This climate change forced migration has displaced women and has put them in a more vulnerable and susceptible position for gender-based violence. Moreover, the stress induced by drought by the family is another direct increase in violence. Drought has shown to increase stress in the home and in a community. This stress leads to more conservative and patriarchal practices which directly leads to an increase in gender-based violence and child marriage (Soliman et al., 2022).

#### REFERENCES

- 2010, 22 February. (2010, February 22). Syria drought response plan 2009-2010: Mid-term Review. Front page. https://www.unocha.org/publications/report/syrian-arab-republic/syria-drought-response-plan-2009-2010-mid-term-review
- 2) Abaad stands for Zero tolerance to sexual exploitation & abuse. ABAAD. (n.d.). https://www.abaadmena.org/
- 3) Bailey-King, E. (2018, August 16). Child marriage and the syrian conflict: 7 things you need to know. Girls Not Brides. https://www.girlsnotbrides.org/articles/child-marriage-and-the-syrian-conflict-7-things-you-need-to-know/
- 4) Bivins, A. (2020c, September 29). On blaming climate change for the Syrian Civil War. MERIP.
- https://merip.org/2020/09/on-blaming-climate-change-for-the-syrian-civil-war/
- 5) Caroline.philhower. (2021b, December 8). Violence has many faces: GBV in the Syrian conflict. Syrian American Medical Society Foundation. https://www.sams-usa.net/2021/12/08/violence-has-many-faces-gbv-in-the-syrian-conflict/
- 6) Climate change exacerbates violence against women and girls. United Nations Human Rights. (2022, July 12). https://www.ohchr.org/en/stories/2022/07/climate-change-exacerbates-violence-against-women-and-girls
- 7) Daoudy, M. (2022, March 22). The Syrian Revolution: A Story of politics, not climate change. Royal United Services Institute.https://rusi.org/explore-our-research/publications/commentary/syrian-revolution-story-politics-not-climatechange#:~:text=To%20some%2C%20climate%20change%20caused,ultimately%20culminating%20in%20the%20uprisin gs

- 8) de Châtel, F. (2014, January 27). The role of drought and climate change in the Syrian uprising: Untangling the Triggers of the Revolution. http://www.tandfonline.com/loi/fmes20.
- https://blogs.commons.georgetown.edu/rochelledavis/files/francesca-de-chatel-drought-in-syria.pdf
- Factbox: Which are the world's 10 most dangerous countries for women? Reuters. (2018, June 25). https://www.reuters.com/article/us-women-dangerous-poll-factbox-idUSKBN1JM01Z/
- 10) Gender-based Violence Risk Assessment Azraq Camp jordan. ReliefWeb. (2021, March 7). https://reliefweb.int/report/jordan/gender-based-violence-risk-assessment-azraq-camp
- 11) Holleis, J. (2021a, February 26). How climate change paved the way to war in Syria DW 02/26/2021. dw.com. https://www.dw.com/en/how-climate-change-paved-the-way-to-war-in-syria/a-56711650
- 12) Irish Consortium on Gender Based Violence. (2022b, August 4). Irish consortium on Gender Based Violence on linkedin: #GBV #endgbv #icgbv #sustainabledevelopmentgoals #climatechange: 38 comments. Irish Consortium on Gender Based Violence on LinkedIn: #gbv #endgbv #icgbv #sustainabledevelopmentgoals #climatechange | 38 comments. https://www.linkedin.com/posts/irish-consortium-on-gender-based-violence\_gbv-endgbv-icgbv-activity-6960895088554037248-z2dY
- 13) Kelley, C. P., Mohtadi, S., Cane, M. A., Seager, R., & Kushnir, Y. (2015, March 2). Climate change in the Fertile Crescent and implications of the ... PNAS. PNAS. https://www.pnas.org/doi/full/10.1073/pnas.1421533112
- 14) Kirkegaard, D. (2022, July 27). What is gender-based violence (GBV)?. USA for UNFPA. https://www.usaforunfpa.org/what-is-gender-based-violence-gbv/
- 15) Linking data analysis to programming series: No. 4 GBVIMS. National GBV IMS Steering Committee Lebanon. (n.d.). https://www.gbvims.com/wp/wp-content/uploads/Lebanon\_Linking-Data-Analysis-to-Programming\_Finalv7.pdf
- 16) Press release: Ahead of the Brussels III Conference, the European Union, UN Women and UNFPA call for stronger measures to address the needs of Syrian women and girls. UN Women Arab States. (2019b, February 26). https://arabstates.unwomen.org/en/news/stories/2019/2/the-impact-of-the-syria-crisis-on-women-and-girls
- 17) Raistick, N., & Maglietti, M. (2014). Reporting on Gender- Based Violence in the Syria Crisis. UNFPA. https://www.unfpa.org/sites/default/files/pub-pdf/EN\_AR2021.pdf
- 18) Rapid assessment of the impact of COVID-19 on vulnerable women in Jordan. UN Women- Jordan. (2020). https://jordan.unwomen.org/en/digital-library/publications/rapid-assessment-of-the-impact-of-covid19-on-vulnerablewomen-in-jordan
- 19) Situation for women and girls in Syria worse than ever before as conflict grinds on. United Nations Population Fund. (n.d.). https://www.unfpa.org/press/situation-women-and-girls-syria-worse-ever-conflict-grinds
- - $a frica \#: \sim: text = Research \% 20 indicates \% 20 that \% 20 women \% 20 and, may \% 20 go \% 20 back \% 20 to \% 20 normal.$
- 21) Syria: Drought driving farmers to the cities syrian arab republic. ReliefWeb. (2009, September 2). https://reliefweb.int/report/syrian-arab-republic/syria-drought-driving-farmers-cities
- 22) Syria: Unprecedented rise in poverty rate, significant shortfall in humanitarian aid funding [en/AR] syrian arab republic. ReliefWeb. (2022, October 18). https://reliefweb.int/report/syrian-arab-republic/syria-unprecedented-rise-poverty-ratesignificant-shortfall-humanitarian-aid-funding-enar
- 23) Too young to wed The growing problem of child marriage among Syrian girls in Jordan. Save the Children. (2014). https://www.savethechildren.org.uk/content/dam/global/reports/education-and-child-protection/too-young-to-wed.pdf
- 24) U.S. gridded Palmer Drought severity index (PDSI) from gridmet. Drought.gov. (n.d.). https://www.drought.gov/datamaps-tools/us-gridded-palmer-drought-severity-index-pdsigridmet#:~:text=The%20PDSI%20is%20a%20standardized,4%20represents%20an%20extreme%20drought
- 25) United Nations. (2021, November 9). Women bear the brunt of the climate crisis, cop26 highlights | UN news. United Nations. https://news.un.org/en/story/2021/11/1105322
- 26) Varalli, S. (2023, August 18). How a decade of war in Syria has led to serious gender-based human rights violations. Women of Influence. https://www.womenofinfluence.ca/2021/06/09/how-a-decade-of-war-in-syria-has-led-to-serious-gender-based-human-rights-violations/
- 27) What is gender-based violence. UNHCR Türkiye. (n.d.). https://help.unhcr.org/turkiye/information-and-resources-on-protection-from-violence/what-is-gender-based-violence/
- 28) Woldetsadik, M. A. (2018, March 22). Tackling gender-based violence among Syrian refugees in Lebanon | rand. RAND Corporation.https://www.rand.org/pubs/commentary/2018/03/tackling-gender-based-violence-among-syrianrefugees.html