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## GEO-POLITICS IN A RAPIDLY CHANGING CLIMATE: EXPLORING THE ENERGY, FOOD AND WATER NEXUS AND ITS IMPLICATIONS FOR AUSTRALIA'S SECURITY

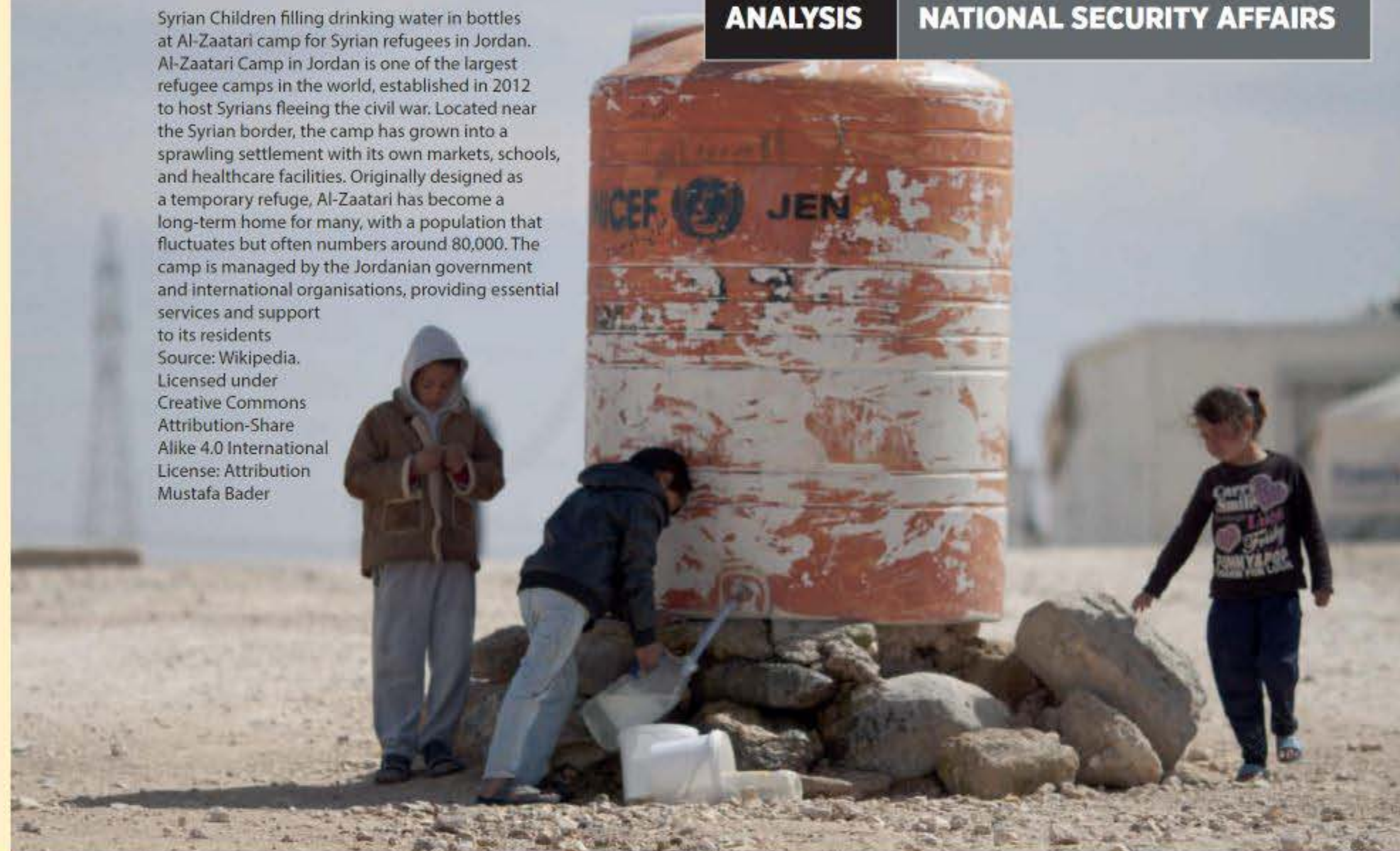
In 2021, United Nations Secretary-General António Guterres warned the UN Security Council that, "climate change is a 'crisis multiplier' with profound implications for international peace and stability". While global greenhouse gas emissions continue to rise and the Human Development Index highlights how unequally the emissions generated are shared between those living in Low and Middle-Income countries and the developed world, there has never been a more important time to consider the geopolitical implications of climate change for Australia. In particular, its compounding effects on the energy, food and water nexus.



Armidale-class patrol boat HMAS Broome entering Darwin Harbour for the last time prior decommissioning, August 2024. The Armidale class are highly capable and versatile warships which are able to conduct a wide variety of missions and tasks. When protecting Australia's borders, crews are employed on a range of constabulary duties involving tracking, intercepting, stopping and boarding other vessels, and sometimes arresting their crews and seizing cargo. Source: Department of Defence. Photographer: LSIS Ernesto Sanchez.

Syrian Children filling drinking water in bottles at Al-Zaatari camp for Syrian refugees in Jordan. Al-Zaatari Camp in Jordan is one of the largest refugee camps in the world, established in 2012 to host Syrians fleeing the civil war. Located near the Syrian border, the camp has grown into a sprawling settlement with its own markets, schools, and healthcare facilities. Originally designed as a temporary refuge, Al-Zaatari has become a long-term home for many, with a population that fluctuates but often numbers around 80,000. The camp is managed by the Jordanian government and international organisations, providing essential services and support to its residents

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### FACING THE 'NEW NORMAL'

Recognising those co-dependencies, the Australian Strategic Policy Institute stresses the need to ensure food resilience in the face of a changing climate. It outlined several strategies to do that, including ensuring effective supply chains are in place – particularly because of the lessons learned from COVID-19, food stockpiling and ensuring adequate local production. The latter becomes more contestable when trying to balance the competing priorities of food production, renewable energy deployment and critical minerals and rare earths extraction.

Exacerbating those considerations is the 'new normal' increase in severe weather events, including storms, floods and extreme heat waves, leading to drought, fires and other hazards that are affecting much of the world's population – often those who are most disadvantaged.

Over the coming decades, deaths related to heatwaves and vector-borne diseases are expected to increase due to climate change. In addition, extreme events are likely to increase health burdens via higher levels of malnutrition, injury, mental health conditions and non-communicable respiratory diseases. Climate change, along with forced displacement and reduced access to fresh water, will all heighten the threat of armed conflict.

### WEAPONISATION OF A CHANGING CLIMATE

Clear evidence of these threats can be seen through the conflicts in the Middle East, with the weaponisation of water and other resources by government and non-state actors. Warmer temperatures and precipitation extremes affect food security and can be a factor in initiating or maintaining conflict.

In the case of Syria, which emerged from a five-year drought in 2010, the dry climate is suggested to have magnified existing tensions in the region. The drought, prior to the 2011 uprisings, was the result of higher temperatures and drier winters in the region. While the Syrian civil war was certainly not solely a result of climate change, it was undoubtedly an important determinant in increasing tensions in the country.

Pointing to conflicts in Ukraine, the Middle East and Sudan, in October 2023, the UN High Commissioner for Refugees (UNHCR) said, "the number of forcibly displaced [persons] worldwide has currently soared to a record 114-million people, a jump of four million since May", also declaring "a record 46 emergencies in 32 countries in the past 12 months".

The UNHCR also asserted that more than 20-million people were being

displaced each year. Closer to home, Myanmar, with a conflict extending over many years, a recent military coup and exposure to a range of climate disasters, has seen more than three million people displaced within the country.

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The displacement of individuals is not, however, equitable, with the safety of many being intensified either by gender, age or other disabilities. Ensuring adequate resources are available to support displaced individuals remains an ongoing challenge across the world. The Australian Defence Force is also challenged by that need: to have the resources available to respond to extreme weather events and, at the same time, to have enough resources to defend the country.

### COMPOUNDING GLOBAL INSECURITY

Compounding global insecurity is the decline of democracy being witnessed across the world, with 72% (5.7bn) of the world's population now living in autocracies; according to the V-Dem Institute's 2022 *Democracy Report*, "The level of democracy enjoyed by the average global citizen in 2022 is down to 1986 levels."

The Institute further suggests that the "decline is most dramatic in the Asia-Pacific region, which is back to levels last recorded in 1978". While democracies are not perfect, they have been recognised as limiting opportunities for conflict and, although climate change does not directly result in conflict, it can indirectly be tied to instability and hostilities through its intersection with multiple other vulnerabilities, which are further amplified by poor governance.

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Food insecurity in South Sudan is an ongoing crisis, affecting millions of people in a country that has faced years of conflict, economic instability and climate-related challenges, leading to widespread hunger and malnutrition. Droughts and floods have exacerbated the situation, destroying crops and displacing people. The crisis has resulted in alarming rates of child malnutrition and a significant portion of the population facing emergency levels of food insecurity. Source: Wikipedia. Licensed under Creative Commons Attribution-Share Alike 4.0 International License: Attribution Mohammed Ebeid

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**Given that Western Australia's emissions rose by nine million tonnes, the most of any state in 2021-22, its reliance on heavy industry and mining and the lack of a 2030 target for the state suggests that there is much to be done both locally and across Australia. To build Australia's resilience and ability to respond to these internal and external threats requires a strategic and coordinated approach to technology and innovation, as well as how we manage our resources: water, energy and associated critical minerals and their significant interdependencies.**

Australia, as an island country, and Western Australia in particular – having the longest exposed coastline of any Australian state or territory – is more at risk of climate and conflict refugees descending on our borders. With the recorded arrival of three boats of asylum seekers on WA's coast in the far north Kimberley over the past six months, it appears the trend has already started.

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There is a need for strategic coordination to limit the impacts of climate change and accelerate the energy transition, as well as limiting the chances for geo-political interference. How those needs are prioritised requires urgent action and planning across all levels of government, along with exploring potential public-private partnerships, to help build Australia's resilience over the coming years. ■

Curtin University's National Resilience and Security Program Office facilitates collaboration between industry, government, and Curtin's research expertise to enhance Australia's national resilience and security. We are committed to advancing innovative technologies and developing talent pipelines that contribute to the security and prosperity of the Indo-Pacific region. To explore new ideas or discuss potential partnerships with Curtin, please contact the NRAS Program Office via [NRAS@curtin.edu.au](mailto:NRAS@curtin.edu.au)



People trapped on the roof of a car as flash flooding swept through the Queensland city of Toowoomba, in January 2011. Seven people lost their lives in the Toowoomba area alone as the floodwaters, caused by torrential rains, reached depths of up to two metres. Source: Wikipedia. Licensed under the Creative Commons Attribution 2.0 Generic License: Attribution Timothy Swinson