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Climate Security and the Security Sector in Southeast Asia

Thematic SSG Brief

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Additional resources

The workshop programme and links to recordings of the public webinar are available at https://www.asiapacificssg.com/post/event-climate-security-and-good-security-sector-governance-in-southeast-asia-14-october.

Acknowledgements

Executive Summary

Four of the 10 countries most affected by climate change in the past 20 years are in Southeast Asia. As such, climate change poses a profound threat to populations across the region, spanning traditional security dimensions as well as non-traditional aspects such as food, water and health security. In particular, marginalised groups such as women, the disabled, rural populations and refugees are disproportionately affected by climate-induced security threats and yet have limited capacities to adapt to these changes. However, more effective management of climate change can partially mitigate its detrimental effects on human security. Strengthening governance mechanisms, particularly within the security sector, can provide a clear entry point for improving climate insecurity responses. If security sector institutions across Southeast Asia can develop their capacities to respond to, plan for and predict climate-induced security threats, they will have significant potential to manage and partially mitigate the impacts of climate change. Vitally, for these reforms to successfully respond to climate change's wide-ranging security implications, they should abide by principles of good governance such as inclusivity, transparency and accountability. Thus, security sector governance and reform (SSG/R) offers an effective policy response to climate insecurity, requiring the reform of roles and responsibilities at all levels including regional organisations, governments, security institutions and civil society. For civil society, recommended entry points for reform include mobilising local communities, empowering grassroots organisations, expanding oversight capacities and sharing expertise. Secondly, security institutions should green their own operations, introduce climate-conditional budgets, develop enhanced diagnostic capacities and improve collaboration with civil society. At the government level, conceptual reform of national security, the development of comprehensive, long-term climate security strategies and cross-governmental cooperation and information exchange are suggested. Finally, regional bodies (e.g., ASEAN) should develop climate security strategies and related funding mechanisms, facilitate diplomatic exchange and integrate a human security approach. If concrete measures such as these can be implemented in a timely manner, the security sector will become much better equipped to adequately respond to present and future climate-induced security threats in Southeast Asia.

Table of Contents

Introduction

Climate change is nowadays understood to generate widespread and various threats to security and development worldwide, a relationship encapsulated by the growing field of climate security.[1] Climate-induced security threats are diverse in their nature, intensity and duration, ranging from direct threats to human security to indirect exacerbation of traditional and non-traditional security concerns, risking spill-over into armed conflict or other situations of violence. In Southeast Asia (SEA), a region particularly vulnerable to climate change, its disruptive effects are already being felt and are likely to worsen in the medium and long-terms. Despite measures taken to combat the issue, the positive impact of these efforts is slow to be felt.

However, the risk of profound insecurity emerging from climate change in SEA and globally can be partially mitigated by good governance. If adaptation and mitigation strategies can be implemented by governments, climate-induced security threats can be managed and (to some extent) prevented. Thus, undertaking security sector reform (SSR) and including considerations for climate security in these reforms is essential to ensuring climate-induced security threats are managed and do not escalate. In light of this critical and evolving question of climate insecurity and its contingency on good governance, this Thematic Security Sector Governance (SSG) Brief compiles insights and recommendations on the topic provided by several experts,[2] with the aim of presenting practical steps forward for security sector actors to respond to and mitigate the growing threats posed by climate change in SEA.

The relationship between climate change and human (in)security is well documented.[3] By damaging livelihoods, forcing migration and creating resource scarcity, climate change exacerbates multiple sources of human insecurity such as food, water and health insecurity. Moreover, the most marginalised groups within populations are disproportionally affected, including women, people in poverty, the disabled, rural populations, refugees and other people who experience vulnerability such as stateless individuals.[4] Similarly, climate insecurity has a disproportionate impact on fragile settings

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1   The term 'climate security' refers to the broad field of research and policymaking undertaken at the nexus of climate and security issues. However, the specific risks or threats to security posed by climate change are known by many names within the field, such as 'climate-related security risks' or here 'climate-induced security threats'. For more information on discussions within the climate security field, please see the 'Climate Security Expert Network' (https://climate-security-expert-network.org/).

2   The findings and recommendations of this Thematic SSG Brief were first exchanged by the authors in draft format during an expert workshop on 'Climate Security and Good Security Governance in Southeast Asia', held in November 2021 by DCAF's Asia-Pacific Unit.

3   Adger, W.N., J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring and C.H. Vogel (2014) "Human Security", in C.B. Field, V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea and L.L.White (eds) Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects, Cambridge, UK and New York, NY: Cambridge University Press, www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA_FINAL.pdf, pp. 755-791.

4   DCAF — Geneva Centre for Security Sector Governance (2021) "Climate Change and its Impact on Security Provision: The Role of Good Security Sector Governance and Reform", p. 6.

experiencing poverty, inequality and historic conflict,[5] especially where good governance by state institutions is already weak. At significant risk of climate-induced food scarcity, rising sea-levels and sudden-onset natural disasters, SEA is one of the most vulnerable regions to climate change's destructive consequences for stability and human security. Indeed, four of the 10 countries most affected by climate change in the past twenty years are in SEA.[6]

Understanding of the link between climate change and traditional security issues has advanced significantly in the last decade, and it is now widely recognised that factors such as resource scarcity and impacted livelihoods can drive people to illegal coping mechanisms and can escalate tensions to the point of outbreak of violence.[7] Yet, despite the increasing evidence of climate change's potential to exacerbate traditional and non-traditional security threats, to date the connection between climate insecurity and good governance remains underexplored and limited efforts have been made in policymaking circles to internalise and control the disastrous impacts of climate insecurity. This means governments and security sector institutions are not accurately assessing, responding to or adapting to present and future climate-induced security threats, leaving them unable to 'break the cycle' in which climate change exacerbates pre-existing vulnerabilities. Undertaking SSR — aimed at achieving a higher quality of governance aligned with core principles such as inclusivity, accountability and effectiveness — offers a viable entry point for national-level security sectors in SEA to effectively internalise and respond to today's range of climate-induced security threats.

In this Thematic SSG Brief, key issues and recommendations on the crucial topic of climate security and good governance will be laid out. Firstly, the existing security challenges posed by climate change in SEA will be presented, covering both traditional and human security threats. Within this, a case study of migration and mobility will be explored to showcase the complex channels through which climate change can cause insecurity and instability. In the following section, the roles and responsibilities of security sector actors in SEA will be analysed, including the importance of security sector governance/reform (SSG/R) as a policy response to climate insecurity. Finally, a range of concrete recommendations will be proposed, illustrating how security sector actors at all levels can implement practical steps to mitigate climate-induced security threats in SEA moving forward.

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5   DCAF — Geneva Centre for Security Sector Governance (2020) "The Impact of Climate Change on Global and Local Security Governance: Learning from Local Experiences of the Security Sector", UNOG-DCAF Seminar 2020, www.dcaf.ch/impact-climate-change-global-and-local-security-governance, p. 3.

6   Eckstein, D., V. Künzel, L. Schäfer and M. Winges (2019) "The Global Climate Risk Index 2020", *Germanwatch*, www.germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_15.pdf, at p. 9.

7   DCAF — Geneva Centre for Security Sector Governance, note 5 above.

Security Consequences of Climate Change in Southeast Asia: Present and Future

Climate Change in Southeast Asia

The direct impacts of climate change on livelihoods around the world are manifold, ranging from the immediate threats to human life posed by climate-induced sudden weather events, to slow-onset issues such as rising sea levels, air pollution and desertification, all of which can contribute to gradual increases in long-term instability. As a region already prone to natural disasters such as surges, typhoons and earthquakes, SEA is particularly vulnerable to the immediate effects of climate change.[8] For example, between 2008-2018, a reported 54.5 million people were displaced by weather-related natural disasters in SEA.[9] Moreover, as the frequency and severity of such hazards are predicted to increase due to climate change, the effects of which will continue being felt for many years even if mitigating measures are taken soon, the region is likely to become more vulnerable to such climate-induced security threats in coming decades.

However, the impact of climate change on security varies significantly within and between countries. This relates to the natural vulnerability of different locations to both immediate and slow-onset climate risks, as well as the differing capacities of governments and regions to mitigate and adapt to the threats they are faced with. Accordingly, disproportionate effects of climate change are felt in lower-income countries in SEA. In the past 20 years, Myanmar, the Philippines, Vietnam and Thailand were amongst the 10 countries most affected by climate change worldwide,[10] while wealthier neighbours such as Singapore and Brunei have remained relatively unscathed. Additional vulnerabilities are also felt by countries experiencing weak governance or internal fragility, which lack the capacity to prepare for and respond to the humanitarian and security consequences of climate change. These discrepancies in vulnerability and response capacity shape displacement patterns and uncontrolled migratory flows within SEA, presenting a major climate-induced security threat for the region. By putting pressure on communities, resources and infrastructure, projected climate change will thus very likely exacerbate existing tensions between communities and increase regional instability.

Climate Change's Consequences on Human Security

In addition to the existential threats it poses, climate change is increasingly recognised to be a 'threat multiplier' that impacts security by exacerbating pre-existing vulnerabilities. These aggravations work through multiple human security characteristics such as food, water and health security, which are predicted to deteriorate over time as the severity of climate change is likely to significantly increase.

Food insecurity is exacerbated by climate change in multiple ways and presents a

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8   Hiebert, M. and D. Fallin (2021) "Security Challenges of Climate Change in Southeast Asia", *Centre for Strategic & International Studies*, 5 October, .

9   Dennis, D. (2020) "Southeast Asia's Coming Climate Crisis", *Centre for Strategic & International Studies*, 22 May, www.csis.org/blogs/new-perspectives-asia/southeast-asias-coming-climate-crisis.

10   Eckstein et al., note 6 above.

major source of climate-induced security threats for SEA. Changing weather patterns, increased rainfall, floods and worsening natural disasters have complex consequences on agricultural systems by reducing the availability of cultivable lands and impacting food production and crop yields. Resulting food scarcity can exacerbate social tensions as groups compete over limited resources, as well as cause displacement as populations migrate to find new food sources.

Similarly, water security is a major area of concern for SEA. Over 325 million people in the region are vulnerable to drought, including the 60+ million residents of the Mekong Delta,[11] a threat which greatly compounds food security concerns due to the impact of water scarcity on crop yields. As water scarcity has historically been a motivator for migration, water insecurity can also lead to competition over limited resources and prompt increased mobility and displacement as populations must find alternative water sources. On the other hand, increased rainfall and flooding can compromise hygiene, increase the prevalence of waterborne diseases, cause physical damage to individuals and infrastructure, and can even risk submerging habitable landmasses altogether. This is a particularly critical concern for SEA, considering that 77 percent of the region's population live in coastal areas.[12] Major sea-level cities in SEA such as Bangkok, Ho Chi Minh City, Jakarta and Manila risk submersion as a result of rising sea levels. The entire Mekong Delta, at less than two metres above sea level, is equally vulnerable.[13]

Furthermore, climate change can severely impact health security by compromising the manifold environmental determinants of good health such as clean water, clean air, uncontaminated food and shelter. The rising frequency and severity of natural disasters are often particularly damaging to the health of populations, resulting in direct physical harm to individuals, the destruction of health services and shelters, and the exacerbation of pre-existing human security challenges such as food and water scarcity.

As illustrated above, the varied human security threats posed by climate change are often compounded by climate-induced mobility and migration. When climate events provoke resource scarcity, degrade natural environments and render entire areas uninhabitable, migration and displacement are often prompted as a response mechanism. This mobility, often highly unpredictable and irregular due to the anomalous nature of climate change, can impose its own environmental, social and political challenges as well as multiply existing ones. Population mobility is already a major issue for governments in SEA. Large-scale migration has historically been prevalent in the region, and this trend continues today. Significant modern-day displacement occurs as the result of natural disasters concentrated in the Philippines, Indonesia and Myanmar,[14] which in addition to the presence of sizable marginalised populations (e.g., Rohingya refugees) who are particularly susceptible to climate-induced security threats, render SEA acutely

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11   Hiebert et al., note 8 above.
12   Global Environment Facility (2017) "Joint ocean management transforms coasts in South East Asia", 7 June, www.thegef.org/news/joint-ocean-management-transforms-coasts-south-east-asia.
13   Expert Group of the International Military Council on Climate and Security (2020) "Climate and Security in the Indo-Asia Pacific: Part of the 'World Climate and Security Report 2020'", July, imccs. org/wp-content/uploads/2020/07/Climate-Security-Indo-Asia-Pacific_2020_7.pdf, p.18.
14   Internal Displacement Monitoring Centre (2020) "Global Report on Internal Displacement", www. internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf, pp. 41-42.

vulnerable to the destabilising effects of unpredictable migratory flows. This challenge will likely become more prevalent over coming decades, as the Lower Mekong subregion alone is predicted to have up to 6.3 million climate migrants by 2050.[15]

Furthermore, climate-induced mobility disproportionately affects marginalised population groups, such as women, the disabled, the poor and rural populations, with women making up 80 percent of persons displaced by climate change.[16] Such groups are more likely to be forced to migrate as their vulnerabilities reduce their ability to adapt to climate challenges. When these groups are forced to flee, they become vulnerable to additional threats such as sexual exploitation, human trafficking and gender-based violence, compounding existing inequalities. However, the most marginalised may be unable to migrate at all. For instance, already-displaced groups such as refugees, stateless individuals and internally displaced persons often reside in the most climate-affected environments yet have the fewest resources at their disposal to respond to these threats. While typically a domestic phenomenon, climate-induced mobility sometimes crosses international borders,[17] creating additional difficulties for migrants who may lack formal identification documents. It is also far more permanent than other forms of migration such as conflict-induced migration, since climate migrants are rarely able to return to their original location.[18] This renders the consequences of climate-induced migration particularly long-lasting.

Climate Change's Consequences on Traditional Security

Both in SEA and beyond, the non-traditional security implications of climate change have the potential to escalate into traditional security threats. Increased resource scarcity, environmental degradation, displacement and natural disasters can inflame tensions and put fundamental safety at risk, driving individuals, and over time even countries, to opt for violent coping mechanisms. Likewise, increased strain on existing infrastructure and basic services can increase grievances towards governments or other segments of the population which may spill over into violence.[19] Thus, although climate change does not directly cause violent conflict, when inadequately managed the above threat multipliers can cause profound instability and indirectly result in the outbreak of violence.

As well as provoking new conflicts, climate insecurity can make existing conflicts harder to resolve by exacerbating levels of violence and creating additional instability that hinders the capacity of security agencies to enforce or build peace.[20] The effects of climate change on livelihoods can be leveraged by non-state armed groups to boost recruitment and can fuel animosity against the state when the government is perceived to

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15   Clement, V., K.K. Rigaud, A. de Sherbinin, B. Jones, S. Adamo, J. Schewe, N. Sadiq and E. Shabahat (2021) "Groundswell Part 2: Acting on Internal Climate Migration", *World Bank*, 13 September, , p. 42.

16   United Nations (2021) "The UN Secretary-General speaks on the state of the planet", 2 December, www.un.org/sites/un2.un.org/files/sgspeech-the-state-of-planet.pdf, p. 10.

17   Gaynor, T. (2020) "Climate change is the defining crisis of our time and it particularly impacts the displaced", *UN Refugee Acency*, 30 November, www.unhcr.org/news/latest/2020/11/5fbf73384/climate-change-defining-crisis-time-particularly-impacts-displaced.html.

18   Ibid.

19   Expert Group of the International Military Council on Climate and Security, note 13 above, p. 16.

20   DCAF — Geneva Centre for Security Sector Governance, note 5 above, p. 5.

be responding inadequately to threats.[21] As such, the traditional security risks of climate change are more pronounced for fragile and conflict-prone countries which are more likely to currently experience instability and at the same time have reduced capacity to mediate climate-induced tensions. While most climate insecurity experienced in SEA to date has been human security-related, the traditional security implications are real and likely to increase over time as migration, tensions and resource scarcity rise. Some of these existing traditional security concerns in SEA with clear environmental dimensions include the South China Sea dispute,[22] transnational organised crime and trafficking. For instance, rising water temperatures and acidification of waters resulting from climate change are projected to have a devastating impact on fish stocks in the South China Sea, fuelling disputes over overfishing and inflaming broader geopolitical tensions between Southeast Asian claimant nations, China and the United States that pose a viable risk of escalating into violent conflict.[23]

How Can SSG/R Reduce Climate Insecurity in Southeast Asia?

Impact of Security Institutions on Climate Change

As illustrated in the previous section, it is not the consequences of climate change such as resource scarcity and mobility per se that are responsible for the majority of climate-related insecurity, but more so the poor management of these consequences. Mismanagement compounds the severity of climate change's negative impacts, which is in part why individuals, communities and nations with pre-existing vulnerabilities, and thus reduced resistance to climate change, suffer the greatest resultant instability. Strengthening governance mechanisms, particularly within the security sector, can provide a clear entry point for improving climate insecurity responses. If security sector institutions can develop their capacities to respond to, plan for and predict climate-induced security threats, these agencies have significant potential to manage and partially mitigate the impacts of climate change. This also includes security institutions 'greening' their own operations, as these agencies (particularly militaries) are themselves among the largest national contributors to greenhouse gas (GHG) emissions.[24]

Centrality of Good Governance Principles

Crucially, changes to the security sector must abide by principles of good governance, such as accountability, transparency, inclusivity, responsiveness and effectiveness, if they are to be successful in responding to climate change's wide-ranging security implications. For instance, only if security providers are responsive to the unique climate security needs of all parts of the population — particularly the most marginalised — are they successfully

21   Expert Group of the International Military Council on Climate and Security, note 13 above, p. 43.
22   Climate Diplomacy (2021) "Fishing Dispute in the South China Sea", climate-diplomacy.org/case-studies/fishing-dispute-south-china-sea.
23   Hiebert, M. (2022) "The Looming Environmental Catastrophe in the South China Sea", *The Diplomat*, 14 January, thediplomat.com/2022/01/the-looming-environmental-catastrophe-in-the-south-china-sea.
24   Costs of War Project (2019) "Environmental Costs", November, watson.brown.edu/costsofwar/costs/social/environment.

providing security to all under their jurisdiction. Moreover, evolving roles for security providers in response to climate change without equally robust oversight mechanisms to ensure a high level of accountability create a heightened risk of climate change becoming 'securitised',[25] whereby agencies may overstep their newly-assigned powers in responding to climate-induced security threats in ways that harm communities and infringe upon human rights.[26] Likewise, if security sector institutions are not transparent, and thus the extent of their own contributions to climate change are not freely accessible to the public, they cannot successfully mitigate climate change's harmful consequences to the best of their abilities and may lack the level of credibility among the population that they need. Proactive SSR, as a political and technical process which applies the principles of good governance to the security sector, is essential in achieving security provision that operates in line with these principles of good governance. Therefore, by achieving alignment with the principles of good SSG via a process of SSR, the roles and responsibilities of security sector institutions in SEA can become truly responsive to the impacts of climate security.

To realise this goal, the SSR process should occur within a framework of democratic civilian control and be inclusive of the broadest possible range of security sector actors, both from security provision and oversight perspectives. Yet to date, governments and security institutions at all levels — both in SEA, and globally — are often failing to internalise and respond adequately to climate-induced security threats, or to modify their modes of operation to reduce their own environmental impacts.[27] As a result, security provision is not reflective of the reality of these new threats, and the present incorporation of climate security considerations into SSR activities and strategies remains insufficient to ensure the realignment of these perspectives. As such, the following section will outline possible adaptations of roles for the full range of security sector actors in response to climate-induced security threats.

25   Scott, S.V. (2012) "The Securitization of Climate Change in World Politics: How Close have We Come and would Full Securitization Enhance the Efficacy of Global Climate Change Policy?", *Review of European Community & International Environmental Law*, Vol. 21, No. 3, doi.org/10.1111/reel.12008, pp. 220-230.

26   Brown, O. and G. Nicolucci-Altman (2022) "The Future of Environmental Peacebuilding: Nurturing an Ecoystem for Peace, A White Paper", *Geneva Peacebuilding Platform, PeaceNexus Foundation, Environmental Peacebuilding Association, Environmental Law Institute and International Union for Conservation of Nature*, ecosystemforpeace.org, p. 18.

27   Manea, M. (2021) "The Security Sector and Climate Change", Geneva Global Policy Brief No. 2/2021, www.dcaf.ch/sites/default/files/imce/PRD/UniversityOfGeneva-GGPB_N2-2021-M-G_Manea.pdf, p. 1.

- Security Sector Governance (SSG) is the process by which security institutions are subordinated to oversight mechanisms, in order to deliver transparent and accountable public services as a public good.

- Security Sector Reform (SSR) is the political and technical process of improving state and human security by making security provision, management and oversight more effective and more accountable, within a framework of democratic civilian control, rule of law and respect for human rights. The goal of SSR is to apply the principles of good governance to the security sector.

Further resources:

- DCAF — Geneva Centre for Security Sector Governance (2015) "Security Sector Governance", SSR Backgrounder Series, Geneva: DCAF, https://www.dcaf.ch/sites/default/files/publications/documents/ DCAF_BG_1_Security_Sector_Governance_EN.pdf.

- DCAF — Geneva Centre for Security Sector Governance (2015) "Security Sector Reform", SSR Backgrounder Series, Geneva: DCAF, www.dcaf.ch/sites/default/files/publications/documents/DCAF_ BG_2_Security%20Sector%20Reform_1.pdf.

Roles and Responsibilities of Security Sector Institutions

As mitigating the impact of climate insecurity requires a whole-of-government approach, reform of the roles and responsibilities of security sector institutions at all levels is needed. This includes changes in policy and conceptualisation of climate change at the national governmental level across SEA, as well as structural reforms to state security providers such as militaries, police forces, border management authorities, coast guards and intelligence services. Moreover, agencies responsible for the oversight of the security sector, such as parliaments, must simultaneously adapt to ensure their continued ability to effectively exercise their duty to provide checks and balances. Similarly, civil society and other informal agencies which fulfil crucial oversight functions must be adequately consulted and offered a forum to advocate for populations' needs, in order to ensure the inclusivity and transparency of security sectors across the region.[28]

Governments

In terms of role adaptation, tackling climate insecurity in SEA first and foremost requires strategic planning on the part of national governments. The development of comprehensive national strategies that analyse and assess the links between climate security, human security and traditional security within the national and regional context is key. These strategies can draw and improve upon existing examples of cooperation between the respective policymaking and research communities in the climate and security fields. Such examples include climate security strategies developed in countries such as New Zealand, the United Kingdom and the United States, as well as within multilateral institutions like the European Union, where climate risk is integrated across foreign, security and development policy and focus is placed on resilience, conflict prevention and rapid crisis response.

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28   Born, H., D. Reimers, V. Csordas, A. Robinson and C. Arvaston (2020) "At the interface of security and development – Addressing fragility through good governance of the security sector", G20 Insights Policy Briefs, p. 5.

Existing national security policies also need to adapt to better integrate the importance of climate security, both by taking practical steps to be more prepared for and able to address potential climate-induced security threats, and by engaging in a conceptual reframing of the way security is typically understood by security actors. Traditional conceptualisations of security (e.g., national security) that often dominate conventional security providers' outlooks are too narrow to fully capture climate-induced security threats. One option for overcoming this is to add an additional layer to this existing concept that reflects the positive impacts of climate change mitigation on traditional security objectives such as global military cooperation, disarmament and weapons control. For instance, the Philippines' 2017-2022 National Security Policy emphasises the importance of resource conservation and environmentally sustainable industrial activity for protecting its national security interests,[29] representing a positive first step towards a more comprehensive integration of climate change mitigation into national security objectives.

Alternatively, broader mainstream security concepts such as human security already encompass non-traditional security threats such as those induced by climate change. This is already featured in the national security strategies of some nations in SEA, such as Thailand.[30] Thus, promoting a re-framing of security as understood by traditional security actors towards a human-centred security approach may provide the solution needed for such institutions to fully internalise climate security. Broadly, this means incorporating human security concepts into national security policy more fully to better understand and address how drivers of fragility and instability will function in a climate-changed future. For example, disproportionate climate impacts on the most marginalised could widen inequality and play into narratives of exclusion, marginalisation or injustice in SEA, which in turn could lead to unrest, political fractions or violence. In extreme cases, this may be capitalised on by armed groups to gain legitimacy, support or recruitment — a risk the governments of Indonesia, Myanmar and the Philippines already recognise.[31] National security policymaking can adapt to climate change by taking these causal chains into consideration, mapping both climate and security vulnerabilities and their potential interactions, and supporting holistic planning (alongside development and diplomatic actors) to mitigate climate-induced security threats. This process also applies to understanding how climate change will impact the array of traditional security issues facing SEA. In this sense, explicitly integrating climate security into the mandate of traditional security providers could shift their self-perception from being not only protectors of states and people, but also of ecosystems and public goods such as natural resources, clean water and air.

Furthermore, addressing a non-traditional security threat such as climate change will require non-traditional approaches from the security community. Analysing the impacts of climate change on the operations and strategic environment of security institutions

29   National Security Council (2017) "National Security Policy for Change and Well-Being of the Filipino People 2017-2022", *Office of the President, Republic of the Philippines*, www.nsc.gov.ph/attachments/article/NSP/NSP-2017-2022.pdf, p. 7.

30   Office of the National Security Council, Office of the Prime Minister (2020) "The National Security Policy and Plan 2019-2022", *Kingdom of Thailand*, pp. 8-9.

31   Sagbakken, H., I. Overland, M. Merdekawati, H. Chan and B. Suryadi (2020) "Climate Change, Security and Regional Cooperation in ASEAN", *ASEAN Focus*, Issue 1/2020, www.iseas.edu.sg/wp-content/uploads/2020/02/ASEANFocus-March-2020.pdf, p. 15.

will require new capacities, such as familiarity with climate science and the need to look beyond sudden-onset disasters towards other challenges that will influence the security environment in the region. These challenges range from food security and livelihoods to the transition to sustainable energy sources. Taking a preventative stance will require, in addition to a more widespread understanding of climate-induced security threats and drivers, improved early warning and rapid response capabilities. Most of the tools for mitigating climate-induced security threats come from outside the security community, requiring a balancing of resources between treating the underlying causes of instability and responding to its symptoms.

Security Institutions

As core components of any national security sector, the armed forces have significant potential to assume a central role in mitigating climate change's impacts on populations in SEA. The armed forces are the security institution best suited to longer-term strategic planning, making them well-placed for forecasting climate-induced security threats. Such advanced planning allows for timely intervention to mitigate against predicted future threats, helping to minimise subsequent instability. Militaries are also well-equipped analytically, giving them the potential to assess an evolving range of security threats. Moreover, the armed forces (particularly branches such as national guards) are often instrumental in maintaining stability during climate-induced emergency situations where security it at risk, such as through the provision of humanitarian and disaster relief.[32] This is a particularly central role for militaries in SEA, which have an established history of responding to natural disasters[33] due to the region's acute vulnerability to such events. Demand for these services is likely to keep increasing as extreme weather events in SEA intensify in severity and frequency.[34]

Furthermore, militaries themselves are major contributors to GHG emissions and are often the largest single consumer of fossil fuel in many nations.[35] These significant contributions are frequently omitted from national emissions targets, representing a major blind spot in existing governmental efforts to control climate change. What's more, exemption for security institutions from reporting emissions means that there is a global lack of transparency and open data on these figures, making assessing the true scale of this problem in SEA and beyond extremely challenging.[36] Nonetheless, militaries in the region have a clear responsibility (and a self-interest) to reduce their own carbon footprint through measures such as transitioning away from fossil fuels, developing more efficient vehicles, and planning operations in a more efficient and climate-sensitive manner.

32   Van Schaik, L., T. von Lossow, N, Yassin and A. Schrijver (2021) "Fears for militarisation of climate change: Should we be concerned?", *Clingendael Alert*, www.planetarysecurityinitiative.org/sites/default/files/2020-10/CA_PSI_Militarisation_of_CC.pdf, p. 3.

33   Chen, C. (2021) "Greening Security: The Military as a Climate Game Changer?", *Institute of Defence and Strategic Studies* Paper, No. 009/2021, 27 October, www.rsis.edu.sg/wp-content/uploads/2021/10/IP21009-Chen-masthead-final-uploaded-1.pdf, p. 4.

34   Expert Group of the International Military Council on Climate and Security, note 13 above, p. 6.

35   King, W.C (2014) "Climate Change: Implications for Defence", IPCC Climate Science Business Briefings, static.s123-cdn-static-d.com/uploads/4109963/normal_5f68bf0d6ca46.pdf, p. 13.

36   Parkinson, S. (2020) "The carbon boot-print of the military", *Responsible Science*, No. 2, www.sgr.org.uk/sites/default/files/2020-08/SGR-RS02-Military-carbon-boot-print.pdf, pp. 18-19.

Police forces have a similar stabilising role to play as institutions vital to maintaining the rule of law in unstable contexts as well as during and after disaster responses. Marginalised groups and communities are often disproportionately affected by climate change's destructive impacts,[37] and police can help protect in this respect. Another important role for the police is protecting the civic space to allow for non-violent political expression, which may help to prevent grievances from escalating into more widespread violence or conflict — however, the fulfilment of this function in reality is far from guaranteed, illustrated by instances of heavy-handed treatment of environmental demonstrators by police forces across SEA.[38] Police also have a direct role in tackling some of the criminal activities that can emerge as causes or by-products of climate change, such as resource exploitation and transnational crime. One major environmental crime that affects a number of SEA nations is illegal logging, which is particularly prevalent in Vietnam, Cambodia, Indonesia and Malaysia.[39] Community policing can contribute to helping local communities better understand and prepare for the impacts of climate change, therefore increasing resilience. Through community policing, police forces can create closer relations with local communities affected by climate change and work collaboratively on prevention measures, such as measures to promote the maintenance of public order in the immediate aftermath of climate change-induced disasters.

Much like police forces, many environmental crimes are equally under the remit of coast guards and maritime agencies, which are well placed to tackle the growing problem presented by non-traditional security threats such as piracy in the Sulu Sea[40] and fishing disputes off the coast of Brunei.[41] Finally, as the agency most directly in contact with SEA's significant and growing climate migrant population, border management authorities have a similar role to play in minimising the particular security risks associated with climate-induced mobility and displacement and related crimes such as human trafficking.

Local Communities, Authorities and Civil Society

As the roles of security institutions should develop and adapt, it is crucial that both state and non-state oversight bodies also reform to allow for sufficient democratic control over the institutions to be maintained. The empowerment of oversight agencies must be inclusive of the vast range of actors which exercise these functions in practice, including government institutions such as parliaments and specialised committees, as well as non-state bodies like civil society organisations, the media, NGOs, advocacy groups for marginalised populations, political parties, think tanks and research institutions. While

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37   Polack, E. (2008) "A Right to Adaptation: Securing the Participation of Marginalised Groups", *IDS Bulletin*, Vol. 39, No. 4, September, opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/8199/IDSB_39_4_10.1111-j.1759-5436.2008.tb00472.x.pdf?sequence=1.

38   Denton, J. (2018) "Environmental Defenders Under Pressure Across Southeast Asia", *The Diplomat*, 6 September, thediplomat.com/2018/09/environmental-defenders-under-pressure-across-southeast-asia.

39   Luong, H.T. (2020) "Transnational Crime and its Trends in South-East Asia: A Detailed Narrative in Vietnam", *International Journal for Crime, Justice and Social Democracy*, Vol. 9, No. 2, doi.org/10.5204/ijcjsd.v9i2.1147, at p. 95.

40   Sagbakken et al., note 31 above.

41   bin Haji Mohd Rosdi, A.R. and P.J. Carnegie (2021) "Illegal Fishing and the Challenges of Maritime Co-ordination in Brunei's EEZ", Working Paper No. 61, *Institute of Asian Studies, Royal Brunei Navy and Universiti Brunei Darussalam*, ias.ubd.edu.bn/wp-content/uploads/2021/01/working_paper_series_61.pdf.

the relative autonomy and influence of such agencies vary significantly across SEA countries in line with respective political systems and restrictions on the civic space, these bodies are essential in ensuring the reform process is civilian-led and thus changes are as closely aligned as possible to the needs of all members of society. Moreover, efficient and empowered oversight bodies help to ensure the continuity of reforms in the longer run when elected governments are subject to change and the prioritisation given to SSG/R across consecutive administrations may fluctuate. This is especially vital in cases where climate-related states of emergency are introduced, which typically entrust security institutions with exceptional powers.[42] For instance, a December 2021 typhoon in the Philippines led to the declaration of a 'state of calamity' in several regions,[43] under which law enforcement agencies such as the police, supported by the military, had the power to ensure peace and order by all means necessary, and even to enforce price caps on basic commodities with imprisonment and large fines for violators.[44]

However, the ability of national security sectors and their constituent institutions to adapt is heavily dependent on their institutional capacity more generally, determined by a country's size, population, wealth and pre-existing level of stability. These disparities are particularly acute in SEA, where the region's wealthiest nation (Singapore) has a per capita gross domestic product over 41 times higher than the lowest-income nation (Timor-Leste).[45] As historically fragile countries experiencing inequality and lower incomes tend to find themselves both most vulnerable to climate change's effects and yet least able to adapt to them, self-led SSR by governments that possess sufficient capacity to undertake meaningful reform risks widening the disparity in global impacts of climate change. Therefore, the sharing of resources, funding and good practices between governments is key to ensuring no community or country is left behind in undertaking SSR processes.

At the same time, considering the full range of actors engaged in SSR, it is necessary to recognise the role of various non-state actors which are engaged in security provision in communities and regions across SEA, including but not limited to traditional or religious leaders and even locally based non-state armed groups. For climate security policy responses to be comprehensive, pragmatic engagement with these actors must be based on localised understanding of their relationships with the climate-security nexus in each context, and these dynamics must be incorporated into national climate security strategies. This includes considering the ways in which natural resource exploitation and other environmental crimes can fund non-state armed groups, as well as the environmental impact and carbon footprints of private military and security companies hired by or operating in SEA countries.

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42   Manea, note 27 above, pp. 5-6.
43   Parrocha, A. (2021) "PRRD declares state of calamity in 'Odette'-hit areas", *Philippine News Agency*, 22 December, .
44   Caliwan, C.L. (2021) "Cops to help enforce price freeze in 'Odette'-hit areas", *Philippine News Agency*, 20 December, .
45   World Bank (2022) "GDP per capita (current US$) - East Asia & Pacific, South Asia, Europe & Central Asia", data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=Z4-8S-Z7&most_recent_value_desc=false.

The Role of ASEAN

Although national security sectors have a central role to play in responding to climate-induced security threats, they cannot adequately respond to this issue on their own. The transboundary nature of climate change's causes, as well as many of its security consequences, requires equally transboundary policy responses involving communication, coordination, joint exercises and expertise-sharing between SEA governments and their respective national security institutions. International and regional organisations, and in particular ASEAN in the case of SEA, are uniquely positioned to play a central role in this respect as their remits naturally extend beyond national borders.

The publication of the first ASEAN State of Climate Change Report (ASCCR) in October 2021 provides a promising framework through which ASEAN member states can be united on climate goals. In this document, ASEAN's first integrated report on climate change, forward-looking recommendations for both mitigation and adaption are made that are "in harmony with the long-term development objectives"[46] of each member state, and thus sensitive to the vastly differing response capacities of nations within SEA. It also emphasises the need for augmented climate science capacity and redesigned regional climate policy going forward. The directive also sets out various concrete steps towards a target of net-zero regional emissions by 2050,[47] responding to previous criticisms that target emissions of ASEAN member states in line with international agreements have thus far been relatively modest and that the region is one of the few in the world where coal consumption has actually increased in recent years.[48] However, the ASCCR fails to recognise the connection between climate change and security threats, with the exception of a handful of references to food, water and energy security. This omission of the climate-security nexus is improved upon in the organisation's security strategies, as the ASEAN Defence Ministers Meeting Plus (ADMM Plus)'s 2019 Joint Declaration on Sustainable Security suggested an increased focus on non-traditional security threats, and the 2021 Annual Security Outlook regularly cited climate change as a security concern for states in the region.[49] Despite this, limited concrete policy has emerged from ASEAN on the topic of climate security, and limited cooperation between its member states has occurred to directly address the issue.[50]

Nonetheless, as the predominant regional organisation in SEA, ASEAN is best placed to play a more important role in coordinating climate security responses across the region. The organisation already serves numerous functions relating to one of the major consequences of climate insecurity in SEA – natural hazards – through mechanisms such as its ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and the ASEAN Coordinating Centre on Humanitarian Assistance on disaster management (AHA Centre). These bodies, which support nationally-led disaster response efforts throughout the region, could be utilised to provide operational support to national

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46   ASEAN Secretariat (2021) "ASEAN State of Climate Change Report", asean.org/wp-content/uploads/2021/10/ASCCR-e-publication-Final-12-Oct-2021.pdf, p. 6.

47   Ibid., p. iii.

48   Sagbakken et al., note 31 above.

49   Association of Southeast Asian Nations (2021), "ASEAN Regional Forum Annual Security Outlook 2021", aseanregionalforum.asean.org/wp-content/uploads/2021/10/ASEAN-Regional-Forum-Annual-Security-Outlook-2021.pdf.

50   Sagbakken et al., note 31 above.

security providers in light of the evolving range of existential threats posed by climate-induced natural hazards.[51] Similarly, ASEAN already boasts mechanisms for tackling other non-traditional security threats which are predicted to be exacerbated by climate change's consequences such as transnational crime,[52] which could likewise form part of a comprehensive climate security response. Taking inspiration from these examples, other existing ASEAN platforms can be leveraged to coordinate the assessment and management of climate-induced security threats across the region such as mechanisms for information sharing,[53] funding and dispute resolution.[54] In addition, by centrally managing access to funding, resources and knowledge, an ASEAN-led response also has significant potential to minimise the disparity in response capacities between SEA nations. Such policies may also augment intra-organisational trust between member states and boost ASEAN's credibility and discourse-shaping ability on climate security issues in the global arena, compounding the positive impact of such initiatives.[55]

Across all security sector institutions both within and beyond national borders, the task of defining new roles for security sector institutions presents challenges. The complexity of climate-induced security threats is that they entail both immediate and long-term needs that must be addressed, and thus simultaneous short-term and long-term elements to a response. Short-term responses often prioritise immediate efficiency and may be at the expense of longer-term goals such as conflict prevention, civilian ownership and responsiveness of the security sector to communities' needs. Thus, it is imperative that reforms are thoroughly planned, with explicit definitions on the roles and limits of power of each actor. Following these principles will minimise the chances of climate-related SSR producing undesirable consequences and will maximise the resulting quality of governance of the security sector. To this end, the concluding section of this paper will provide specific recommendations for security sector actors at all levels on adapting to climate-induced security threats.

Recommendations

If the security sector is to adequately respond to present and future climate-induced security threats in SEA, concrete and timely actions need to be taken to integrate these threats into SSR efforts. As countries in the region are already experiencing climate-induced existential threats, SSR would address the needs remaining despite ongoing responses to these immediate threats through redefining the roles of security sector actors. Yet while climate change is typically understood to have a negative impact on

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51 Expert Group of the International Military Council on Climate and Security, note 13 above, p. 44.

52 Association of Southeast Asian Nations (2021) "Joint Statement, Fifteenth ASEAN Ministerial Meeting on Transnational Crime, adopted on 29 September 2021", asean.org/wp-content/uploads/2021/10/2.-Joint-Statement-15th-AMMTC-adopted-29092021.pdf.

53 Various existing ASEAN initiatives facilitate information exchange and the sharing of best practices, including the ASEAN Defence Ministers Meeting, Regional Forum Workshops and Inter-Sessional Meetings.

54 Expert Group of the International Military Council on Climate and Security (2021) "Climate Security and the Strategic Energy Pathway in Southeast Asia: Part of the 'World Climate and Security Report 2020", World Climate and Security Report 2020 Briefer Series, imccs.org/wp-content/uploads/2021/01/Climate-Security-and-the-Strategic-Energy-Pathway-in-SOUTHEAST-Asia_February-2021.pdf, p.18.

55 Sagbakken et al., note 31 above.

security, it also provides opportunities for the security sector to reform its own practices and exercise better governance overall. Although SSR strategies need to be adapted to local contexts,[56] a range of measures for security sectors in SEA can be recommended in the face of the evolving threats presented by climate insecurity.

Governments

- **Reform the concept:** National security strategies must undergo a conceptual overhaul, ensuring that climate security is sufficiently incorporated into national security policies and the accompanying discourse on national security threats in policymaking circles. This may be attained through specific training, budget allocations and doctrine overhauls, drawing on outputs produced by the research community, and should be reflected in concrete policy such as defence white papers.

- **Improve governance:** The better governance mechanisms both within and outside the security sector are generally, the more effective their response to climate-induced security threats. Thus, governments need to develop comprehensive national strategies with chains of command that streamline responses across agencies. These mechanisms must crucially include oversight bodies with specifically described roles and responsibilities, particularly in the case of devolved governments. Similarly, comprehensive strategies can help ensure that policy in no area of government (e.g., energy policy) unintentionally undermines climate-sensitive national security interests.

- **Strategise in the long term:** Provisions should be included in national law and policy that firmly integrate climate security strategies into countries' long-term planning and prevent strategies from being overturned by changing administrations.

- **Cooperate and exchange information:** Cross-governmental cooperation and communication networks between all relevant domestic agencies and communities should be established, providing a standardised framework for sharing information on climate security. An entity such as a climate security taskforce with multi-agency representation could facilitate such exchanges, while also offering additional oversight capacity.

Security Institutions

- **Reduce carbon footprint:** Security institutions should take concrete steps to reduce their own carbon footprints, such as by introducing new technologies and setting emissions targets. Adoption of these policies by some governments could have a positive impact beyond the security institutions themselves by creating a snowball effect that encourages other governments to adopt similar measures. This outcome is already unfolding, as 2020-2021 saw a series of increasingly ambitious national emissions targets from Cambodia, Laos, Indonesia and

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56   Born et al., note 28 above, p. 8.

Malaysia.[57] However, standardised targets and procedures should be mindful of the variations in size, population and income amongst countries in the region, being sure not to impose unconstructive 'one size fits all' policies. Critically, as militaries are typically exempted from reporting their GHG emissions, a necessary first step towards this aim (aside from fundamentally including these institutions in national emissions targets) is to encourage greater transparency and open reporting of security institutions' emission contributions, a point which equally applies to ASEAN-wide GHG emissions targets. One positive example is provided by the Singapore Armed Forces' target to reduce two-thirds of its carbon emissions by 2030, to be halved again by 2050. This aim will be enacted through reforms such as installing solar panels in military camps, introducing green fuel sources and upgrading to an electric-only vehicle fleet.[58]

- **Develop diagnostic capacity:** In addition to undertaking greater collaboration with academic institutions on the topic of climate security, security institutions should develop their own capacity for diagnosing risks and forecasting future threats. This function is particularly suited to intelligence services given their specialisation in information-gathering and analysis, analysis which if expanded to take into consideration climate-induced security threats could serve as an early-warning mechanism regarding the potential outbreak of violent conflict. Furthermore, their expertise could also be used for applied research on how climate-related conditions and security risks on the ground evolve, which would then feed back into conceptualisations of the climate-security nexus operationalised by all security sector institutions. Such forecasting capacities would also complement the efforts of security providers in SEA tasked with humanitarian assistance and disaster relief, such as militaries, which will need to adapt their practices and capacities to the evolving range of natural hazards faced by the region.

- **Improve communication:** In order to improve civil-military coordination and establish productive communication channels with civil society and local community groups needed for inclusive SSR, security institutions must undergo training to advance their communication, awareness and civilian cooperation competencies. Engagement with local communities on the ground in dialogue and consultation processes would allow communities to advocate for their needs and problems resulting from climate change, while also serving as a trust-building activity between civilians and security institutions.

- **Implement community policing:** It follows from the above recommendation that greater involvement of the security sector at the local level — facilitated by improved civil-military trust and communication — could allow for better detection of climate-induced security threats before they emerge, serving as an early-warning mechanism which can supplement intelligence services. To this end, a community policing approach adopted by police forces could go a long way in forging stronger relationships between security institutions and local communities. Moreover,

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57   Arino, Y. and S.V.K.R. Prabhakar (2021) "What's in ASEAN's First State of Climate Change Report?", *The Diplomat*, 29 October, thediplomat.com/2021/10/whats-in-aseans-first-state-of-climate-change-report.

58   Chen, note 33 above, p. 3.

community policing could also assist police forces in ensuring the cohesion of communities in the immediate aftermath of climate change-induced disasters, as well as reduce the risk of looting and exploitation of marginalised members of the community in post-disaster contexts. Similarly, if and when communities are forced to migrate in response to climate change, a community policing approach could help police forces to structure and oversee such movements in an orderly manner and ensure that the needs of the most marginalised are addressed. Local security actors, for example ethnic or religious leaders, could equally fulfil this role, either independently or in support of police forces.

- **Conditionalise budgets:** To ensure security providers fully internalise climate-induced security threats, climate security-related goals and measures to address climate threats such as response strategies, mitigation measures and preparations should feature as conditions of future defence budgets. This should include specific allocations in budgets for new, climate-sensitive training, technologies and infrastructure. Such conditions would also help to avoid securitising climate change and strengthening the security institutions at the expense of civilian control.

Local Communities, Authorities and Civil Society

- **Ensure civilian-led reform:** To ensure civilian-led reform processes that promote inclusivity and representation in the SSR process, civilian-led governance institutions such as relevant elected offices or ministries should take the lead. If needed, new commissions could be created to offer a stronger voice to scientists from academia. While some SEA nations such as Brunei, Cambodia, the Philippines and Singapore already have dedicated climate change ministries or commissions, these do not appear to currently include climate security or climate-related SSG/R under their scope. Such commissions present the opportunity to help ensure accountability of security providers in respecting the boundaries of their reformed roles and powers by providing necessary oversight of the reforms.

- **Mobilise local communities:** Ensuring that SSR is truly inclusive of the needs of the most marginalised — especially groups who do not adequately have their interests represented in parliamentary processes — also requires the establishment of additional communication channels and healthy relationships between civil society and security institutions. This should include engagement with local security sector actors such as community leaders, in some cases religious leaders, and other social groups who can effectively mobilise communities and ensure the inclusion of the most marginalised populations (see also next recommendation).

- **Empower grassroots organisations:** Local security actors and community-based civil society organisations are often the first responders to climate-induced destruction and instability and its consequences such as displacement. Increasing the funding and power of these bodies would increase their capacity to mitigate the shocks of climate change at the local level. Their inclusion in related SSR processes is particularly needed in highly centralised political systems, which is often the case in SEA. Notably, supporting the capacity of environmentally focused groups

led by young people, women or minorities could prove particularly valuable by additionally serving to amplify the needs of marginalised groups and transform their relationships with security institutions. Examples include Green Brunei[59] and Save Kampong Ayer,[60] two youth-led initiatives working to promote environmental sustainability in Brunei. However, such approaches must be adopted in a context-specific and pragmatic manner, sensitive to the varying levels of openness of the civic space across different SEA countries.

- **Expand oversight capacities:** Existing formal oversight bodies such as parliaments and parliamentary committees should be sensitised to climate security and related specific SSR needs. Moreover, where existing oversight bodies lack the necessary capacity to expand in such a way, the range of oversight bodies brought into decision-making needs to be increased. This may involve bringing in existing institutions which can indirectly assist in ensuring that security sector actors are not engaging in activities harmful to the environment or communities, including human rights or anti-corruption commissions, judicial authorities, independent complaints authorities and audit offices. For example, audit offices could function to ensure that security institutions align their own procurement practices with climate change considerations, as was recently implemented by the NATO Climate Change and Security Action Plan in order to stimulate innovation in low-carbon technologies.[61] Alternatively, dedicated oversight agencies could be established, which may include a specific ombudsperson, government ministry or a joint parliamentary-scientific committee. In any case, the established agencies should be inclusive of civil society representatives for reasons developed in previous recommendations.

- **Share expertise:** Greater localised research on climate security should be carried out by think tanks and academic institutions, including on specific topics such as the climate change-migration-security nexus, and this expertise shared with security institutions and oversight bodies. This will allow threats to be better identified, and thus priority response strategies to be targeted and mitigation measures to be developed. An example from SEA from which inspiration can be drawn is that of the Global Awareness and Impact Alliance (GAIA), a Brunei-based organisation that produces knowledge materials, offers policy recommendations and facilitates workshops on several regional environment-related issues.[62]

Regional and International Bodies

- **Develop dedicated climate security strategies:** Where currently absent, as is the case with ASEAN, relevant multilateral organisations must first develop a coherent organisational strategy for addressing climate-induced security threats. For ASEAN, this will likely involve overcoming existing disconnect and resultant poor coordination between the various bodies tasked with climate change and

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59 Green Brunei (2022) "Green Brunei", green-brunei.com.
60 Meyer, F. (2021) "Youth in Brunei Lead 5th River Clean-Up", *Sustainable Ocean Alliance*.
61 North Atlantic Treaty Organization (2021) "NATO Climate Change and Security Action Plan", 14 June, www.nato.int/cps/en/natohq/official_texts_185174.htm.
62 GAIA Alliance (2022) "GAIA Alliance", www.gaiaalliance.co.

security-related issues through the creation of a cross-sectoral task force or similar entity.[63]

- **Predetermine funding guidelines:** International and regional forums which coordinate governments, such as ASEAN, should generate solutions to prevailing logistical questions on climate security-sensitive SSR in SEA. This includes how payment for reform policies should be distributed and how equal access to new, climate-sensitive technologies can be assured, given the vast disparity in income levels across SEA countries. This could build upon related policy instruments which recognise the varied developmental statuses of ASEAN member states such as the 2021 ASEAN State of Climate Change Report (ASCCR). However, since the ASCCR does not make the connection between climate change and security,[64] a gap remains in climate security-specific policy and related funding mechanisms at the regional level.

- **Create space for diplomatic exchange:** Cooperative multilateral frameworks that facilitate communication and coordination across international diplomatic networks at the climate-security nexus should be introduced. These could build on existing forums for exchange and dialogue on the topic of security cooperation such as the ASEAN Defence Ministers Meeting or the ADMM Plus, which could also provide the opportunity for developing joint military capacities for tackling the consequences of climate change. The establishment of a dedicated ADMM Plus Working Group on climate security could offer a clear entry point towards this goal.[65] Alternatively, the Track II Network of ASEAN Defence and Security Institutions (NADI) could facilitate collaboration between militaries and research institutions across SEA, generating policy recommendations which could be adopted in other ASEAN forums such as the Defence Ministers Meeting.[66]

- **Advocate for marginalised groups:** Power inequalities mean the most marginalised groups in every society are left behind in climate change responses, with their needs and opinions inadequately heard. Platforms specifically tasked with amplifying the voices of underrepresented populations in SEA should be created, and the needs raised should be addressed through concrete, targeted actions. For example, an ASEAN-led regional structure to provide regionally recognised identification documents would solve one of the common issues that renders migrants in the region stateless and thus more vulnerable to climate change's effects. Existing forums such as the ASEAN People's Forum could be used as the launchpad for such an initiative.

- **Adopt a human security approach:** Declarations, statements and protocols issued by ASEAN and other international bodies should incorporate a human security-sensitive approach. This encourages such organisations to sufficiently recognise the varied challenges and vulnerabilities experienced by individuals as a result of climate change, while at the same time avoiding overemphasis on securitised discourse and action. The ASEAN Declaration on Human Trafficking provides a

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63   K. Florian, R. Scassa and G. Mitrotta (2018) "Responses to Climate-Related Security Risks: Regional Organizations in Asia and Africa", SIPRI Insights on Peace and Stability, No. 2018/2, , pp. 5-6.

64   ASEAN Secretariat, note 47 above.

65   Expert Group of the International Military Council on Climate and Security, note 13 above, p. 38.

66   Chen, note 33 above, p. 3.

positive example in this regard, although the language of such doctrines should equally avoid casting victims in a criminal light.

- Apply normative pressure: ASEAN and other regional and international bodies that have developed policies and mechanisms on climate security to date — such as the Asian Development Bank, the International Organization for Migration, the United Nations Security Council and the South Pacific Defence Ministers' Meeting — should use their existing expertise and leverage as regional powers to encourage member states' adoption of new climate change regulations and climate-sensitive security policies.

- Tackle root causes: One of the most effective strategies for minimising the disruptive effects of climate insecurity in years to come is to encourage reduced emissions and greener practices across the SEA region. To this end, existing initiatives that coordinate such multilateral outcomes, such as the ASEAN Power Grid, should be accelerated to expand the usage of renewable energy sources across the region.[67]

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67   Sagbakken et al., note 31 above.

Conclusion

The consequences of climate change on human security in SEA are already dire. Consensus among the scientific community indicates they are likely to only worsen in coming years. An increase in the severity and frequency of natural disasters, as well as associated problems such as food scarcity, will push more people towards mobility and migration as strategies for safeguarding their livelihoods.

Traditionally, the armed forces have been at the forefront of responses to natural disasters, while other security sector actors have played supporting roles. Moving beyond traditional emergency responses, security sector actors will need to play a major role in mitigating the effects of climate-induced security threats on populations region-wide. Security institutions will need to help local communities prepare for such threats and ensure that this collaboration is done inclusively. Local security sector actors, ranging from traditional and religious leaders to non-state armed groups, will need to be consulted and included in the design of responses and mitigating measures. At the same time, oversight bodies and mechanisms will need to be able to effectively carry out their duties in order to ensure transparency. To achieve this, security institutions will need to be supported by their governments through the allocation of necessary budgets, the sharing of necessary scientific knowledge, and the provision of necessary technical training and support. Moving beyond the government level, as climate insecurity transcends national borders, so too should response strategies. A coordinated regional response is needed, ensuring that smaller or less wealthy countries receive equal levels of support and are able to reach the same level of preparedness. Many of ASEAN's existing mechanisms will need to be further developed to facilitate this, and additional structures will likely also need to be created. Finally, it is recognised that for these mechanisms to be developed and the necessary adaptations made, further research must be undertaken on the role of security sector actors in supporting mitigation of climate-induced security threats, with a specific focus on concrete and pragmatic steps to be taken that are acceptable and realistic for security sector actors at every level.

As presented and analysed in this Thematic SSG Brief, good SSG and SSR can – and need to – play a vital role in mitigating the impacts of climate change-related threats to human security in Southeast Asia. This is the case both in terms of providing inclusive and transparent responses to natural disasters and the direct consequences of climate change, as well as helping communities and countries adapt to this emerging security threat.

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