



appg

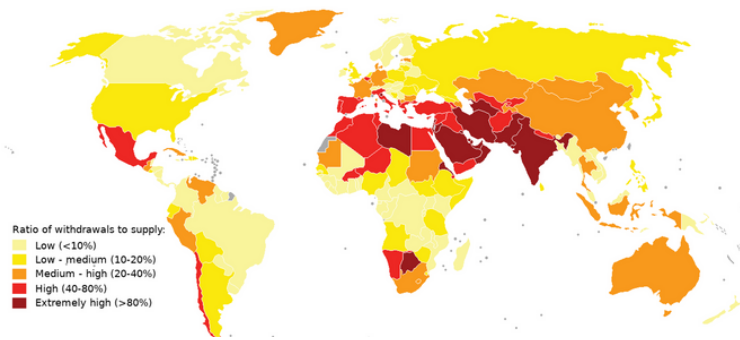
for climate & security

EXPERT PERSPECTIVES:

CLIMATE CHANGE & TERRORISM

Speakers:

Professor Marcus King &
Professor Andrew Silke



Water Stress Map - Source: Water Resources Institute 2019

On 11 September 2023, the All-Party Parliamentary Group for Climate & Security held a session on the links between climate change and the threat from terrorism. The event was attended by parliamentary members of the APPG, various representatives of the APPG's Secretariat and a number of invited specialists.

This article highlights some of the insights shared by the session's expert speakers, Professor Marcus King (Georgetown University, USA) and Professor Andrew Silke (Royal Holloway University of London, UK).

The Q&A session and subsequent discussions are not reported as they were subject to the Chatham House Rule.

Water and Terrorism

Professor Marcus King began by presenting how water stress (withdrawal compared to available supply) is being exacerbated by the Climate Crisis. He noted how the situation is particularly acute across the Middle East and North Africa (MENA).

Parts of MENA are already characterised by “chronically arid climate conditions and unpredictable yet prevalent, droughts.” Regional climate models predict higher temperatures, more frequent droughts, and increased variability in precipitation. Some nations in the region have fragile governments engaged in combatting extremism. Compounding this problem, climate conditions will diminish food security and social stability in the coming decades.

Evidenced by remote sensing maps of MENA, Professor King highlighted the correlation between the spheres of influence of violent extremist organisations (VEOs) and sparse vegetation resulting from acute water stress. His research project posited three hypotheticals:

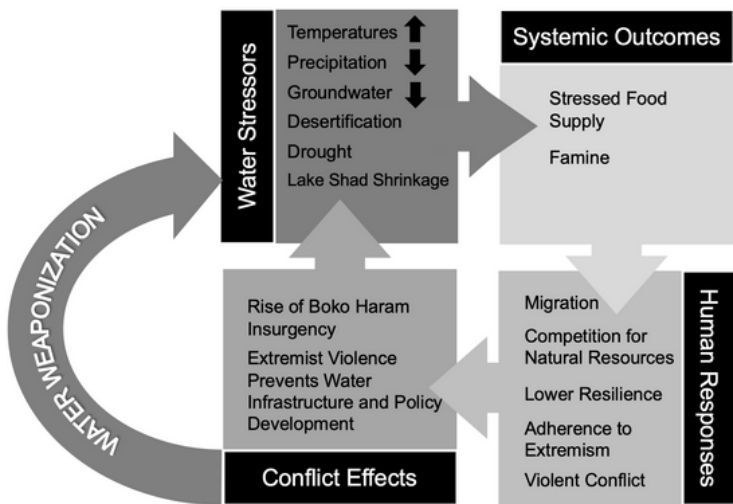
- Water stress can be a causal factor in the outbreak of conflict
- Water stress can accelerate conflict when water is weaponized
- Alleviation of water stress can be an important factor in national post-conflict peacebuilding and reconstruction.

The case studies he described focused on the internal conflicts in Syria, Iraq, Somalia, and Nigeria – each country having been affected by drought conditions between 2011 and 2019. The VEOs discussed included: Islamic State (ISIL) and other jihadists in Syria and Iraq; al-Shabaab in Somalia; and Boko Haram and Islamic militants belonging to the Fulani tribe in Nigeria.

Professor King concluded that, at the national level, water stress is more likely to engender cooperation between nations than conflict, with this cooperation centring on the division of waters from shared international river basins. As regards the subnational level, water stress was noted to be a driver of conflict.

Whilst the case study specifics varied, it was noted that there were sufficient similarities among the variables in each conflict cycle that a generic pattern can be recognized. For example, in each case migration is a catalyst for instability.

The first step in the 'Water and Conflict Cycle' is to understand the Water Stressors or underlying hydrological conditions in a country. These conditions illuminate conflict dynamics because it helps with the understanding of the political economy of water distribution. Next, the impacts of the aforementioned ecological factors on Systemic Outcomes. These systems could include agriculture, health or energy production. For example, diminished food security led to lower resilience to Boko Haram's attacks and increased adherence to their organization. Finally, and most importantly for purposes of conflict analysis, are the Human Responses to the Systemic Outcomes of water stress. Conflict, migration, and sometimes desperate water policy adjustments are typical responses to water stress. In Nigeria, there was diminished societal resilience due to climate impacts to resist Boko Haram.



Governments may attempt to control the negative consequences of water induced-problems before they reach crisis proportions.

It was also highlighted that successful policy interventions generally require functional, transparent and well-informed governments. In the absence of effective governance, migration and conflict become more prevalent. For example, maladaptive

water infrastructure, such as inefficient open irrigation channels, can intensify the effects of ongoing droughts, and misplaced subsidies distort incentives to conserve water.

It was emphasised that climate change-induced water stress played a meaningful but complicated role in creating conditions that lead to agricultural systemic failure, migration and conflict.

Water Weaponization

Professor King recalled a 2012 U.S. Intelligence Assessment on global water security and its prediction that, as water becomes scarcer in the coming decades, states may begin to employ the water weapon. As such, states with relatively greater water resources would be able to exercise strategic advantage or 'hydro hegemony'. Professor King asserted that the water weapon is already being used by VEOs at the intrastate level.



Strategic Weaponization

In Syria and Iraq, ISIL used the water weapon on the strategic level to achieve virtual control of territory. ISIL had postured forces to maintain control of territory along the banks of the Tigris and Euphrates Rivers. Forces were also seemingly positioned to control key water infrastructure, mostly dams. Professor King described the infamous example of ISIL's seizure and brief control of the Mosul Dam on the Tigris River upstream from Baghdad in 2014. This action provided at least the theoretical ability of unleashing a torrent of water capable of destroying the so-called Green Zone in Baghdad where Western forces were based. It was described how the U.S. was drawn deeper into the conflict with the initiation of an airpower campaign that was largely in response to this threat. ISIL also used water as a strategic asset in a campaign to fund the administration of so-called Caliphate and support the procurement of weapons. In Raqqa, the de facto capital of ISIL in Syria, the organization collected taxes in exchange for water access.

Tactical Weaponization

Professor King also detailed how, on several occasions, ISIL wielded the water weapon in immediate support of operations against targets of military value. For example, in 2014, ISIL militants intentionally diverted water from nearby rivers in Iraq's Diyala Province to halt the advance of Iraqi security forces. Similarly, in Somalia, in June 2018, al-Shabaab staged an attack on U.S. special forces who had been deployed on an

operation to liberate Somali villages in the Lower Juba region. By diverting water from the Lower Juba River, al-Shabaab flooded the area under surveillance by U.S. special forces and Kenyan forces. The weaponization of this water forced Kenyan and U.S. troops to relocate to higher ground, where members of al-Shabaab ambushed them, killing one U.S. soldier.

Turning to Nigeria, Professor King explained that Boko Haram sometimes employed child soldiers to poison wells. In the country's Middle Belt, an increasing arid transition zone between the lush Niger River Delta in the south and the arid northeast, an intense and protracted conflict has emerged pitting militant semi-nomadic Muslim Fulani herdsman against predominantly Christian farmers. The primary conflict driver in this locality was the contested access to shrinking cattle grazing lands and the waters they provide along ancestral paths of migration.

Professor King also noted that the drought that hit the Lake Chad region in Nigeria in 2011 caused a largescale, involuntary out-migration. Many of the internally displaced people were left at the mercy of Boko Haram who were very active in the area. Manipulation of water including poisoning of water wells and resultant migration brought instability to the region and diminished the resilience of the population to attacks and the kidnappings that occurred there.

Psychological Terrorism and Coercive and Unintentional Weaponization

A number of examples and points were made by Professor King linked to the psychological effects of to the coercive and unintentional weaponization of water by VEOs. In Somalia, for example, al-Shabaab were noted to have exercised a strategy of coercion. In 2014, government forces made inroads against the Islamist extremist group's territory, eventually retaking most major cities. With drought again as a backdrop, al-Shabaab shifted its approach from traditional 'hit and run' guerrilla tactics to attempts to assert power and presence by cutting off government-liberated cities from their water sources. They were successful to the extent that the Somali Government's inability to provide water services eroded its authority and legitimacy. However, al-Shabaab miscalculated when a famine ensued and they choose to severely limited humanitarian agencies access to the affected drought-plagued regions. It was noted that this action led to more than a quarter of a million deaths and hundreds of thousands of displaced persons. The loss of life at this scale undermined support and, as such, this miscalculation can be characterized as unintentional water weaponization. Professor King highlighted analogous actions by the Taliban in Afghanistan and by AQAP, ISWAP and other groups in the context of the civil war in Yemen.

Professor King described the ways that regional water weaponization has wider geopolitical, economic and security ripple effects. Currently, for example, Somalia is gripped by another drought-induced famine. This is exacerbated with cereal exports from Ukraine being truncated by the Russian invasion. Professor King finished his presentation by stating that climate change is worsening the situation. A litany of global impacts, including higher temperatures, changes in precipitation, extreme weather events, and depletion of glaciers, are steadily expanding the footprint of global water stress. As this happens, the potential battlespace where water can be weaponized is growing in many parts of the world.

"climate change is shaping what we understand as causes of terrorism and drivers of conflict."



Climate Change and Terrorism

Professor Silke moved the discussion on with his presentation on interrelationships and trends. He began with an introduction to the 'four-wave theory' of terrorism, developed by David Rappaport. Rappaport argued that there have been four waves in terrorism in the past 120 years, with one of the key elements of this theory being that past drivers of terrorism have been tied into geopolitical processes. An initial wave was the 'anarchist wave' kicking off in the 1860s, and this was tied into the rising middle classes and higher levels of education, with less tolerance for autocratic government. This was followed by an 'anti-colonial wave' that emerged, in part as a result of World War I and World War II, which effectively bankrupted the European colonial empires. The result was fragmentation, succession, and independence movements, with terrorism tied up to these processes. The 'new left wave' was next which Rappaport asserted was tied into the dynamics of the Cold War and the conflict between the West and the Soviet Union and the Warsaw Pact. Since the collapse of the Soviet Union, in the 1980s and 1990s, there has been 'the religious wave', which has essentially been tied into ideas of capitalist globalisation colliding with more religious conservative values in many different parts of the world. This fed a rise of religiously-motivated terrorism and is now associated particularly but not exclusively with Islam. This fourth wave originally tied into all sorts of religious denominations.

Professor Silke then hypothesised as to what the 'fifth wave' would look like. He dismissed right wing extremism being a potential candidate on the basis that the past waves were all connected to big geopolitical process. So, he analysed the current significant geopolitical processes and concluded that climate change stands out as one of those major processes that is going to have a big impact – and, indeed, already has – on terrorism both now and going forward.

Professor Silke noted that climate change is shaping what we understand as causes of terrorism and drivers of conflict. Points of concern centre on parts of the world that are disproportionately affected by climate change, particularly those with large populations, lower levels of development under, and increasing environmental stress. Essentially, he argued, increasing demand for resources both within countries and within regions is going to increase competition – and increased conflict and increased terrorism will be consequences of this. Professor Silke recognised that climate change is going to kill huge numbers through famine and drought and other impacts. He further noted that terrorism is going to be one of the

elements tied into the situation in certain localities. He qualified that it is not, in most situations, going to be the element that that causes the most harm, but that it is going to feature widely.

Professor Silke focused on Lake Chad as an indicative example. Over the last 20-30 years, Lake Chad, partly due to climate change, but also partly due to mismanagement has gone from being a body of water that was the size of Wales to being something now that almost entirely disappears at certain times of the of the year. This has led to a complete collapse of agriculture, fishing and a whole range of industries that were tied into the presence of the lake in the surrounding region. That collapse coincided with the rise of groups like Boko Haram. In addition to the importing of Wahhabi Salafi ideology from Saudi Arabia, environmental impacts have been central to the shifting security context. Essentially, environmental collapse has been happening at the same time and driving the disappearance of livelihoods, with people effectively being left destitute. Professor Silke argued that had it not been for the environmental collapse you, the rise of Boko Haram would have been slower.

Professor Silke also drew the same conclusion for ISIL in Syria. He asserted that ISIL were partly able to seize control of the amount of territory they did because of drought. The worst drought in Syrian recorded history preceded ISIL's emergence. In short, the Syrian state became so weak that it was unable to resist or overcome ISIL growth and influence.

in an area start to ask, 'is this a government that is actually beginning to collapse?' and 'is the government now starting to be no longer able to function properly?' In short, as the government's legitimacy and efficacy recede, the risk of terrorism starts to go up.

Climate change creates a context where the environments for all countries is deteriorating and will continue to deteriorate at least for the rest of the century. Professor Silke asserted that right now is as good as we are going to get and things are going to continue to get worse. He said that he was not personally expecting the climate situation to stabilise and, indeed, that he was expecting the situation to deteriorate.

In terms of resources, Professor Silke underscored the need for governments and agencies to be realistic about where you can focus and what you can prioritise. Predicting centres of instability was also important. Professor Silke pointed to Iraq and Syria as specific cases of concern, and how Pakistan and Afghanistan will continue to be highly volatile. He also noted that other events also inform where you can focus your resources. Dealing with Covid-19 and other crises, for example, consumes resources and reduces options. The only solution is to be strategic with one's focus. Professor Silke highlighted the strategic importance for the UK of supporting stability in Nigeria. The consequences of instability in Nigeria would not only have serious consequences regionally and globally, but, for the UK particularly, given economic links, colonial history, and specific climate change related investments.

In terms of a specific point of concern within the context of terrorism, Professor Silke highlighted, 'eco-fascism' – right wing extremism founded on the idea that the environment can be improved if, for example, refugees are stopped from coming into a country. The Christchurch (2019) and the El Paso (2019) attackers referenced this ideology. Whereas traditional 'eco terrorists' tend to target the destruction of property and deliberately minimise the risk to human life, eco fascists differ in tending to be intent on kill large numbers of people.



Climate Terrorism Trajectories

Professor Silke moved the discussion on to highlight that, given the different elements at play, the drivers and causes of terrorism in the developed world are not the same as the ones in the developing world. He made specific reference to climate refugees and how the link between potential terrorist recruitment here was very weak as people who are at subsistence level are too busy surviving to think about engaging in terrorism. He referenced studies that have shown that the people who become radicalised, linked to groups such as Hamas and the Palestinian Islamic Jihad, tend not to be the poorest of the poor in the refugee camps.

Professor Silke then highlighted that climate change has an impact on government and on infrastructure. As infrastructure starts to collapse, the government is no longer able to cope. This creates the conditions for VEOs to exploit vulnerabilities. Professor Silke highlighted how key this might be in predicting terrorist activity. Government is the prime focus. Various actors