

Key Factors Affecting Black Swans and Gray Rhinos in the USCENTCOM AOR

Expert Elicitations and Background Research

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Executive Summary

NSI, Inc. interviewed seven subject matter experts¹ and conducted additional background research in support of its analyses on Black Swans, Gray Rhinos, and current thinking about key factors and variables not typically included in political stability models (e.g., climate variables, the influence of illicit networks).² The main topics of focus included water and food availability, sectarianism (ethnic and religious), refugee flows, illicit drug networks, illicit antiquities trade, and human trafficking. Summarized findings relating to each of these topics are presented in detail below.

Water and Food Availability

- The USCENTCOM area of responsibility (AOR) is largely dependent on groundwater resources, which are finite and dwindling. This is a looming threat because, as the region, especially the Middle East, runs out of water, the population will come under stress and may be forced to emigrate.
- Surface water is also in jeopardy due to decreasing rainfall. Furthermore, it is controlled by relatively few states in the Middle East and Central Asia, creating the potential for interstate conflict over this life-essential resource.
- The Middle East is dependent on foods and goods produced in other regions (particularly Eurasia and China). Many of these resources require continued access to water for sustained production. Therefore, droughts in these regions that impact food production levels will also have a profound impact on food insecurity and instability in the Middle East.
- A Black Swan-like danger is that when food and water availability cross critical thresholds, weak governance in the region may not be able to compensate, which could lead to rapid regime collapse and instability.
- The greatest potential for sudden, Black Swan-like effects is in the interactions between water availability, climate change, economic growth, urbanization, and population growth. Unit changes in these variables are multiplied, producing amplified effects on instability.

¹ The following subject matter experts kindly contributed to this effort: **Dr. Thomas Barfield** (Boston University), **Dr. Noor Borbieva** (Purdue University, Fort Wayne), **Dr. Alex Braithwaite** (University of Arizona), **Dr. Peter Gleick** (Pacific Institute), **Cascade Tuholske** (University of California, Santa Barbara), **Christine van den Toorn** (Iraq Fund for Higher Education), and **Dr. Katalyn Voss** (Georgetown University).

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Sectarianism

- Religious and ethnic sectarianism is important in the region. However, these identities are not immutable and written in stone.
- Sectarianism rose after the Iranian Islamic Revolution in 1979, which alarmed Sunni Arab states in the region and intensified the Sunni/Shia Muslim division. Within Iraq, the US invasion in 2003, increased Sunni/Shia sectarianism within the country as those factions vied for power. However, the ethnic orders established in Middle Eastern and Central Asian countries may be weakening as their governments have failed to serve their own ethnic constituencies.
- A new generational division appears to be emerging between a disaffected younger population and the ethnically-based establishment.
- Sectarian divides exist but are not necessarily always salient and should not be assumed as such. They become active when elites use them to mobilize support in bids for power. Extremists will also try to mobilize support along sectarian lines.
- However, power typically flows upward from local strongmen and elites who serve as patrons for local followings. Those local leaders similarly gain benefits and serve provincial leaders, and so forth to national leaders. These power relations do not necessarily follow sectarian lines.
- The dynamics of these power relations can be different from country to country.
- Outside powers exert powerful influences as well; however, they do not always do so to their own benefit. Russian and Chinese ethnocentrism is manifest in different ways. Central Asians are dependent on remittances from labor in Russia but resent the discrimination they experience when working there. The Russian government appears to regard Central Asia as a region it could take back if it wanted to, which is probably a delusion. China tends to look down on non-Han, and while its investments are welcome in cash-strapped Central Asian states, China's condescension, predatory loaning practices, and unfair labor practices may eventually create a serious backlash.
- The dependency of Central Asians on remittances from Russia means that political or economic instability in Russia is likely to have a ripple effect on Central Asia.

Refugee Flows

- Refugees are a destabilizing factor in the Middle East. Iran also houses millions of Afghan refugees.
- Countries that house large refugee populations are burdened and potentially destabilized, but they can also use them as political pawns by threatening to send them home or unleash them on other regions of the world.
- The water availability crisis in the region may ultimately cause mass migrations from the region if food availability and quality of life become no longer tenable. This is especially the case if regional governments are unable to cope with the effects of water and food vulnerability.

Drugs

- Illicit drug manufacturers and traffickers benefit from insecurity, and places like Syria and Afghanistan have attracted drug trafficking as a result. However, there is a reciprocal effect in that drug trafficking increases corruption and instability in these very states, creating a spiraling positive feedback loop of increasing drug trafficking and instability.
- Terrorist organizations, including Hezbollah (with Captagon), the Taliban (with opium), and ISIS (with Tramadol and nicotine) have benefitted from the instability they have sown and have been able to partially fund their operations through the illicit trade.
- The proliferation of the drug trade in the Middle East and Central Asia has led to extremely high drug abuse rates, taxing health care systems and damaging societies throughout the region.

Illicit Antiquities

- Political insecurity increases the looting of antiquities. Locals may opportunistically loot as law enforcement and antiquity site protection becomes diminished or insufficient, and terrorist groups may strategically loot to fund their operations and denigrate their enemies by destroying sacred sites.
- Because re-establishing security in unstable regions is difficult, the most effective way of preventing illegal antiquities trade and denying terrorists this income may be to target wealthy buyers in the West who make online purchases with near impunity.

Human Trafficking

- Human trafficking in the Middle East is often used to coerce labor and force women into prostitution and sexual slavery. This adds to the burden of grievances that fuel unrest in the region.
- Trafficking networks also fuel illegal migration outside of the region and destabilize regions like Europe.

Water and Food Availability

NSI interviewed three experts (Gleick; Tuholske; Voss) on water availability and food security in the Middle East. Other experts (Barfield; Borbieva; van den Toorn) also made water-related comments during their interviews. A literature review was also conducted to supplement the insights provided by the experts.

Water issues are important because water availability is correlated with state and political security (NATO, 2019). Gleick (2017) provides a framework for thinking about conflict and water. As Gleick explains, water is correlated with conflict for several reasons, including:

- **Water scarcity can trigger conflict:** People fight over access to or control of water as a resource.
- **Water and water systems can be weaponized:** Water can be held back from or used to flood targeted groups.
- **Water can be a target:** Armed groups or militaries can seek to damage or destroy water resources and water supply infrastructure (as has been seen in Yemen).

Groundwater

In the Middle East, much of the water supply occurs as groundwater, locked in fossil aquifers and accessible only through wells. For instance, Kuwait does not have a source of renewable water within its borders (NATO, 2019). Groundwater is a finite and dwindling resource in the Middle East (Voss; see also Gleick, 2014, 2017). Unfortunately, no one knows how much is left or how the costs of extraction will increase as groundwater levels drop. Voss likens it to drawing on a bank account when you do not know how much you have in the bank. The dwindling supply of groundwater in the Middle East is a looming Gray Rhino; the impact of its loss will be felt in both agriculture and urban water supplies and is potentially devastating to the populations and polities of the region.

Surface Water

Surface water is limited throughout the USCENTCOM AOR and is controlled by only a few countries; Turkey controls water flow for the Tigris and Euphrates rivers feeding Syria and Iraq (Gleick; Voss), Kyrgyzstan and Tajikistan control key water resources for Uzbekistan in Central Asia (Barfield; Borbieva),

and Afghanistan controls water going to the Helmand Basin in Iran (Gleick). Therefore, surface water has the potential to incite conflict or be weaponized. Though these controlling countries have not taken escalatory action yet, their future decisions to exercise control of water is likely to result in interstate conflict. For example, low-level conflict may eventually emerge between Afghanistan and Iran over water (Gleick). So far, a few limited water agreements have been instituted, but not effectively enforced, between countries in the region. This indicates the possibility for peaceful negotiation over surface water access is still in play; although the weakness or lack of agreements leaves the opportunity for conflict and weaponization (NATO, 2019). Water conflict is usually sub-national and can be disruptive. For example, sub-national conflict over water could emerge in the form of disputes in southern Iraq between Iraqi (even Shia) farmers and the Shia majority government of Iraq (van den Toorn).

Climate Change

Floods and droughts are becoming increasingly unpredictable, frequent and severe, leading to increased conflict over water in the Middle East (Gleick; Voss; see also Al-Rimmawi, 2012; NATO, 2019). This trend is interacting with other factors to destabilize the region. Poor governance means that water-related problems are not mitigated, creating stresses on the population and social system (Gleick). Population growth and floodplain overdevelopment (construction) interact to erode floodplains, decrease farmland, and increase flooding hazards (Gleick; Voss). This process is happening, but perhaps too slowly to be obvious, which could mean that the problem will be realized after it has crossed a “too late to solve” threshold (Voss). Ultimately, loss of water resources and land can destabilize economies in the Middle East and lead to mass migration (Gleick). Increasing temperatures could be another Gray Rhino trend. When temperatures rise above 40°C (104°F), people cannot effectively work and production decreases, which can lead to food insecurity (Tuholske). The Middle East is becoming excessively hot with more and more days that exceed this limit, which could harm economies (Tuholske).

The interaction of water availability and food security is especially complex and important for economic stability (Tuholske). Agriculture is responsible for 60 to 90 percent of the world’s freshwater withdrawal (Bastiaanssen & Steduto, 2017). A steady temperature increase of 0.2°C per decade has begun to impact harvest seasons and the types of grains that can be produced, which has in turn affected the productivity of the region’s livestock (NATO, 2019). Because Middle Eastern countries lack water, they are net food importers (Tuholske; see also NATO, 2019). Because food and manufactures require water, and because the Middle East imports so much food and goods, it is dependent on the water resources of other regions. Therefore, this dependency makes the Middle East vulnerable to droughts occurring in other regions of the world (Tuholske). Urbanization is also growing in the Middle East, increasing the requirement for food imports and therefore their dependence on water from outside of the region. Droughts in the Middle East certainly stress the population and its food supply, but droughts outside of the region can have a devastating impact (Tuholske). A case in point is the Syrian civil war. Droughts in Syria caused a migration of the rural population into the cities. At the same time, a series of droughts in Russia and China caused both to restrict food exports to the Middle East, spiking food prices and further intensifying grievances, leading to the protests that eventually spiraled out of control in the lead-up to the Syrian civil war (Erian, Katlan, & Babah, 2010; Gleick, 2014; Johnstone & Mazo, 2013; Kelley, Mohtadi, Cane, Seager, & Kushnir, 2015). Here the careful argument is that water and climate can be contributing factors to insecurity and unrest, not that they are the only factors.

The complex interactions between water availability, climate change, economic growth, urbanization, and population growth create potential Black Swan events, such as the Syrian civil war. Many of these trends are happening slowly now but should they pass a critical threshold, rapid destabilization is possible (Voss; Tuholske).

Potential for Solutions

While the risks of violence related to water and climate conditions are growing, all of the experts noted that people are capable of being innovative and finding solutions (see also Al-Rimmawi, 2012). Smart water management (improved efficiency, expansion of supply options, better management) reduces the risks of water disruptions. Desalinization can expand supply for countries with access to oceans and sufficient capital to build and operate costly systems. This is being done by wealthier countries (Israel, Saudi Arabia), but remains expensive, requires a tremendous amount of energy, and is limited to coastal urban areas (Voss). Israel has an aggressive water recycling program (Voss). In addition, governments have the potential to come up with innovative agreements over water access, although many have not done so yet—for example, there is no international agreement among the countries that share the Tigris and Euphrates river system (Gleick; Voss).

Solutions for securing the food supply that developing countries need to feed their growing populations includes increasing the productivity of crop yields, increasing the efficiency of water use on commercial farms, and avoiding land degradation (Bastiaanssen & Steduto, 2017). To this end, increasing the access for farmers to modern and more efficient technology is an important first step for both the reduction of water usage and increasing average crop yields (Bastiaanssen & Steduto, 2017). Increasing the production of less water dependent crops like corn will increase the overall crop yield and supply of food (Bastiaanssen & Steduto, 2017). More in-depth research on the ratio of water required to achieve an ideal crop yield is needed if both water scarcity and related food shortage are to be addressed (Bastiaanssen & Steduto, 2017). Currently, Middle Eastern countries import 50 percent of their food (NATO, 2019). Because of population growth and global warming, countries in the Middle East must increase their production by 71 percent if they want to maintain the region's current food import level (Brent, 2019).

Sectarianism

NSI interviewed three experts (Barfield; Borbieva; van den Toorn) on sectarianism in the USCENTCOM AOR. Additional research was also conducted to supplement the insights provided by the experts. A broad range of social divides were considered, including ethnic, religious, urban/rural, class, and generational divides. The findings will be addressed regionally, starting with Central Asia.

Central Asia

A shift from sectarian divides to generational ones may be happening in Central Asia. The younger generation is increasingly concerned about and active in protesting issues of corruption, bad governance, and unemployment (Barfield; Borbieva). Urbanization is increasing in Central Asia, and its population is young. Barfield stresses that the effects of rapid urbanization and the youth bulge are unknowns; we tend to focus on the concerns of the people who run government, who are typically over the age of 50, which may not reflect the majority and future population's concerns and, therefore, we may be missing what actually matters to the bulk of the population in the region. Borbieva notes that urbanization is creating stark urban/rural social divides.

The Central Asia states were at one time members of the atheist Soviet Union. After the collapse of the Soviet Union, a religious reawakening occurred (Pannier, 2014). Borbieva notes that religious orthodoxy is increasing, especially due to Saudi-funded madrassas, leading to an emergence of militant Islamist views in Islamic traditions that have had a history of tolerance. More than a thousand civilians of Central Asian states have traveled to the Middle East to join violent extremist organizations (VEOs), most prominently the Islamic State (Pannier, 2014).

The issue of ethnicity, while important, is often misunderstood by Western observers. Barfield states that, historically, people in Central Asia have been used to living in multi-ethnic societies. The assumption was that each group contests for power and dominance, and once the hierarchy is established, proceeds to get on with life. Ethnic identities are probably too broad to define real cleavages; social divides in Central Asia have more to do with wealthy and powerful local patrons and tribute systems and elite power competition rather than ethnic or religious divides (Borbieva). Borbieva stresses that, on a country level, Central Asian polities are so unique that no one characterization of sectarianism or the relation of people to their governments can hold for the region—in Kyrgyzstan, elite wealth is resented; in Uzbekistan, the authoritarian government has concentrated wealth among the elite; and in Tajikistan, regional warlords wield power. A study of the rise of warlordism in Afghanistan also found that the control of small arms actually eroded traditional social structures and led to the rise of warlords as new power brokers (Sidky, 2007).

Central Asian economies are very dependent on remittances, mostly from Russia (Borbieva). Therefore, people and national economies are dependent on the health of the Russian economy. Central Asians benefit economically by working in Russia but also experience discrimination and often return feeling aggrieved. Russia unrealistically assumes Central Asia is devoid of people and can be easily regained (Barfield). The remittance economy raises Black Swan-like possibilities including a Putin fall from power, or a Russian economic collapse (Borbieva), which could have devastating impacts on Central Asian societies.

China's future in Central Asia with its Belt and Road Initiative (BRI) is uncertain (Barfield; Borbieva). One unknown influence is a Chinese tendency to look down upon non-Chinese with contempt (Barfield). If the Chinese treat Central Asians this way there could be backlashes against China.

Sectarianism is a growing issue in Pakistan. Like sectarian violence in the Middle East, underlying political, economic, class conflict, and urban-rural tensions, and upheaval in neighboring countries, are the main drivers for sectarian violence in Pakistan (Roberts, 2019). To emphasize this, while intra-sect violence between Sunni, Shia, and Sufi Muslims does occur in Pakistan, there have been more examples of cooperation between moderate Sunnis and Shias to prosecute extremists within each religious sect of Islam (Roberts, 2019). Pakistan's state government has a complicated relationship with sectarianism that is represented by its state funding of madrassas (Hadid, 2019) and its Prime Minister, Imran Khan, whose populist rhetoric is meant to appease both fundamental Islamists and moderate Muslims (Kuznar & Aviles, 2018).

Iraq

The sectarian divide between Sunni and Shia Muslims is the most well-known divide in the region. The conflict between Sunnis and Shias is most prevalent in Syria and Iraq and most pronounced in tribal communities (Robinson, Connable, Thaler, & Scotten, 2018). State leaders throughout the region often justify conflicts by using sectarian allegiances; however, the true motivation for conflicts are often political or for the control of regional resources (Kabalan, 2019). Kabalan (2019) argues that sectarian violence and conflict in the region is a result of Western intervention and failed state-building activities that date back to the Iranian revolution in 1979. The Iranian revolution is one of the first modern examples of a conflict in the Middle East increasing sectarian-driven violence, as Iran, which is mostly Shia, urged other Shia Muslims to rise up and overthrow their governments in neighboring countries (Kabalan, 2019). This led to Iraq, which was governed by a Sunni minority, taking proactive measures and declaring war on Iran in 1980. Because of Iran's revolutionary rhetoric shortly after the Iranian Revolution, Sunni majority Persian Gulf states supported Iraq financially during the Iran-Iraq war, which increased sectarian tensions throughout the region (Kabalan, 2019).

The Sunni Gulf states and Iraq formed the Gulf Cooperation Council (GCC) in the 1980s, which Iran viewed as a Sunni lead confederation designed to hem in Tehran's regional political power (Kabalan, 2019). Kabalan argues that the US invasion of Iraq in 2003 weakened the GCC and removed an important tool to counter Iran's expansionist tendencies. Van den Toorn believes that a shift from sectarian divides to generational ones may be happening. She notes that sectarianism within Iraq rose after the US invasion in 2003, but the ethnosectarian order has failed most people. Interestingly, in Iraq, the current protests are mainly Shia protesting the Shia elites and Iranian presence. The issues motivating these protests are corruption, bad governance, and unemployment, just as in Central Asia.

Within Iraq, the immediate effect of the recent killing of Iranian Revolutionary Guard leader Qasem Soleimani in Iraq by a US drone strike has been crackdowns on protestors by hardline Shia allied with the government and Iran (van den Toorn). However, this reinforces popular resentment against the Shia elite and Iran, which may lead to a longer-term weakening of Iranian-influenced government in Iraq.

The Kurds

Kurdistan has never been a sovereign region in the Middle East (Taucher, Vogl, & Webinger, 2015). Dating back to the Ottoman Empire, ethnic Kurds have sought to govern themselves as a separate and autonomous region. Following the collapse of the Ottoman Empire in the 1920s, Kurdistan became divided by the sovereign borders of Iran, Turkey, and Iraq as each formed statehood (Taucher et al., 2015). The Kurds became ethnic minorities in all the newly formed countries, and they became easy scapegoats for state issues and subsequently targets for ethnically motivated violence (Taucher et al., 2015). The history of violence in ethnically Kurdish communities from years of government repression and military crackdowns has left Kurdish communities with high amounts of trauma and mental health issues that have only recently been studied. Taucher et al. (2015) point out that the Kurds are not religiously, linguistically, or politically homogenous. This diversity is reflected in Kurdish political parties in Turkey. These parties include Halklarn Demokratik Partisi (People's Democratic Party [HDP]) and Hur Dava Partisi (Free Cause Party [HUDA-PAR]) (Taucher et al., 2015). The HDP has progressive issues on its political platform, including gender equality and LGBTQ rights, while HUDA-PAR is a more conservative party that bases its political beliefs from Sunni-Islam (Taucher et al., 2015).

The Latency of Sectarian Divides: I, Against My Brothers. I and My Brothers Against My Cousins

This old Bedouin Arab saying embodies the concept of the segmentary lineage, codified by anthropologists working in southern Sudan (Evans-Pritchard, 1940), in Somalia (Simons, 1995), throughout the Middle East (Gregg, 2005), in military operations in Iraq (Eisenstadt, 2007), and in Pakistan (Barth, 1959). The segmentary nature of ties means that the ties may exist, but lie dormant, until activated (Harris, 1979). That activation usually comes about when an outside threat arrives, and especially when a leader uses fear of outsiders as a rallying cry for support. This can explain how the salience of sectarian identities can wax and wane, as described by the Middle Eastern and Central Asian experts interviewed and in the history of sectarianism as described in the literature. Sectarian identities are not necessarily disruptive; they only become so when outside threats (rise of a Shiite state, Soviet invasion of Afghanistan, Western invasion of Iraq) and political opportunists activate them.

Islamic Extremist Organizations

VEOs that operate in the region use sectarian motives to recruit new members and justify their actions (Gold, Faber, & Hammerberg, 2017). VEOs such as Hezbollah, the Islamic State, Al Qaeda, the Taliban, and

the Muslim Brotherhood use failures by countries' governments and insecurities of local populations to gain power, leverage, and in some circumstances political legitimacy. Even though these groups are comprised of hard-core fundamentalists, when there are geopolitical gains to be made the groups from opposing religious sects will work together (Risen, 2019). An example of this was a meeting between the Muslim Brotherhood and Iran's Quds force to discuss the mutual interests of hemming in Saudi Arabia's political influence (Risen, 2019).

Refugee Flows

Syria is the largest and most recent example of how insecurities in one state can place strain on another's national security (L. Lynch & M. Lynch, 2017). In 2017, the United Nations estimated that six million Syrians had fled the country and another ten million were displaced internally (L. Lynch & M. Lynch, 2017; Wood, 2019). Syria is responsible for nearly a third of the world's total refugee population. In Lebanon, one in six people are refugees (Wood, 2019). For insights on refugee flows, NSI interviewed an expert (Braithwaite) who is currently conducting a MINERVA grant project on Syrian refugees in Lebanon. Braithwaite notes that Syrian refugee issues are the most destabilizing due to sheer volume. Refugees can become political pawns in interstate relations. Turkey currently has the largest total population of refugees in the world, with three and a half million (Wood, 2019). Turkey uses the threat of releasing Syrian refugees as a coercive force against Europe. Iran has many Afghan refugees that they have not yet, but could, use as political pawns in the region. Out-migration of refugees, when they are opponents of a regime, can actually strengthen that regime while creating problems for neighboring countries; this might help explain Assad's hold on power in Syria.

Migration does not appear to have a sectarian aspect; people are generally fleeing violence. Braithwaite is studying resilience to violence. He explains that one aspect of resilience to violence is that some early migrants leave because they have the means, while the poor are forced to stay. However, some wealthy people remain in war-torn areas because it is where the source of their wealth (businesses) is located. The full explanation of why some are more resilient than others is yet to be discovered. Braithwaite has found that the willingness to return to Syria depends less on who wins and more on the cessation of violence.

The issue of climate intersects with Syrian refugee flows. First, traditional routes for migration to escape drought have been repurposed for war migration. Because climate migration is not a legal reason for seeking asylum, some climate migrants may be falsely claiming asylum from war. Braithwaite acknowledges that there is healthy debate among scientists regarding the actual extent climate change is causing migration (Gemenne, 2011; Johnstone & Mazo, 2013; Nett & Ruttinger, 2016; Van Hear, Bakewell, & Long, 2018), which is consistent with previous SMA research (Kuznar, 2019). Water scarcity may increase illegal immigration to Europe (Al-Rimmawi, 2012). To reach Europe, refugees from countries in the USCENTCOM AOR use Turkey as a causeway to reach the Balkans (L. Lynch & M. Lynch, 2017). Most displaced Syrians, who make up the bulk of Middle Eastern refugees, remain in the Middle East; however, one million asylum seekers have made their way to Europe. Germany is the leading destination for Syrian refugees in Europe, hosting more than 500,000, and Sweden is the second, with 110,000 (L. Lynch & M. Lynch, 2017). Other asylum seekers trying to enter Europe from the Middle East have resorted to more risky means of travel, including taking boats across the Mediterranean (Boghani, 2018). As a result, in 2018, hundreds of Middle Eastern refugees drowned on their voyage.

Braithwaite suggests that immigration across the Gulf of Aden from Yemen may be a Gray Rhino that is being ignored. These migrants gain access to African migration routes that can bring them to Europe, further disrupting European societies over the issue of immigration.

The interconnectedness of Middle Eastern countries raises potential Black Swan effects since a problem or solution to migration in one country has unanticipated ripple effects on other countries. Finally, Braithwaite notes that what are at one time considered Black Swan surprises can be seen as Gray Rhinos after the fact. Before 2014, no one would have thought that so many would take such risky journeys to Europe despite European measures to prevent their entry, yet today it seems apparent. Braithwaite's insightful characterization is consistent with Taleb's third characteristic of Black Swans, people tend to explain them after the fact (Taleb, 2007).

Afghanistan is a country that has experienced several refugee crises because of conflict. The first crisis was in the 1980s after the Soviet Union's invasion of Afghanistan displaced Afghans in the north of the country (Miller & Castles, 2009). Following the invasion of Afghanistan by the United States in 2001, thousands of Afghan citizens were displaced by conflict again (L. Lynch & M. Lynch, 2017). Afghan citizens who return home often reflect that their living conditions abroad were better than the living conditions they returned to (L. Lynch & M. Lynch, 2017). Many of the returning Afghan refugees did not decide to return home but were instead forced to return by Pakistan's government (Glinksi, 2019). Returning Afghan refugees are typically worse off financially than those that stayed behind with extended family members in Pakistan. Some Afghan refugees have chosen to return home to take advantage of voluntary return programs that supply them with money through a cash grant (Glinksi, 2019). The US invasion and subsequent civil war with the Taliban has made Afghanistan the second largest origin country for refugees behind Syria (Wood, 2019).

Illegal Drug Networks

Terrorist organizations have produced and trafficked narcotics for decades to fund their military campaigns (Nichols & Kravitz, 2015). Hezbollah, the Taliban, and branches of Al Qaeda are well known for trafficking drugs in the USCENTCOM AOR. A review of the literature reveals a strong association between weak states and strong drug trade, rationalization by jihadist groups who are involved in the drug trade, the ways that different terrorist organizations engage with the drug trade, and the regional impacts of the drug trade on populations.

Weak State Security and a Strong Drug Trade

The drug trade in the USCENTCOM AOR is not the cause of the region's instability, but drug traffickers seek unstable states to use as bases for their operations (Nichols & Kravitz, 2015). For instance, Hezbollah moved much of its production of Captagon (fenethylline) from Lebanon to Syria because the Syrian civil war has created a vacuum of security where the drug trade can flourish (Crabtree, 2016). Nichols and Kravitz (2015) point out that weaker state stability and a lack of financing has led government officials, especially in Syria, Afghanistan, and Lebanon, to be involved in the drug trade themselves.

Rationalizing Drug Trafficking and Religious Beliefs

Jihadist groups, given their ostensive religious/moralist agenda, face a moral and ethical dilemma surrounding the selling of illicit drugs (Lounnas, 2018). However, the Taliban, ISIS, Hezbollah, and other groups that market their brand of Islam as religiously pure justify the production and selling of narcotics because most of the drugs will be consumed by non-believers (Nichols & Kravitz, 2015). Organizational leaders, including Abdul Rashid, who oversaw the Taliban's religious police force in Afghanistan, have stated that the use of funds from selling drugs was permissible if the funds were used to finance the Taliban's Jihad (Lounnas, 2018).

The Taliban and Hezbollah have also used job creation to justify their involvement in the drug trade (Barzoukis, 2017). The Taliban can continue to build support from local farmers and create a sustainable market that it can profit from by continuing to support Afghanistan's poppy farmers (Barzoukis, 2017). A rough estimate of the Taliban's income from the opiate trade in 2016 is 150 million US dollars (Barzoukis, 2017; Shelley, 2018).

Controls of the Narcotics Trade

There are numerous terrorist and narcotics organizations that sell or process drugs in USCENTCOM's AOR (Nichols & Kravitz, 2015), including North African drug syndicates that have ties to networks in USCENTCOM's AOR (Barzoukis, 2017; Crabtree, 2016). In the USCENTCOM AOR, the Taliban controls most of the trade of opioids (Barzoukis, 2017; Shelley, 2018), while Hezbollah and ISIS control the flow and production of Captagon and black market cigarettes.

Taliban and Opiates

Shelley (2018), predicts that between 26 percent to 86 percent of Afghanistan's poppy fields are controlled by the Taliban. It is also estimated that the Taliban made 150 million dollars during 2016 from the trafficking of heroin (Barzoukis, 2017; Shelley, 2018). For the Taliban, the production of opium and heroin from poppy seeds has become a large share of its income, and it has stockpiled poppy seeds for the future in case it becomes cut off from its fields (Nichols & Kravitz, 2015). However, this seems unlikely, as the area in Afghanistan that is producing poppy has increased 87 percent since 2015 (Feldab-Brown, 2017) and the expansion of poppy fields is especially prevalent in Helmand province, which is the center of both the Taliban's control of Afghanistan and the opium trade (Azami, 2018; Feldab-Brown, 2017). Narcotics makes up an estimated 60 percent of the Taliban's yearly revenue (Azami, 2018).

Hezbollah and Captagon

Lebanon has been the epicenter of the Captagon trade since the 1970s, before Hezbollah was founded (Nichols & Kravitz, 2015). However, Hezbollah has used its political connections and violence networks to dominate the trade (Barzoukis, 2017). Syria's civil war allowed Hezbollah and Lebanese mafia-style families that Hezbollah is allied with to process Captagon while the Syrian government necessarily focuses on greater security risks. It is known that production of Captagon and its transportation has been partially enabled by corruption in both Lebanon's and Syria's governments. The involvement of government officials in the drug trade makes it unlikely that a government-lead crackdown on Captagon production will occur (CIA, 2012; Crabtree, 2016; Nichols & Kravitz, 2015). Cooperation that occurs between Lebanon's government and narcotics traffickers has discouraged Lebanese drug enforcement officers from making arrests because they fear they might lose their jobs (Nichols & Kravitz, 2015). Hezbollah, the Lebanese government, and strong Lebanese drug families located in Beqaa Valley work together and only resort to violence against each other if one group oversteps its bounds (Nichols & Kravitz, 2015; Prothero, 2009). An example of this is Hezbollah's retraction of its military protection of Lebanese gangsters, the Nawah Zoitar's Medaq family, after the Medaq family began hijacking cars and committing armed robberies (Prothero, 2009).

ISIS' Bid to Sell Drugs

The Islamic State profits from narcotics but on a much smaller scale than both Hezbollah and the Taliban. ISIS took territory in Afghanistan and started to profit from trading opium but the Taliban has taken it back (Shelley, 2018). It is unclear whether ISIS is a major exporter of Captagon, but the group has been linked to the trafficking of another opiate-based pain reliever, Tramadol (Crabtree, 2016). Also, according to a 2015 National Security report conducted by the US State Department, ISIS profits from the black market

trade of tobacco products and cigarettes, which has proved to be lucrative. Even though ISIS is not a major producer or transporter of Captagon or opium, it uses the same smugglers responsible for smuggling drugs out of the USCENTCOM AOR to bring in out of state ISIS recruits (Nichols & Kravitz, 2015).

Other Organizations

Other organizations, including the Iranian Revolutionary Guard Corps (IRGC), the Kurdistan Workers Party (PKK), and branches of Al Qaeda inside and outside of the USCENTCOM AOR are also engaged with narcotics trafficking (Shelley, 2018). A 2019 report by the Middle East Monitor claims the PKK, based out of Turkey, plays a significant role in the transportation of Captagon to the Gulf Coast and Europe.³ The report also estimates that the PKK earns 1.5 million dollars annually from its narco-trafficking enterprise. The IRGC, through its connections to Hezbollah, is also heavily involved in trafficking narcotics (Hajizade, 2018). Hajizade (2018) argues that, like Hezbollah's ties to other groups in Lebanon, the IRGC has connections to Iranian drug lords who are not members of its organization. The IRGC has been able to use its relationship to Hezbollah to secure lucrative deals to trade Captagon and other drugs with Albanian and Latin American cartels (Hajizade, 2018).

The Marijuana Trade

Although most of the literature on the drug trade in USCENTOM's AOR is focused on opium, Captagon, and other opioids, there is also a large regional demand for cannabis. Enough is grown in the region for the PKK, IRGC, Hezbollah, Taliban, and other organizations to earn money from taxing its cultivation (Shelley, 2018). In 2012, Cannabis was one of the most lucrative crops in Afghanistan and generated nine thousand dollars per farmer annually (Mackie, 2012). Hashish, a drug made from the resin of the cannabis plant, is also produced by the Taliban (Bradford & Mansfield, 2019).

The Drug Epidemic

Drugs from the Central region predominantly go to Middle Eastern countries along the Persian Gulf and to Europe (Nichols & Kravitz, 2015). The annual drug trade to Europe is worth 28 billion dollars. The smuggling of Captagon to the Gulf Coast and Arab states is fueling a current drug epidemic. Barzoukis (2017) states that Iran, Syria, and Lebanon, whose state governments appear to be partially responsible for the production and transportation of the drugs, have not escaped the epidemic either. In 2017, Iran faced an opioid epidemic with addiction rates that were six times the global average and had more than 700,000 people receiving rehabilitation treatment (Barzoukis, 2017). In Saudi Arabia, 60 percent of the admissions to its rehabilitation clinics in 2017 were attributed to the use of opiates (Barzoukis, 2017).

Illegal Antiquities Trafficking

Looted antiquities from historical and cultural sites in the Middle East, especially Egypt, Syria, and Iraq, are financing terrorist organizations' campaigns that threaten regional and global security. There is a useful distinction between strategic looting, which is planned and committed with a pre-determined purpose, and opportunistic looting, which occurs because of a sudden opportunity (e.g., sometimes economic, sometimes because of a sudden weakening of security around a high value item making it a less risky target) (Fabiani, 2018). Looting can support local families, local criminal networks, and terrorist groups. For instance, in order to raise money for weapons, both pro-government and anti-Assad forces looted artifacts from archeological sites (Fabiani, 2018). The looting of artifacts is a practice seen in conflict zones across the world as governments cannot maintain the same level of peacetime security around

³ <https://www.middleeastmonitor.com/20191127-eu-pkk-found-to-be-active-in-drug-trafficking-throughout-europe/>

culturally and historically significant landmarks. Fabiani found in his 2018 study of Egypt that armed conflict and looting of archeological sites has a strong correlation. In contrast, the relationship between armed conflict and opportunistic looting was weak.

Antiquities Funding Terrorism

In the Middle East and Northern Africa, Islamic extremists are using looted items to fund their military campaigns (Williams & Coster, 2017). Most recently, the Islamic State has used stolen antiquities to fund its military endeavors in Iraq and Syria (Willett, 2016). At first, ISIS incentivized local Syrians and Iraqis to loot items themselves opportunistically and profited off a 12 to 50 percent tax placed on black market transactions (Gerstenblith, 2016; Willett, 2016). This practice changed in 2015 when Abu Sayyaf, an ISIS officer who previously orchestrated the Islamic State's illegal oil market, institutionalized the theft of artifacts and strategically transformed the selling of stolen antiquities into an ISIS-led industry (Coker, 2016; Willett, 2016). Under Sayyaf's command, ISIS has sent soldiers to inspect historical sites, mostly in Syria and Iraq but also other Middle Eastern countries, for artifacts so it can cut out the middleman and directly profit from selling antiquities (Willett, 2016). Stolen artifacts were estimated to be the second largest source of income for ISIS when the caliphate was at its strongest (Fabiani, 2018). Based on confiscated receipts from Sayyaf's personal compound, it is estimated the Islamic State made more than four million US dollars per year from the sale of stolen artifacts when the caliphate was intact (Hardy, 2017). Other terrorist groups including the Taliban, Al Qaeda, and smaller organizations such as Ansar Al Dine have also trafficked stolen items.

ISIS' Cultural Genocide

The Islamic State's looting of antiquities to finance its caliphate is only one of its uses for culturally important symbols. The Islamic State has used social media to first gauge the public's relationship to highly important historical sites and then produce 'shock and awe' once a culturally significant item has been stolen or destroyed⁴ (Smith, Burke, de Leiu, & Jackson, 2015). This strategy maximizes the publicity surrounding ISIS' actions and increases the effect on its target audience. Gerstenblith (2016) argues that the importance of protecting the cultural heritage of items is not only in their monetary value but also in the sense of identity they give people. Antiquities' impact on a people's identity has long been understood by politicians. The Islamic State realizes the cultural importance of these religious sites and their stores of artifacts. This has led ISIS to broadcast the destruction of Islamic or pre-Islamic sites that do not adhere to its form of Islam (Gerstenblith, 2016). Gerstenblith (2016) states that by erasing certain sites and their artifacts, ISIS is committing cultural genocide by erasing all other forms of cultural identity in the region. The destruction of sites has been particularly damaging to minority ethnic groups in the region, including Yazidis, Druze, and Zoroastrians, who are at risk of being culturally erased (Gerstenblith, 2016).

Challenges of Tracking Stolen Antiquities

Once items are stolen by looters it is difficult for security officials to identify stolen goods or stop their transit to buyers. Many of the items that are looted are sold to Westerners in Europe or North America (Williams & Coster, 2017), with the profits ironically funding attacks against the West. Modern technology and the connectivity provided by the Internet have exponentially expanded the ability for perpetrators to conduct trade (Willett, 2016). Stolen artifacts have even been sold on popular and highly regulated social media sites including Facebook and Ebay (Fabiani, 2018; Swann, 2019). Like Facebook, Ebay, one of the world's largest online marketplaces, is a frequently used platform for the selling of looted antiquities (Fabiani, 2018). Even when wealthy buyers are caught, legal ramifications are virtually non-existent.

⁴ The Islamic State falsely reported the destruction of Ninevah, a culturally significant site in Iraq, to gauge the news coverage and the impact the action would have on Iraqi citizens (Smith et al., 2016).

Usually the apprehended buyer merely forfeits the artifact and pays a fine (Fernholz, 2019). Additionally, by warehousing looted items in ‘free ports’ that are not subjected to normal tax laws, items can remain hidden for years (Bulos, 2016).

Solutions, Tracking, and Coordination

Once armed conflict creates a lack of security and leaves items vulnerable, there is little that can stop their theft. Therefore, the ownership for stopping illegal trade in looted antiquities is placed on the destination countries (Fabiani, 2018). Steps can be taken to make artifacts traceable once they have been taken. Syrian archeologists have begun painting artifacts with ink that is only visible under ultra-violet light⁵ (Gardner, 2017). The United States Government Accountability Office undertook a study in 2016 to better understand how to stop the flow of illicit goods from the Middle East,⁶ including eliciting suggestions from experts in the art community that included appointing a direct contact within the Department of Defense that could be reached quickly and discretely.

Human Trafficking

Every year, millions of people are trafficked around the world for the purposes of slave labor and sexual exploitation (United Nations Office on Drugs and Crime, 2018a). One of the leading threats refugees pose to a state’s security is a weakening of its borders (L. Lynch & M. Lynch, 2017). Human trafficking loosens border security throughout the region and strengthens a network of traffickers that use families with family members in multiple countries (L. Lynch & M. Lynch, 2017). The following sections will focus on why people are trafficked, the role of conflict in human trafficking, the sources of trafficked persons, and the legal ramifications of human trafficking in the USCENTCOM AOR.

Why are People Being Trafficked?

People in the Middle East are trafficked for a variety of purposes, including forced labor, sexual exploitation, and for use as combatants.

Forced Labor

In the Middle East, 52 percent of trafficked people are trafficked for the purpose of forced labor (United Nations Office on Drugs and Crime, 2018b). It is estimated that there were 600,000 victims of slave labor in the Middle East in 2013 (Haroff-Tavel & Nasri, 2013). Additionally, the Persian Gulf’s oil fields have attracted foreign labor for decades (Anti-Slavery International, 2006). False recruiters lure workers to the region through the kafala system (Haroff-Tavel & Nasri, 2013). Kafala is a system of sponsorship between an employer or sponsor and a foreign worker who is brought into the country during an economic boom to satisfy the demand for workers (Kane-Hartnett, 2018). Sometimes the employer collects the worker’s legal documents, including passports (Haroff-Tavel & Nasri, 2013). By doing so, the employer can exercise influence over the worker’s mobility, which has allowed employers to violate workers’ rights by withholding wages, forcing them to work extra hours, or forcing them to take extra jobs for little to no pay (Haroff-Tavel & Nasri, 2013).

In addition, refugees fleeing conflict in their home countries will often take low paying and undesirable jobs and are subject to abuses by employers who maintain power through threatening or committing physical violence, restricting movement, debt bondage, withholding wages, retaining legal documents, and threatening exposure as illegal aliens to authorities (Anti-Slavery International, 2006). Women who

⁵ The clear liquid being applied by Syrian archeologists was created by the British company Smartwater (Gardner, 2017).

⁶ <https://www.gao.gov/products/GAO-16-673>

travel with their husbands or by themselves work largely in domestic settings (Anti-Slavery International, 2006). Haroff-Tavel and Nasri (2013) estimate that, in 2013, there was two million undocumented domestic workers in the Middle East alone. In extreme cases, employers of these women resort to physical or sexual violence to maintain control over them.

Sexual Exploitation

Women and children who are trafficked are also frequently victims of sexual assault, even if they were originally trafficked for cheap labor (Gezie, Worku, Kebede, & Gebeyehu, 2019). The longer a woman or child is trafficked, the greater the chance they will experience sexual violence (Gezie et al., 2019). According to Gezie, 35 percent of trafficked women and children were sexually assaulted while being trafficked, while 58 percent were victims of sexual assault when they reached their destination.

Most women and children in USCENTCOM's AOR are trafficked from other countries in the region (United Nations Office on Drugs and Crime, 2018b). The Persian Gulf states of Saudi Arabia, the United Arab Emirates, and Kuwait are the countries that experience the most human trafficking (Anti-Slavery International, 2006). Women and children from countries in USCENTCOM's AOR are sometimes sold into the sex trade or forced by family members or spouses to prostitute themselves (Dudley, 2009). Women and children who are refugees and often either widows or separated from their families are also easy targets for traffickers (Ecpat, 2016). In Syria alone it is estimated that there are 50,000 women and children that have been forced into prostitution because of their poor living conditions.

Use as Combatants

The practice of trafficking people to be used as combatants in the Middle East and Southern Asia is a prevalent issue. Four countries in USCENTCOM's AOR were placed on the global watch list for the use of child soldiers (United States Department of State, 2019). Iran, ranked third, and Iraq, ranked fourth, are the countries in USCENTCOM's AOR where the use of child soldiers is most prevalent. The People's Protection Unit (YPG) and the Kurdistan Workers' Party (PKK) both currently use child soldiers but have agreed to keep minors away from combat (Hauch, 2019). In 2016, the use of child soldiers doubled in the Middle East because of a lack of security caused by conflict (Mcveigh, 2017).

Conflict and Human Trafficking

Conflict often displaces people and makes them vulnerable to being trafficked. McAlpine, Hossain, and Zimmerman (2016) argue that most of the perpetrators of sexual abuse and human trafficking in countries that are riddled by conflict are military personnel. Because conflict weakens security, it has a strong correlation with human trafficking (United Nations Office on Drugs and Crime, 2018a). Trafficking is a common tactic used in conflict zones to create fear in and subdue a local population. Women and children are also forced into marriages or sexual slavery by paramilitary organizations to appeal to young male recruits (United Nations Office on Drugs and Crime, 2018a). Women and children who are refugees are more likely to be trafficked, especially if they are widows or orphans (United Nations Office on Drugs and Crime, 2018a). Because 90 percent of refugees live under their host country's poverty line, women are commonly forced into prostitution (Zenko, 2017).

Home Region of Trafficked Peoples

Most people being trafficked in the countries that comprise USCENTCOM's AOR are from countries inside the region (United Nations Office on Drugs and Crime, 2018b). Most sexual exploitation of people in the region begins as forced marriages, child marriages, or temporary marriages (McAlpine et al., 2016). Furthermore, countries in the Middle East have a high percentage of people being trafficked from outside

the region (38 percent), as compared to South Asia (1 percent) (United Nations Office on Drugs and Crime, 2018a). This is mostly because of migrant workers from North Africa and South Asia coming to work in the region's oil fields (United Nations Office on Drugs and Crime, 2018b). A United Nations report in 2018 estimated that 44 percent of all people being trafficked in the Middle East and Persian Gulf are from South Asia.

Regional Legal Ramifications for Trafficking Humans

The prison sentences and fines for human trafficking in countries throughout USCENTCOM's AOR are increasing (United Nations Office on Drugs and Crime, 2018b). In 2006, the United Arab Emirates passed Federal Law 51, the first law addressing human trafficking in the Middle East (Haroff-Tavel & Nasri, 2013). In 2009, the United Arab Emirates also passed the Palermo Protocol, which is a set of protocols that was proposed by the United Nations to combat organized crime, including human trafficking. Since the United Arab Emirates signed Federal Law 51, other countries in USCENTCOM's AOR have passed a number of laws and increased legal penalties and fines for human trafficking (Haroff-Tavel & Nasri, 2013; United Nations Office on Drugs and Crime, 2018b). Jordan is a good example, it passed Anti-Human Trafficking Law No. 9 in 2009, which prohibited all forms of human trafficking and increased penalties for sex trafficking (ten years in prison and a \$28,000 USD fine) and labor trafficking (six months in prison and a \$7,000 USD fine) (Haroff-Tavel & Nasri, 2013). However, although countries in USCENTCOM's AOR have increased prison sentences and fines for human trafficking, the number of convictions for human trafficking has not significantly increased (Haroff-Tavel & Nasri, 2013).

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