

NTS Insight, no. IN21-05, September 2021

Framing Climate Change: The Need for a Human Security Perspective

By S. Nanthini and Tamara Nair

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Climate change has now become the defining issue of the time – and one of the biggest threats to humanity. The recent Intergovernmental Panel on Climate Change (IPCC) report has proven to be a “reality check”, making it clear that climate change is already affecting the world by laying out its various manifestations including temperature increases, sea level rise and changes in rainfall patterns.¹ With the stress placed on the economic, social and political systems that underpin the international system, it is now becoming increasingly clear that climate change is a development, economic, health, and security risk,² – essentially a *human and national security* risk. The impacts of climate change range from the direct, as seen by the increasing frequency and intensity of extreme weather phenomena, to the indirect, such as migration, resource scarcity and conflict – situations in which climate change acts as a ‘threat multiplier’. As such, it is now imperative to take into account the ways in which climate change is discussed, moving the discourse beyond the environmental, scientific and securitisation framings, which have dominated academic and policy discussions, into one that is more *humanistic*, taking into account the present and emerging vulnerabilities that are being generated through “dynamic social, political, economic, institutional, cultural and technological conditions and their

¹ IPCC, “Climate change widespread, rapid, and intensifying – IPCC, August 2021”, *Press Release*, 2021, <<https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>>.

² UNEP, 2021. *Climate Change and Security Risks*. Available online: <https://www.unep.org/explore-topics/disasters-conflicts/what-we-do/risk-reduction/climate-change-and-security-risks>

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Recommended citation: S. Nanthini and Tamara Nair, Framing Climate Change: The Need for a Human Security Perspective', *NTS Insight*, No. IN21-05 (Singapore: RSIS Centre for Non-Traditional Security Studies (NTS Centre), Nanyang Technological University Singapore, 2021).

historical legacies".³ While the examination of human vulnerabilities in public policies is not quite a new phenomenon, the devastation wrought across the world by the COVID-19 pandemic has thrust human security back into the spotlight. The pandemic has revealed the insecurities and vulnerabilities that have already been facing individuals, communities, and populations around the world – with some having intensified during the pandemic as general tensions have built up throughout societies. Structural changes are needed to relieve these pressures. A human security perspective, with its core principles of freedom from fear, freedom from want and freedom from indignities, would move climate change discussions beyond simply managing them as technocratic issues – one which can be solved with the right 'solution' – to examining and understanding the genesis of the risks faced by communities and populations. This would allow them to enhance their capabilities and resilience in order to adapt more effectively to climate change.

With the renewed interest in human security as seen in the release of the 2020 Human Development Report and its focus on the Anthropocene,⁴ as well as the latest IPCC findings released in August 2021,⁵ there is an urgency in focusing

on, not only human-induced climate change but also in addressing the impacts of this climate variability on the global populations, especially the millions of vulnerable people that will be directly (and indirectly) affected. This NTS Insight will explore how investigating the impacts of climate change through a human security lens, in addition to the current narratives, might ensure the security and stability of communities in a new climate future. The next section will discuss human security as a concept, before exploring its relevance to the issue of climate change. Subsequent sections will discuss this framing as applied to vulnerable groups such as women and coastal communities.

Climate Change Through a Human Security Lens

Over the past decades, it has become clearer that changes in the climate can be attributed "directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability, observed over comparable time periods".⁶ Since at least the 1970s, there has been an international awareness of the potential effect of human activity on the environment. By the 1980s, scientists had already discovered the hole in the ozone layer and were warning that greenhouse gas emissions and other forms of human activity were causing changes in the climate, calling upon politicians to create policies to mitigate these forms of "human-induced climate change".⁷ As the world woke up to the dangers of climate change, the international system moved accordingly. Major advances in the field included the creation of the IPCC in 1988, with the United Nations Framework Convention on Climate Change created in 1992, the Kyoto Protocol in 1997 and most recently, the Paris Agreement in 2015 – all representing an

³ Karen O'Brien, Asuncion Lera St Clair, and Berit Kristofferson, "The framing of climate change: why it matters", in Karen O'Brien, Asuncion Lera St Clair, and Berit Kristofferson (eds), *Climate Change, Ethics and Human Security*, (Cambridge, UK and New York: Cambridge University Press), 2010, p 6.

⁴ Pedro Conceição et al, "Human Development Report 2020: The next frontier: Human development and the Anthropocene", *United Nations Development Programme*, 2020, < <http://hdr.undp.org/sites/default/files/hdr2020.pdf>>.

⁵ IPCC, "Climate change widespread, rapid, and intensifying", *Press Release*, 2021, <<https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>>.

⁶ United Nations Framework Convention on Climate Change [UNFCCC] 1992

⁷ Laurence Boisson de Chazournes, "Introductory Note to the United Nations F", *UN*, 1992, < <https://legal.un.org/avl/ha/ccc/ccc.html>>.

awareness of the seriousness of climate change at the highest levels of government.⁸ However, by design and structure, these mainstream environmental discourse necessarily focus on a state-centric approach – one which takes into account the sovereign borders that form the basis of the international system. As it is possible to measure the national pollution levels of each State, this approach can sometimes lead to a situation in which States seek to compare themselves, each blaming the other on which State is a bigger contributor to the planetary problem of climate change – a practice that is unlikely to lead to progress in mitigating the effects of climate change. However, it is no longer possible for any State to assert its own national sovereignty and engage in unilateral decision-making, especially in the case of climate change, when others are affected by its actions. Although the structure of the international system makes a state-centric approach a vital part of an overall multilateral climate discourse, it is perhaps less useful in bringing a ground-level perspective to the debate. With national and human security implications of climate change such as the increase in the frequency of natural disasters, exacerbation of conflict, and forced displacement of people increasingly evident, the link between human and national vulnerabilities and their link to international peace and security is becoming progressively clearer.

A more relational approach, one which moves beyond the technocratic approach of treating climate change as a problem in need of a ‘fix’, is needed to explain how individuals and communities can best build resilience in response to threats to their environmental and social rights.⁹ While there is no set definition, a human security perspective generally reframes security into a discourse that is more people-centered, examining questions such as ‘who provides security?’ and ‘how are risks created/identified?’. Conventionally, this concept can be framed as freedom from want, freedom for fear and freedom to live in dignity.¹⁰ By changing the referent object from the State to humans, this framework allows one to look beyond physical/military violence as the only “relevant threat” and importantly, to look beyond physical harm as the only “relevant damage”.¹¹ This in turn highlights the complementary nature of ‘national security’ and ‘human security’ as it allows the State to acknowledge and classify threats to people’s (human) security, such as climate change, as threats to national security, thereby expanding the range of stakeholders, widening frameworks for knowledge creation, and allowing for a redistribution of vital resources – all necessary steps in such a complex security issue like climate change. A critical framing of the human security approach would thus allow those who might likely be made invisible, i.e., vulnerable individuals, communities and/or populations, to be seen and included in decision-making processes.

By exposing the political and social context behind who or what is deemed ‘invisible’, we can also examine the context in which the vulnerabilities of these groups are themselves constructed.¹² Most importantly, such steps can work towards successfully building capacity in communities and populations by identifying areas that need focused attention, and empowering people and communities to fend for themselves. This empowerment is one of the important steps identified by the Human Security Commission itself.¹³ In the context of climate change, a human security framework seeks to restore humans to a “condition that exists when the vital core of human lives is protected, and when people

⁸ *Ibid*; United Nations, “Environmental Law”, 2021, *Audiovisual Library of International Law*, < <https://legal.un.org/avl/ha/environmentallaw.html> >.

⁹ Karen O'Brien, Asuncion Lera St Clair, and Berit Kristofferson, “The framing of climate change: why it matters”, in Karen O'Brien, Asuncion Lera St Clair, and Berit Kristofferson (eds), *Climate Change, Ethics and Human Security*, (Cambridge, UK and New York: Cambridge University Press), 2010, p 11.

¹⁰ Lorraine Elliot, “Critical human security: reclaiming a cosmopolitan ethics of dignity and recognition” in John Morrissey (ed), *Haven: The Mediterranean Crisis and Human Security*, (Edwards Elgar Publishing), 2020, pp. 21-38.

¹¹ Gasper, Des. “Human Security: From Definitions to Investigating a Discourse” in Mary Martin and Taylor Owen (eds) *Routledge Handbook on Human Security*. (Abingdon: Routledge), 2013, pp 28-42

¹² Elliot, “Critical human security: reclaiming a cosmopolitan ethics of dignity and recognition”

¹³ Commission of Human Security, “Human Security Now”, 2003,

<<https://reliefweb.int/sites/reliefweb.int/files/resources/91BAEEDBA50C6907C1256D19006A9353-chs-security-may03.pdf>>.

have the freedom and capacity to live with dignity”.¹⁴ In other words, human security seeks to address the problems of communities *vis-à-vis* their broader social, economic, institutional and political context, eventually aiding in building capacity and resilience in these communities at the local and national levels.

Resilience, Risk and Vulnerability

Human security is an inherently integrative and relational concept that highlights present and emerging vulnerabilities and, the economic, social, and political context in which they emerge. As such, this framework views vulnerability as an artificial construct that is dependent on external pressures. Defined as “multi-layered and multidimensional, created as a result of cultural, economic and political norms found in specific places and at specific times”, vulnerability is thus not only created, but is also specific to the context in which it emerges.¹⁵ On the other hand, risk is created when a community’s coping capacity is not equal to the hazard faced. In the context of disaster risk, natural hazards do not automatically lead to a disaster. While it would indeed be the defining factor, there are also other relevant factors that must be taken into consideration including the vulnerability of the affected community as well as their coping capacity,¹⁶ in defining levels of risks. Similarly, resilience – another key concern of the human security framework – is built by enhancing a community’s ability to cope and adapt with vulnerabilities that are created by certain risks (i.e., disasters, conflict, resource scarcity).

In the case of the Asia-Pacific, the region is plagued by several persistent issues, such as intensifying levels of pollution, increasing displacement of people, and widespread poverty. Together with the increase in the frequency and intensity of extreme weather phenomena because of climate change, these issues are taking a toll on the coping and adaptive capacities of various communities in the region.¹⁷ It is important to note however that the concept of resilience to risk, even to climate change, is not new. Individuals and communities have always had to cope and adapt to the threats in their surroundings, both known and unknown. However, climate change has led to hazards that are not only increasing in frequency and intensity, but also deviating from historical patterns.¹⁸ These hazards then become disasters of increasing damage and devastation. These deviations from the ‘norm’ have added an extra element of uncertainty to resilience-building for communities. It is the intersection between vulnerability, risk and resilience that makes climate change an extremely complex issue, one which would benefit immensely if interrogated through the human security framework. There is a clear need to move beyond merely identifying vulnerabilities and expanding existing coping mechanisms. There is a need to examine and understand the genesis of climate-induced risks and its impact on vulnerability, and from there, build resilience to create the stability in human lives to ‘handle’ crises better. The discussion below will highlight how a human security perspective can help understand the vulnerabilities of communities using the examples of two groups that are being disproportionately affected by climate change – women and coastal communities.

¹⁴ Adger W N, et al, “Human Security”, In Field C B, et al (Eds) *Climate change 2014—Impacts, adaptation and vulnerability: Part A: Global and sectoral aspects: Working group II contribution to the IPCC Fifth Assessment Report: Volume 1: Global and Sectoral Aspects, 2014*, Cambridge University Press, pp 755–791.

¹⁵ Tamara Nair, “Upscaling Disaster Resilience in Southeast Asia- Engaging Women through the WPS Agenda”, *RSIS Policy Report*, March 2018, <https://www.rsis.edu.sg/wp-content/uploads/2018/03/PR180314_Upscaling-Disaster-Resilience_WEB.pdf >.

¹⁶ Juan M. Pulhin et al, “Climate Change and Disaster Risks in an Unsecured World” in Juan M. Pulhin, Makoto Inoue & Rajib Shaw (eds), *Climate Change, Disaster Risks, and Human Security: Asian Experience and Perspectives*, Singapore: Springer Singapore Pte Limited, 2021, pp. 1-19.

¹⁷ *Ibid.*

¹⁸ UNESCAP, ‘The Disaster Riskscape Across Asia-Pacific: Pathways for resilience, inclusion and empowerment’, 2019, <https://www.unescap.org/sites/default/d8files/knowledge-products/Asia-Pacific%20Disaster%20Report%202019_full%20version.pdf>.

Women

As the ongoing global COVID-19 pandemic has clearly highlighted, the impacts of any crises vary – with different groups affected in different ways due to their different coping capacities. Gender is one selection criteria. Although climate change affects everyone regardless of their backgrounds, its impacts are nonetheless felt more deeply by those already vulnerable, such as women and girls, with climate change simply magnifying pre-existing inequalities.¹⁹

Women have long been considered the “shock-absorbers” of communities.²⁰ In times of crisis and disasters, they care for the young, old, and infirm and overall, are generally tasked with providing security and continuity to their communities.²¹ However, this does not necessarily mean women are less vulnerable in times of crisis. Instead, female mortality tends to be higher during and after disaster situations. For example, during the 2004 tsunami in Banda Aceh in Indonesia, 55 – 70 percent of the deaths were women, and in the hardest hit village of Kuala Cangkoy in the North Aceh district, women made up 80 percent of the deaths with similar figures reported in India and Sri Lanka, showcasing a serious imbalance of male to female survivors.²² During the 2008 Cyclone Nargis in Myanmar, 61 percent of deaths were of women.²³ However, vulnerability does not solely manifest itself in mortality rates alone, but takes other forms as well. For example, the gendered divisions of labour, more often than not, means that women are concentrated in the informal sector, including work in fishery and agriculture sectors, both of which are more vulnerable to the impacts of climate change. They are also more likely to have lower levels of formal education, face higher levels of poverty and hold less decision-making power, thereby diminishing their visibility in policy discussions and further lowering their overall resilience to the impacts of climate change.²⁴ The digital gender gap is also a factor, with women using the Internet 17 percent less than men; and with a wider gap in developing countries, contributing to their lack of access to information and further inhibiting the potential resilience “gains” offered by digital technologies to mitigate the impacts of, prepare for, respond to, and recover from the various manifestations of climate change.²⁵ Due to these responsibilities and restrictions, women are more vulnerable to crises than men. They are most likely to experience impacts disproportionately when it comes to climate change, and, due to social norms, likely to be overlooked when it comes to relaying their experiences on the ground.²⁶ But women can also be positive agents of change, not just victims. For example, natural disasters have also sometimes provided women with a unique opportunity to challenge their socio-economic roles such some women taking on traditionally ‘male tasks’ in disaster response such as digging wells or participate in political organisation for equitable access.²⁷ A human security angle will allow for the identification of these

¹⁹ Irene Dankelman et al, “Gender, Climate Change and Human Security Lessons from Bangladesh, Ghana and Senegal”, *WEDO*, May 2008, < http://www.gdnonline.org/resources/WEDO_Gender_CC_Human_Security.pdf>.

²⁰ Des Gasper and Thanh-Dam Truong, “Development Ethics Through the Lenses of Caring, Gender, and Human Security”, *ISS Working Paper Series / General Series*, 2008, 459, pp. <<http://hdl.handle.net/1765/18734>>.

²¹ *Ibid*.

²² UNIFEM, “UNIFEM Responds to the Tsunami Tragedy One Year Later: A Report Card”, 2005, <<https://reliefweb.int/sites/reliefweb.int/files/resources/AEC8595ED6FCCDECA492570DC000FDDDB2-unifem-tsunami-19dec.pdf>>; Oxfam, “The tsunami’s impact on women”, 2005, *Oxfam Briefing Note*, < https://www.preventionweb.net/files/1502_bn050326tsunamiwomen.pdf >.

²³ UNDP, “ Gender and disaster risk reduction”, *Policy Brief*, 2013 <

<http://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/PB3-AP-Gender-and-disaster-risk-reduction.pdf>>

²⁴ Oxfam, “Why the majority of the world’s poor are women”, 2021 <<https://www.oxfam.org/en/why-majority-worlds-poor-are-women>>.

²⁵ ITU, “Measuring Digital Development: Facts and Figures 2019”, 2020, < [https://www.itu.int/en/ITU-](https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf)

[D/Statistics/Documents/facts/FactsFigures2019.pdf](https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf) >; ITU, “Women, ICT and emergency telecommunications: opportunities and constraints”, 2020, < <https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Documents/events/2020/Women-ICT-ET/Full-report.pdf> >.

²⁶ Irene Dankelman and Khurshid Alam, Wahida Bashir Ahmed, Yacine Diagne Gueye, Naureen Fatema, Rose Mensah-Kutin, “Gender, Climate Change and Human Security Lessons from Bangladesh, Ghana and Senegal”, *WEDO*, May 2008, <https://www.unscn.org/web/archives_resources/files/Gender_CC_and_human_security.pdf> .

²⁷ Elaine Enarson, ‘Gender and Natural Disasters’, *International Labour Organization*, 1 (2000), < https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_crisis/documents/publication/wcms_116391.pdf>.

strengths and weaknesses.

Using the human security perspective to study gendered resilience to climate change allows for an understanding of the *real* impacts of climate change on women and girls and importantly, provide a framework to unpack the root causes of their experiences of vulnerability. In this case, one of the causes is their lack of proper representation in decision-making. However, even before this can happen, there needs to be an explicit understanding on why women suffer disproportionately in the first place. If this is not understood, then any policies aimed at uplifting women will simply be an overlay on existing inequalities and vulnerabilities, which is highly unlikely to translate to good participatory planning. In particular, there is a need to ask: what are the issues that deny women freedom from wants, fears and indignities? What are the systems in operation that deprive women of this sense of 'security' in the social, political, and economic spheres? What type of knowledge(s) is needed to create policies that will help to alleviate vulnerabilities and create greater opportunities for women? A human security lens allows for the examination of these types of questions and provides the much-needed evidence for stronger, well-informed policies targeted at women and girls specifically in mitigation and adaptation measures.

Female representation is vital to at all levels in the decision-making process, from information-gathering on the ground, to creating policy, to implementing them. Rather than simply implementing 'gender-blind' or 'gender-neutral' approaches or policies that may lead to biased outcomes due to its over-generalised nature, policies must instead be 'gender-sensitive', or 'gender-informed', all the while taking into consideration specific vulnerabilities and coping mechanisms of women in affected populations.²⁸ This has already been well-acknowledged at the international level with several UN agreements, such as the 2005 Hyogo Framework for Action and the 2015 Sendai Framework for Disaster Risk Reduction 2015 – 2030, having specific mention on integrating a "gender perspective". Unfortunately, this is not always implemented. In line with the human security framework, decision-makers should look beyond the tendency to overly securitise climate change issues and come up with managerial solutions to its problems. Instead, they should seek to address the root causes of vulnerability – in this case, the obstacles hindering women from increasing their coping capacity and becoming more resilient.

Coastal Populations

Coastal populations are another particularly vulnerable population caught in the intersection of climate change and risk. According to the 2021 IPCC report, climate change as manifested by sea-level rise and ocean warming are set to continue throughout the 21st century.²⁹ This in turn will lead to a further increase in the intensity and frequency of hydro-meteorological disasters, the severity of coastal flooding and coastal erosion as well as changes to the ocean's ecosystem.³⁰ These changes are likely to result in a higher risk of destruction of livelihoods, shelters, infrastructure and lives, thereby increasing the vulnerability of nearby affected populations, i.e. coastal communities living near and off the sea.

²⁸ Naila Kabeer, "Gender-aware policy and planning: a social relations perspective", in Mandy McDonald (Ed) *Gender planning in development agencies: meeting the challenge*, (Oxford: Oxfam, 1994), pp 80-97.

²⁹ IPCC, "Climate change widespread, rapid, and intensifying – IPCC", *Press Release*, < <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/> >.

³⁰ *Ibid.*

In applying the human security approach to look at the impact of climate change on a community dependent on the stability of oceanographic systems for survival, we invite new knowledge (s) as part of policymaking, in this case, the very specific issues faced by coastal communities that can be infinitely different from, say, agriculturalists. In the case of coastal communities, as is the case of other communities, their vulnerability to climate change seems to have emerged because of several factors including physical, environmental, and social ones. But here, this vulnerability will be more specific to this community. The 2021 IPCC report has warned that Southeast Asia is particularly vulnerable to sea-level rise and the current trend of coastal flooding, coastal erosion and “prolonged inundation” of coasts is highly likely to increase in frequency and severity over time.³¹ This has extremely unfortunate implications for the more than 100 million people living in the region’s coastal areas.³²

For coastal communities, the coastal ecosystem not only serves as a vital resource for food, but also protects their economic security whether as part of the tourism sector or in fishing. In addition, coastal vegetation, such as mangroves, also provide physical protection from storm surges and sea-level rise.³³ With projections indicating the increasing likelihood of ocean warming and ocean acidification significantly disrupting the marine ecosystem in the area, communities which depend on the seas for their livelihood, are in turn, increasingly likely to face threats to their survival.³⁴ As the health of the marine environment continues to degrade, the biodiversity of the region is likely to be affected as well, threatening the livelihood of these coastal communities. Their entire way of life might eventually become untenable and gradually abandoned, leading to both tangible losses such as a loss of income as well as intangible losses such as a loss of a community’s cultural heritage and/or traditional practices.

The term ‘coastal communities’ also includes the populations living near marine environments, including those of the dense urban cities on Southeast Asia’s coastline. Cities such as Bangkok, Jakarta, and Manila, with their millions of residents, are also vulnerable to the effects of climate change on the coasts, particularly the urban low-income and marginalised communities. This is particularly alarming when considering Asia’s urban population has increased significantly over the last decades from approximately 20 percent of the population being urbanised in the 1950s to approximately 50 percent in 2016, with this only set to increase further to approximately 64 percent in 2050.³⁵ As sea levels continue to rise, urban flood exposure is also increasing – further exacerbating the vulnerability of these urban coastal populations. In an effort to address risks associated with climate change and related disasters, governments in ASEAN Member States are attempting to enhance the coping capacities of these low-income urban communities by integrating social protection schemes with disaster response frameworks.³⁶ As more people continue to migrate to urban cities – cities which may be partially submerged by the end of the 21st century– in search of economic opportunities or perhaps even fleeing the effects of climate change in other areas, the need for these communities to enhance their resilience will become ever more urgent. It is therefore of utmost importance that policies to address the vulnerabilities of these communities consider their individual contexts and pledge to “leave no one behind”, in line with the 2030 Agenda for Sustainable Development.

³¹IPCC, “Climate Change 2021: The Physical Science Basis”, 2021, <
https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf >.

³² ADB, 2017 <<https://www.adb.org/sites/default/files/publication/325251/region-risk-climate-change.pdf> >.

³³ *Ibid.*

³⁴ Kristy J. Kroeker et al, “Impacts of Ocean Acidification on Marine Organisms: Quantifying Sensitivities and Interaction with Warming”, *Global Change Biology*, 2013, 19(6), pp. 1884–1896.

³⁵ Asian Development Bank, “A Region at Risk”, Manila: ADB, 2017, <<https://www.adb.org/sites/default/files/publication/325251/region-risk-climate-change.pdf> >.

³⁶ Cheng Boon Ong and Celine Peyron Bista, “The State of Social Protection in ASEAN at the Dawn of Integration”, Bangkok : ILO, 2015, <
https://www.ilo.org/jakarta/whatwedo/publications/WCMS_428982/lang--en/index.htm>.

Forging Ahead...

Climate change has slowly and surely become the front and centre when conceptualising global security and peace. As a 'threat multiplier', climate change manifests in many forms – both direct and indirect – including as local resource competitions, increased migration, extreme weather events and disasters as well as volatile food prices, all creating an extremely challenging environment for States and their citizens. The transboundary nature of climate change means that borders are unlikely to be respected, with national legislative mechanisms for control and mitigation stymied by sheer complexity. The human security framework is particularly suited for looking at an issue as complex as climate change, with its multiplicity of causes and effects and no clear 'fix' in sight. It has been put forth that climate adaptation and mitigation measures, strong institutions, international cooperation, availability of information, a focus on research and analysis of climate impacts are some ways to reduce climate change-induced security issues. While true, these methods tend to be centered around the State as the referent object, rather than the communities who are the most vulnerable. It is also important to consider a social science perspective – to examine the root causes of the vulnerabilities, their coping capacities, and the level of resilience of these communities, alongside state-centric mitigation efforts based on the securitisation *and* scientisation of climate change. After all, what is human security but the protection of the vital freedoms of people and the development of their capabilities? Now, more than ever, this framework is of importance in examining the impacts of climate change as well as in the creation of secure and satisfying lives in a new climate future.

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About the Centre for Non-Traditional Security Studies (NTS Centre)

The **S. Rajaratnam School of International Studies (RSIS)** is a think tank and professional graduate school of international affairs at the Nanyang Technological University, Singapore. An autonomous school, RSIS' mission is to be a leading research and graduate teaching institution in strategic and international affairs in the Asia Pacific. With the core functions of research, graduate education, and networking, it produces research on Asia Pacific Security, Multilateralism and Regionalism, Conflict Studies, Non-traditional Security, Cybersecurity, Maritime Security and Terrorism Studies.



NTS Centre conducts research and produces policy-relevant analyses aimed at furthering awareness and building the capacity to address non-traditional security (NTS) issues and challenges in the Asia Pacific region and beyond. The Centre addresses knowledge gaps, facilitates discussions and analyses, engages policymakers, and contributes to building institutional capacity in Sustainable Security and Crises. The NTS Centre brings together myriad NTS stakeholders in regular workshops and roundtable discussions, as well as provides a networking platform for NTS research institutions in the Asia Pacific through the NTS-Asia Consortium.

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