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SECURITY ASPECTS OF CLIMATE CHANGE

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- Climate change is unarguably the most urgent issue threatening human society. Scholars and practitioners have begun using the concept of security to highlight the importance of acting against climate change.
- The term “climate security,” however, has been subject to various interpretations and usages. Some experts are critical of the casual use of the term “security,” questioning the added value of using this new term.
- Nonetheless, using the term can integrate different aspects of climate-related risks into a single compound risk, emphasizing the interconnectedness of climate change and other types of risks. The concept of security is also best fitted to describe the newly emerging threats we are likely to face in the near future due to changing climates.

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Climate change is unarguably the most urgent issue threatening human society. The global average temperature in 2024 was the highest in recorded history, reaching 1.55 degrees Celsius above pre-industrial levels, according to [the World Meteorological Organization](#). Increasing global temperatures lead to extreme weather events around the world, including heat waves, droughts, extremely heavy rainfall, and strong hurricanes, that affect our livelihoods in many ways. For instance, World Weather Attribution — a network of researchers from the US, the UK and several other European countries — claimed that the hot, dry, and windy conditions exacerbating the January 2025 wildfire in Los Angeles, which led to the loss of more than 28 lives and 10,000 homes, were about 35 percent more likely due to global warming.

Seeing such destruction as a threat to humanity, nations, and the world, some scholars and practitioners have begun using the concept of security to highlight the importance of taking action against climate change. However, the term “climate security” has been subject to various interpretations and usages that pose a diversity of challenges. This commentary aims to briefly classify different approaches to linking climate change and security, and to highlight missing elements in the debate. It also touches upon the current situation in Japan regarding the security aspects of climate change.

An article I co-authored in 2021¹ classifies the usage of “climate security” or “climate change and security” into four categories. The first category emphasizes the urgency of responding to climate change by viewing it as a threat not only to human beings but also to the entire planet, leading to the concept of global security. From this viewpoint, all living things on Earth need protection from the changing climate. The only way to avoid the worst-case scenario is to reduce greenhouse gas emissions, which is often referred to as climate change mitigation.

The second category focuses on individuals affected by the adverse impacts of climate change such as extreme heat, droughts and floods. This is a human-centric perspective, differing from the first category in that it only considers human beings as the object of protection. This category is relevant to the broader discussions on human security, while both the first and second categories align with the discourses of the Copenhagen School, which developed the concept of securitization in areas such as the environment and other non-military threats².

The third category considers conflict and social instability as consequences of climate change. Many conflicts between nations or groups of people occur due to a lack of food, water, shelter or other resources to satisfy basic human needs. As droughts and

floods increase due to climate change, displacement has become a widely acknowledged issue. Many displaced individuals remain within their home countries, while others cross borders and become climate refugees. The United Nations Security Council has partially recognized climate change as an underlying cause of conflict since 2007 but has yet to reach an agreement on a clear link between climate change and conflict.


The fourth category addresses the impacts of climate change on military operations, e.g., hurricanes destroying military facilities. This argument is primarily presented by defense-related organizations in the United States but has been raised in other countries as well. Sending military troops to areas hit by natural disasters as part of humanitarian operations is becoming unsustainable as the number of disasters increases. This has become an additional burden on military operations.

In the latter two categories, the notion of security is confined more or less to traditional definitions, where armed conflict or social instability directly threatens people or the nation-state. Climate refugees are discussed within this context when they are considered a group that could directly or indirectly cause social tension between countries.

While many scholars emphasize the significance of linking climate change to the concept of security, others reject the casual use of the term “security,” questioning the added value of using this new term. The impacts of climate change on the global ecosystem or individuals’ daily lives can be explained without invoking the term “security.” Disasters and extreme weather events were disrupting social stability even before the Earth began warming. At least in Japan, usage of the term “security” in climate change-related debates was never popular for the reasons given above. Why is there a need to use the term “security” to explain what has already been understood without it?

I contend there are two reasons why “security” still has a role to play in discussions related to climate change. First, using the term enables us to integrate different aspects of climate-related risks into a single compound risk, emphasizing the interconnectedness of climate change and other types of risks. For example, most people do not readily connect the damage caused by a typhoon with carbon dioxide emissions or military conflicts. By viewing various climate risks as a significant threat requiring public attention, actions to reduce greenhouse gas emissions would not be seen as isolated from actions to protect people’s lives and infrastructure. In Japan, the Ministry of Defense referred to climate change for the first time in its 2021 White Paper,

arguing that climate change is a threat to Japan's national security in various ways. Climate change was also taken up in the National Security Strategy issued by the Cabinet Office in 2022 as "a security issue that affects the very existence of humankind."

Second, as global temperatures continue to rise, we are beginning to witness phenomena that have never occurred before in human history. Rising sea levels will reshape national territories. Some small island states will disappear. Japan's Exclusive Economic Zone is likely to shrink as some of its small islands in the Pacific Ocean go under water. Many megacities, including Tokyo and New York, could be partially submerged by the end of this century. The extremely hot summer season will become the most dangerous time, forcing us to stay indoors with air conditioning to stay alive. These new threats do not yet have proper names because they have never existed previously. The concept of security is best fitted to describe these emerging threats we are likely to face in the near future due to changing climates. Responding to climate change is imperative to protect everything on Earth, from the planet itself to nation-states and individuals. 

¹ Kameyama, Yasuko, Keishi Ono (2021) "The Development of Climate Security Discourse in Japan", *Sustainability Science*, 16(1), 271-281. doi: 10.1007/s11625-020-00863-1

² Barry Buzan, Ole Wæver, Jaap de Wilde (1997) *Security: A New Framework for Analysis*, Lynne Rienner Publishers Inc.

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