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What climate change means for national and international security

Background Paper for the UK
Commonwealth Parliamentary
Association

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The Commonwealth Parliamentary Association UK

CPA UK supports and strengthens parliamentary democracy throughout the Commonwealth. It focuses on key priority themes including women in parliament, modern slavery, financial oversight, security and trade.

CPA UK brings together UK and Commonwealth parliamentarians and officials to share knowledge and experience through peer to peer learning. It aims to improve parliamentary oversight, scrutiny and representation and is located in, and funded by, the UK Parliament. We undertake work at the request of other parliaments around the Commonwealth, and our tailored programmes include both individual country activities, and large scale projects and activities that bring together Commonwealth parliamentarians and clerks. For more information about our work and activities, please visit our website: uk-cpa.org

Good Governance, Parliamentary Oversight and Accountability across the Commonwealth Project

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Read more about the project [here](#)



E3G

Acknowledgements

E3G is an independent climate change think tank working on the frontier of the climate landscape to tackle the barriers and advance the solutions to a safe climate. E3G's goal is to translate climate politics, economics and policies into action

This paper is intended as a basis for discussion. The views and opinions expressed in this discussion paper are those of the authors and do not necessarily reflect the views of CPA UK.

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Summary

It is now widely recognised that climate change poses direct and indirect risks to national security. About 70% of nations in the world have explicitly stated that climate change is a national security concern. The systemic nature of climate risk means that it also has consequences for international security and geopolitics.

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While the Paris Climate Agreement aims to limit global temperature rise to “well below 2°C”, current country emission reduction pledges if delivered would only limit warming to between 2.7-3.5°C beyond 2050. If climate policies were to fail or be reversed, there is a plausible (10%) chance that global mean surface temperatures would rise between 3.5°C to 7°C.

Improved scientific attribution of extreme weather events shows climate change is driving increased intensity and probability of heatwaves, droughts, and floods. The World Meteorological Organization (WMO) reports that disasters have increased by a factor of five since 1970, accounting for US\$3.6 trillion in economic losses. Hurricane Irma in 2017 caused catastrophic damage the Caribbean including leaving half of the population of Barbuda homeless. Cyclone Idai hit eastern Mozambique in 2019 killing 1,000 and displacing 2.6 million people, with 8.7 million people continuing to suffer from food and water insecurity a year later. In 2018, flooding in Nigeria affected 80% of the country and triggered 600,000 new displacements. In June 2021, Pakistan experienced extreme heat that exceeded wet bulb temperatures safe for humans.

These direct impacts, notably droughts, floods, heat waves and cyclones, are just the first step in a chain of indirect and systemic risks. Climate change is highly likely to increase the spread of infectious diseases and the probability of pandemics. It will also drive food insecurity. Projections by the UK’s Meteorological (Met) Office suggest that the likelihood of multiple harvest failures in any two of the world’s major ‘breadbasket’ regions could increase from 1 in 100 years to 1 in 25 years by 2050.

There is an inherent human bias to believe that climate change will occur slowly over decades or even centuries. But above 3°C of warming the probability of breaching thresholds for “tipping elements” in the climate system rises sharply. The World Bank has warned that 4°C would make large areas of Africa and Asia incapable of supporting their current populations, severely undermining poverty reduction goals and the Sustainable Developments Goals (SDGs).

Since 2008 an average of 21.8m people have been internally displaced by weather-related disasters

Research has firmly established that climate risks are likely to cascade across societies in ways that ultimately drive conflict. Desertification and decreasing water resources is increasing pressure on farmer-herder relations in several Commonwealth countries in Africa. Several Indian states have seen growing conflict over water resources, both within and between states. Complex and intersecting impacts across different systems are likely to include large unplanned movements of populations, principally within countries. Since 2008 an average of 21.8 million people have been internally displaced by weather-related disasters.

The World Bank projects that over 216 million people could move within their countries by 2050 across six regions. History shows that in cases where populations are impacted by climate change but unable to move, people may turn to communal conflict over scarce resources.

...over 216 million people could move within their countries by 2050 across six regions.

Many governments are responding to climate security risks through greater political prioritisation, improved research and risk assessment, and integration into planning and policymaking. Regional Organisations like the Pacific Islands Forum and the African Union have acknowledged climate as a security threat, as has the UN Security Council which has held numerous open debates on the subject and has passed resolutions for appropriate risk assessment and management of climate change in specific countries and regions including Lake Chad, West Africa and the Sahel, Sudan, and Iraq.

However, while there has been progress in the past two decades, governments and institutions have to date failed to develop comprehensive climate security risk assessments or to fully integrate climate risk into strategic planning and policymaking. As a result, all countries have under invested in physical and social resilience compared to the scale of climate stresses they face.

Commonwealth parliamentarians play a critical role in areas related to legislation, oversight, representation, and capacity. They can and should support efforts to improve climate security risk management through the following actions:

Legislation



- Support legislation that aims to protect citizens from climate impacts by improving resilience and adaptation, including through well-defined obligations under international frameworks such as the UN Sendai Framework on Disaster Risk Reduction
- Carry out audits of existing climate-related legislation to identify gaps and propose amendments to existing legislation or consider new legislation. Consider for example introducing mandatory annual reporting of climate risks that includes security risks.

Oversight



- Consider establishing an all-party group / parliamentary committee on climate change which ensures climate risks are considered across government policy and departments. In addition, Defence and Foreign Affairs parliamentary committees should include climate security risks in their oversight.
- Increase the focus on climate security risks through use of parliamentary debates and parliamentary questions. Require annual reports to parliament by Ministers responsible for climate change on strategic and operational impacts of climate and progress towards a risk management strategy.
- Ensure relevant parliamentary committees are empowered with all relevant fiscal data and analysis to ensure climate risk assessments can be integrated in budget review processes. Parliamentary committees should climate proof the budget and infrastructure planning to ensure investments are resilient to climate change.

Representation



- Ensure government data is sufficiently disaggregated by location to facilitate parliamentarians' engagement with constituents on climate risk issues.
- Use constituency clinics / engagement to proactively meet local climate groups and citizens concerned by climate change security risks and raise their concerns in parliament.

Capacity:



- Build relationships with parliamentarians / parliamentary committees through Commonwealth, international and regional parliamentary structures to share good practices on legislation, oversight and to share climate-intelligence.
- Increase awareness of climate security risks among parliamentarians through training programmes, briefing notes, improved access to information and research capacity within parliament.
- Ensure national climate security assessments involve and are communicated to sub-national authorities, agencies, and legislatures, including metropolitan regions and cities. Parliamentarians should be empowered with relevant data pertinent to their constituencies, to enable local response and capacity to be developed.

Introduction

It is now widely accepted that climate change poses direct and indirect risks to national security. This has been recognised by heads of state¹, security and intelligence assessments², defense and foreign affairs ministers, and scientific bodies throughout the world, including the Intergovernmental Panel on Climate Change (IPCC)^{3 4}.

The complex nature of climate risk means it also has international security implications. Climate change is a systemic risk, in that its direct impacts can have knock-on effects across entire regions and systems. The risks associated with climate fluctuations, which are now falling outside historical ranges, are not confined to the countries where they occur. In a highly interconnected world, shocks in one region will not stay within political borders.

Maintaining a safe climate that allows for continued peace and stability will require not just substantial redirection of financial flows and investment in new energy infrastructure, but also investment in adaptation and stronger resilience to climate shocks, alongside reform of current governance systems and institutions which are not designed to deal with this kind of risk.

Governments have a responsibility to prepare for climate security risks to protect their citizens⁵. The systemic nature of climate risk means that international organisations, and particularly UN agencies, that are responsible for maintaining stability and cooperation around key global systems also have an essential role to play by integrating climate security risk into their strategic planning⁶.

There is a critical role for parliaments or other legislative bodies in drafting legislation that can strengthen climate security risk management and in oversight of the implementation of climate security risk strategies.

This paper provides brief background and context on climate security challenges and offers some emerging recommendations for a parliamentary response.

1 [Biden Makes Climate Change a National Security Priority | ASP American Security Project](#)

2 [climate-security-101-2_21_15.pdf \(wordpress.com\)](#)

3 [The long history of climate change security risks » Yale Climate Connections](#)

4 [International Military Council on Climate and Security \(imccs.org\)](#)

5 [the-responsibility-to-prepare-and-prevent-a-climate-security-governance-framework-for-the-21st-century_2019_10.pdf \(climateandsecurity.org\)](#)

6 [2021-06-24-climate-risk-management-brown-et-al \(netdna-ssl.com\)](#)



A brief history of climate security

Climate change has appeared in official national security documents and strategies for almost two decades⁷. About 70% of nations in the world have explicitly stated that climate change is a national security concern⁸.

About 70% of nations in the world have explicitly stated that climate change is a national security concern

There has been a proliferation in climate security literature from academics and think tanks in the years since including a report in 2007 from the US Center for Naval Analysis *National Security and the Threat of Climate Change* which found that “Climate change can act as a threat multiplier for instability in some of the most volatile regions of the world...”⁹. The first debate on climate change at the UN Security Council (UNSC) also took place in 2007, under the UK presidency. There have since been multiple Arria Formula and Open debates at the UNSC on linkages between climate change and security¹⁰.

In October 2018 the Climate Security Mechanism (CSM) was established as a joint initiative by three UN agencies – the Department of Political and Peacekeeping Affairs (DPPA), United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) - to leverage existing expertise and strengthen UN capacities for a systematic response to climate-related security risks. In July 2020, an Informal Expert Group (IEG) on climate-related risks to peace and security was formed.

Climate change has also been recognised as a security risk by regional organisations. The African Union (AU) held its 774th meeting of the AU Peace and Security Council, chaired by Rwanda, on *‘The link between climate change and conflicts in Africa and addressing the security implications’*¹¹. The Association of Southeast Asian Nations (ASEAN) and the Economic Community of West African States (ECOWAS) have recognised the links between climate and security, including in the context of its role in amplifying other challenges like food security and disaster risk¹². The Caribbean Community (CARICOM) have strategies for regional cooperation to build climate resilience and have advocated for the recognition of climate as a security risk¹³.

7 [catastrophe readiness and response - appendix 2 - abrupt climate change.pdf \(fema.gov\)](#)

8 [The Global Security Defense Index on Climate Change | ASP American Security Project](#)

9 [GPG3474_CoverFinal.indd \(cna.org\)](#)

10 <https://www.climate-security-expert-network.org/unsc-engagement>

11 [The 774th meeting of the AU Peace and Security Council, an open session on the theme: “The link Between Climate Change and Conflicts in Africa and Addressing the Security Implications”-African Union - Peace and Security Department \(peaceau.org\)](#)

12 [Responses to climate-related security risks: Regional organizations in Asia and Africa \(sipri.org\)](#)

13 [climatesecurity_makingit_doable_latest.pdf.pagespeed.ce_naqctbogs7.pdf \(sipri.org\)](#)

Trends in climate impacts

Warming and impacts

The global average surface temperature has risen by about 1.2°C since the industrial revolution, with most of the warming occurring in the past four decades¹⁴. The Paris Climate Agreement aims to limit global temperature rise to “well below 2°C”. However, current country emission reduction pledges if delivered would only limit warming to between 2.7-3.5°C beyond 2050¹⁵. Under current emissions trajectories there is a less than 1% chance of meeting the 1.5°C target. None of the world’s major emitters currently have a climate pledge that aligns with 1.5°C¹⁶.

The global average surface temperature has risen by about 1.2°C since the industrial revolution...

It should be noted that current policy scenario estimates, which would result in a dramatically different climate and environment to the one we have today, assume that existing decarbonisation efforts are successful. If climate policies were to fail or be reversed, there is a plausible (10%) chance that global mean surface temperatures would rise between 3.5°C to 7°C¹⁷. The political, economic, social and security consequences of a 7°C temperature increase are arguably immeasurable.

Improved scientific attribution of extreme weather events shows climate change is driving increased intensity and probability of heatwaves, droughts, and floods. The World Meteorological Organization (WMO) reports that disasters have increased by a factor of five since 1970, accounting for US\$3.6 trillion in economic losses¹⁸.

There are numerous examples of “low probability” extreme weather events occurring in recent years. Hurricane Irma in 2017 caused catastrophic damage the Caribbean including leaving half of the population of Barbuda homeless¹⁹. Cyclone Idai hit eastern Mozambique in 2019 killing 1,000 and displacing 2.6 million people. One year after the disaster, 8.7 million people continued to suffer from food and water insecurity²⁰. In 2018, flooding in Nigeria affected 80% of the country and triggered 600,000 new displacements²¹.

14 [Evidence | Facts – Climate Change: Vital Signs of the Planet \(nasa.gov\)](#)

15 [United Nations Warns of ‘Catastrophic Pathway’ With Current Climate Pledges - The New York Times \(nytimes.com\)](#)

16 Climate Action Tracker 2021.

17 [2021-09-14-climate-change-risk-assessment-quiggin-et-al \(chathamhouse.org\)](#)

18 [Weather disasters drive US \\$ 3.64 trillion in losses in 50 years: WMO data - Artemis.bm](#)

19 [Hurricane Irma causes devastation in the Caribbean - BBC News](#)

20 [After the storm: one year on from Cyclone Idai | Oxfam International](#)

21 Internal Displacement Monitoring Centre (2020), Global Internal Displacement Database, <https://www.internal-displacement.org/database/displacement-data>

The 2020 Atlantic Hurricane season was the most active on record with 30 named storms. Much of the damage was in Central America; flooding from Eta's rains killed at least 215 people and left 49 missing, primarily in Guatemala, Honduras, Mexico, and Panama²². There have been record breaking heatwaves in Western North America resulting in destruction of infrastructure and loss of life²³. In Canada, the village of Lytton was destroyed by a wildfire after recording the hottest temperature in the country's history, while in other parts of the country farmers are being forced to sell livestock due to extreme drought²⁴. And while Australia has a history of droughts, the Millennium Drought (1997-2009) was larger and longer than any drought in southern Australia for the last 400 years²⁵.

the Arctic is warming three times faster than the rest of the world - with Arctic sea ice declining 13% per decade

The impacts of global warming are not evenly distributed. Temperatures are rising faster in many arid regions in Africa and the Arctic is warming three times faster than the rest of the world - with Arctic sea ice declining 13% per decade²⁶. The Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report (AR6) finds that heatwaves have become more frequent and intense since the 1950s. The past seven years have been the seven warmest on record. In June 2021, Pakistan experienced extreme heat that exceeded wet bulb temperatures safe for humans.

Systemic risk

These direct impacts, notably droughts, floods, heat waves and cyclones, are just the first step in a chain of indirect and systemic risks. Climate change is highly likely to increase the spread of infectious diseases and the probability of pandemics²⁷. It will also drive food insecurity. Projections by the UK's Meteorological (Met) Office suggest that the likelihood of multiple harvest failures in any two of the world's major 'breadbasket' regions could increase from 1 in 100 years to 1 in 25 years by 2050²⁸. To meet global demand, agriculture will need to produce almost 50% more food by 2050. However, yields could decline by 30% in the absence of dramatic emissions reductions²⁹.

22 [A look back at the horrific 2020 Atlantic hurricane season » Yale Climate Connections](#)

23 [Nowhere is safe, say scientists as extreme heat causes chaos in US and Canada | Climate crisis | The Guardian](#)

24 [Wildfires and Drought Stifle Canada's Summer - The New York Times \(nytimes.com\)](#)

25 [CP - Multi-century cool- and warm-season rainfall reconstructions for Australia's major climatic regions \(copernicus.org\)](#)

26 [2020 Tied for Warmest Year on Record, NASA Analysis Shows – Climate Change: Vital Signs of the Planet](#)

27 Curseu, D., Popa, M., Sirbu, D. and Stoian, I. (2010), 'Potential Impact of Climate Change on Pandemic Influenza Risk', in Dincer, I., Hepbasli, A., Midilli, A. and Karakoc, T. H. (eds) (2010), *Global Warming: Engineering Solutions*, Boston, MA: Springer, pp. 643–57, doi:10.1007/978-1-4419-1017-2_45.

28 Woetzel, J., Pinner, D., Samandari, H., Engel, H., Krishnan, M., Boland, B. and Powis, C. (2020), *Climate risk and response: Physical hazards and socioeconomic impacts*, McKinsey Global Institute, <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physicalhazards-and-socioeconomic-impacts>.

29 [2021-09-14-climate-change-risk-assessment-quiggin-et-al \(chathamhouse.org\)](#)

What are the security consequences of climate change?

Climate and conflict

Climate change is unique in that it combines with other factors to create compound risks. For example, climate change drives resource scarcity, leading to food and water insecurity which can increase the risk in inter or intra-state conflict.

The precise links between climate and conflict are still debated but are far more firmly established following substantial research efforts in recent years³⁰. There is general agreement now that climate risks are likely to cascade across societies in ways that ultimately drive conflict. It is the interaction between various complex systems that lead to cascading climate risk. For example, modest climate impacts in 2007-08 and 2011-12 combined with other factors to destabilise grain markets which led to export bans and price spikes, all of which contributed to social unrest and political instability³¹.

Desertification and decreasing water resources is increasing pressure on farmer-herder relations in a number of Commonwealth countries in Africa. Numerous deaths and violent incidents between pastoralists and farmers were reported in Kenya and Tanzania between 2012 and 2019³². Violence between farmers and herders has escalated in Nigeria since 2018. Over 1,700 deaths were attributed to these conflicts in 2018 alone in Northern and Central Nigeria³³.

During recent heatwaves in Iraq, 24-hour power outages were experienced across the country. While some have access to generators and air conditioning, for most people blackouts mean significant disruption to their lives and limited access to water from electric pumps. Following the outages, the Electricity Minister submitted his resignation, and protests broke out in Basra and Baghdad³⁴.

A number of Indian states have seen growing conflict over water resources, both within and between states. The 2016 monsoon was the worst in Tamil Nadu since 1876, sparking 144 farmer suicides, a dispute between Karnataka and Tamil Nadu over the shared Cauvery river, and protest riots. A 2019 drought in Maharashtra state pushed 50,000 farmers to march to Mumbai in protest³⁵.

30 [Climate-fragility Discussion Paper: \(climate-security-expert-network.org\)](https://climate-security-expert-network.org/)

31 [2021-09-14-climate-change-risk-assessment-quiggin-et-al \(chathamhouse.org\)](https://www.chathamhouse.org/2021/09/2021-09-14-climate-change-risk-assessment-quiggin-et-al)

32 <https://pacinst.org/wp-content/uploads/2020/09/Ending-Conflicts-Over-Water-Pacific-Institute-Sept-2020.pdf>

33 [HHRG-117-FA16-Wstate-WelshC-20210427.pdf \(house.gov\)](https://www.house.gov/imo/media/doc/HHRG-117-FA16-Wstate-WelshC-20210427.pdf)

34 <https://www.reuters.com/world/middle-east/iraqis-protest-over-power-water-cuts-amid-heat-wave-2021-07-02/>

35 India - [ending-conflicts-over-water.pdf \(wri.org\)](https://www.wri.org/publications/2019/07/ending-conflicts-over-water)

Tipping points

There is an inherent human bias to believe that climatic changes will evolve as a slow, linear process. But elements of the climate system are likely to function more like light switches, resulting in relatively abrupt and highly disruptive changes. It is important to note there is a 'long tail' on the probability distribution which makes more severe outcomes or high impact events much more likely than more benign ones. And above 3°C of warming the probability of breaching thresholds for "tipping elements" in the climate system rises sharply. The World Bank has warned that 4°C would make large areas of Africa and Asia incapable of supporting their current populations, severely undermining poverty reduction goals and the SDGs³⁶. It would also result in feedback loops from melting permafrost and forest dieback with increased water scarcity and sea level rise.

Who is most at risk?

Climate change is regressive, in that its impacts disproportionately affect the poor, women and those from marginalised groups. 70% of the bottom quartile of countries most vulnerable to climate are also in the bottom quartile of the most fragile countries in the world³⁷. Additionally, 9 of the 10 most climate vulnerable countries in Africa are already in conflict³⁸. Climate impacts are putting additional strain on governments and communities in all countries, but particularly those the Global South and in many fragile states. Many regions and countries most effected by climate change also face challenges related to demographics, health and poor governance which means they lack the capacity to invest in resilience to climate impacts that would be necessary to protect their citizens.

Regions of particular concern for security and intelligence analysis include North Africa and the Sahel, where some areas may become too hot to support a population. The Middle East North Africa (MENA) region is the most water scarce in the world with many countries also reliant on transboundary water resources³⁹. However, it has been subject to an almost continuous drought since 1998⁴⁰. In a cruel twist, MENA is also one of the regions most exposed to sea level rise. East and South East Asia and Africa are all highly exposed to drought, with 125 million, 105 million and 152 million people each year impacts by prolonged drought of six months or more by 2040, respectively⁴¹. Research suggests that Africa is the region where climate change is most likely to lead to violent conflict⁴².

The populations of small island states are also among the most vulnerable. For example, there has been a significant increase in both the number of disaster events and numbers of people displaced in Pacific Commonwealth countries in the last ten years. 180,000 people were displaced in 2020, 50% higher than the next most impacted year (2012)⁴³. And since 2016 Fiji has experience 12 cyclones, 3 of which were top strength⁴⁴. As a result of increased flooding and rising sea levels Fiji is set to relocate approximately 80 villages from low-lying areas.

36 [Series: Turn Down the Heat \(worldbank.org\)](https://www.worldbank.org)

37 USAID (2018): "Lessons Learned from Peace III: A Mid-Cycle Portfolio Review", USAID: Washington, D.C.

38 [Analysis Search | ACLED \(acleddata.com\)](https://acleddata.com)

39 [Water Scarcity in MENA | EcoMENA](#)

40 [How the Middle East is suffering on the front lines of climate change | World Economic Forum \(weforum.org\)](#)

41 [2021-09-14-climate-change-risk-assessment-quiggin-et-al \(chathamhouse.org\)](#)

42 [Climate and Conflict in Africa | Oxford Research Encyclopedia of Climate Science](#)

43 [Global Internal Displacement Database | IDMC \(internal-displacement.org\)](#)

44 [More at risk of losing homes as climate change outpaces response, Fiji warns | Reuters](#)

Climate and migration

These complex and intersecting impacts across different systems will have unpredictable consequences. But these are likely to include large unplanned movements of populations, principally within countries. Since 2008 an average of 21.8 million people have been internally displaced by weather-related disasters⁴⁵. In 2015 alone, more than one million migrants and refugees entered Europe after fleeing conflict in MENA. The World Bank projects that over 216 million people could move within their countries by 2050 across six regions, with 86 million internal climate migrants in Sub-Saharan Africa⁴⁶.

Since 2008 an average of 21.8 million people have been internally displaced by weather-related disasters

A combination of greenhouse gas mitigation and climate resilient development could reduce these projections by 80%. History shows that in cases where populations are impacted by climate change but unable to move, people may turn to communal conflict over scarce resources. Other security consequences are likely to include increased risk of armed conflict and the rise of extremist groups, and destabilisation of markets following commodity price spikes or a sudden fall in asset values⁴⁷.

There are no hard security solutions to climate change, but a failure to develop national and international climate security risk management frameworks could very well have hard security consequences.

⁴⁵ Internal Displacement Monitoring Centre (2020), Global Internal Displacement Database, <https://www.internal-displacement.org/database/displacement-data> (accessed 9 Aug. 2021).

⁴⁶ [Groundswell Part 2 : Acting on Internal Climate Migration \(worldbank.org\)](https://www.worldbank.org/groundswell/part2)

⁴⁷ [2021-09-14-climate-change-risk-assessment-quiggin-et-al \(chathamhouse.org\)](https://www.chathamhouse.org/2021/09/14-climate-change-risk-assessment-quiggin-et-al)



How are governments and institutions responding?

Current responses to climate security risks fall into several categories, including political prioritisation, research and risk assessment, and integration into planning and policymaking.

Political prioritisation:

Several countries or regional institutions can be considered 'champions' of the climate security agenda based on their efforts to draw attention to the issue. The European Union (EU) has noted links between climate and security in its Council Conclusions and has hosted high level debates, for example in 2018 when the EU High Representative for Foreign Affairs and Security Policy, Federica Mogherini, hosted a high level-event on Climate, Security and Peace⁴⁸. The EU External Action Service (EEAS) has committed to lead efforts with international organisations and external countries to identify and educate partners on the links between climate change and security⁴⁹.

The Netherlands Ministry of Foreign Affairs launched the Planetary Security Initiative and annual conference in 2015 to enhance political involvement, knowledge and policy efforts in climate-security. The UK, Germany and Sweden have all been instrumental in supporting efforts to draw more attention to the climate security nexus. In the EU-African Union Memorandum of Understanding from 2018 on Peace, Security and Governance the two parties agreed to "Jointly cooperate on climate-related security threats across peace and security policy arenas"⁵⁰. The Dominican Republic, Peru, the Maldives, Morocco, Niger, Tunisia, Viet Nam, and Saint Vincent and the Grenadines have all been instigators of debates on climate and security in the UNSC. Ireland is pushing for a resolution to be passed by the UN Security Council that would ensure that the impact of climate change on conflicts around the world was monitored⁵¹.

Research and risk assessment:

The United Kingdom has integrated climate change into its security threat assessments. The United States National Intelligence Council (NIC) published in 2008 National Intelligence Assessment on the National Security Implications of Global Climate Change to 2030. In 2016 the NIC published *Implications for US National Security of Anticipated Climate Change*. However, a survey in 2016 of G7 countries showed very few examples of governments integrating climate or environmental security risks into annual threat assessments.

Integration of environmental and climate risk:

The integration of environmental and climate risk into conflict early warning systems is another area of development. In the Horn of Africa, IGAD has developed the Conflict Early Warning and Response Mechanism (CEWARN) which draws on data from the IGAD Climate Prediction and Applications Centre (ICPAC), in order to better predict increased tensions related to climate⁵². Bangladesh has a widely recognised early warning and disaster response system. The EEAS has an early warning system that uses a set of indicators to identify countries at risk of conflict over a four- year timeframe. The European Commission's Joint Research Centre (JRC) also provides a Global Conflict Risk Index which includes water stress as one variable, however it does not include data on natural disasters or climate shocks⁵³.

48 [Climate, Peace and Security: The Time for Action - European External Action Service \(europa.eu\)](#)

49 [World-Climate-and-Security-Report-2021.pdf \(imccs.org\)](#)

50 [Europe and Climate Security - \(climate-security-expert-network.org\)](#)

51 [Taoiseach to push China, Russia, and India to accept link between climate crisis and security \(irishexaminer.com\)](#)

52 [Horn-Expert-Group-Background-Paper.pdf \(royalafricansociety.org\)](#)

53 [Europe and Climate Security - \(climate-security-expert-network.org\)](#)

Integration into policy and strategic planning:

Climate change is considered a factor that could increase the risk of conflict in various UK policies and was identified as a driver of instability in its 2015 National Security Strategy (NSS)⁵⁴:

“Our long-term objective is to strengthen the resilience of poor and fragile countries to disasters, shocks and climate change. This will save lives and reduce the risk of instability. It is also much better value for money to invest in disaster preparedness and resilience than to respond after the event”.

The 2015 NSS also includes a pledge to strengthen partnerships with commonwealth countries on climate:

“We have chosen to invest in and lead international work on two major areas of global risk which threaten stability overseas and the UK’s long-term security: climate change and health security.”

The UK has created a National Strategy Implementation Group (NSIG) on climate change to ensure the full integration of climate into decision-making⁵⁵ and the UK Climate Change Act requires that the government conducts a climate risk assessment every five years. The French Defense and National Security Strategic Review identifies climate change as an important factor aggravating crises.

Through President Biden’s Executive Order on the Climate Crisis, the United States now aims to fully integrate climate concerns into foreign and national security policy and build resilience at home and abroad to climate impacts⁵⁶. The EO includes assessments of climate impacts, and Climate Risk Analysis from the Department of Defense that can be incorporated into modeling, simulation, war-gaming, and other analyses as well as a National Intelligence Estimate on the national and economic security impacts of climate change.

The UN Office for West Africa and the Sahel (UNOWAS), which is responsible for preventive diplomacy, political mediation, and facilitation efforts in the region, includes climate change as a cross-cutting issue in its Integrated Strategy for the Sahel (UNISS) as related to processes for conflict prevention and peacebuilding⁵⁷. UNOWAS also has a mandate from the UN Security Council (UNSC) to take into consideration the adverse implications of “climate change, energy poverty, ecological changes and natural disasters, among other factors, and assist governments in the region and the UN system in undertaking risk assessments and risk management strategies” relating to climate change factors.

54 [National Security Strategy and Strategic Defence and Security Review 2015 \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/472222/national-security-strategy-and-strategic-defence-and-security-review-2015.pdf)

55 [Achieving net zero \(Summary\) \(nao.org.uk\)](https://www.nao.org.uk/reports/achieving-net-zero-summary/)

56 [Executive Order on Tackling the Climate Crisis at Home and Abroad | The White House](https://www.whitehouse.gov/the-press-office/2021/03/15/eo-14033-climate-crisis/)

57 [World-Climate-and-Security-Report-2021.pdf \(imccs.org\)](https://www.imccs.org/wp-content/uploads/2021/03/World-Climate-and-Security-Report-2021.pdf)

The African Union's Regional Stabilisation Strategy for the Lake Chad Basin identifies climate change as a direct challenge to peace and security:

“All future investment in socio-economic development must be climate-proofed: climate change fragility assessments should underpin the planning process to build resilience to shocks, support adaptation and mitigation, and ensure long-term sustainability.”⁵⁸

The Pacific Islands Forum, the majority of whose members are Commonwealth countries, signed up to the 2018 Boe Declaration on Regional Security which states that climate change remains the single greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific⁵⁹.

At the international level, as highlighted above the UN Security Council has acknowledged the security risks of climate change, has held numerous open debates on the subject and has passed resolutions for appropriate risk assessment and management of climate change in specific countries and regions including Lake Chad, West Africa and the Sahel, Sudan, and Iraq. An Informal Expert Group (IEG) first met in November 2020 and the local UN Mission in Somalia has appointed an Environmental Security Advisor. Several UN agencies have jointly created the Climate Security Mechanism as an 'institutional home' for climate security issues. The EU has long been a champion of the need to consider climate change and international security together. Climate change was mentioned in the 2003 European Security Strategy and more recently in 2016 in the Global Strategy on Foreign and Security Policy which notes the links between climate and conflict.

Despite the progress set out above, governments and institutions have to date failed to develop comprehensive climate security risk assessments or to fully integrate climate risk into strategic planning and policymaking. As a result, all countries have under invested in physical and social resilience compared to the scale of climate stresses they face. The world is therefore grossly unprepared to manage the implications of even the most optimistic warming scenarios, much less long-tail risks or climate 'tipping points' like the largescale melting of permafrost or dieback of the Amazon rainforest.

⁵⁸ [regional-stabilisation-recovery-and-resilience-strategy-rss-.pdf \(peaceau.org\)](#)

⁵⁹ [Mapping Security Cooperation in the Pacific Islands \(anu.edu.au\)](#); [Climate Threats are Shaping Regional Security Cooperation in the Pacific « The Center for Climate & Security \(climateandsecurity.org\)](#)

What should governments do?

It is encouraging that the debate has slowly shifted from *whether* climate-related security risks should be addressed to *how* climate-related security risks should be addressed. However, despite progress in threat assessment and conflict early warning systems governments are not yet adopting comprehensive climate risk management responses. There is little evidence of improvements in resilience to climate or resource shocks and stressors or of climate being fully integrated into peacebuilding operations.

There are multiple reasons for the lack of progress, including a lack of evidence on ‘what works’ in reducing climate security risks on the ground; lack of understanding of the complex links between climate impacts and instability or conflict; the need to address immediate crises; and the complexity involved in providing decisionmakers with strategic choices that require input from a multiple government departments and agencies.

Overcoming these barriers requires progress to be made in several areas, including:

1

Making climate change a political priority at the highest levels of government/institutions:

Climate security is still seen as a ‘niche’ or technical concern among senior decisionmakers. It should be considered as mainstream as other national security threats like nuclear proliferation or terrorism.

2

Develop comprehensive climate threat assessments:

Scientific assessments are available, but climate threat assessments are rare. These should consider a full range of risks including socio-economic, political and security impacts and long-tail risks.

3

Fully integrate climate security into risk management and policy:

Climate change should not be siloed from other security strategic planning. This would include ‘stress testing’ high priority policies and strategies.

4

Climate proof budgets and development assistance:

To ensure that funding is helping to strengthen physical and social resilience to climate impacts and fully considers and mitigates conflict and security risks.

Recommendations for Commonwealth Parliamentarians

Commonwealth parliamentarians play a critical role in areas related to legislation, oversight, representation, and capacity. They can and should support efforts to improve climate security risk management through the following actions:

Legislation:

Support legislation that aims to protect citizens from climate impacts by improving resilience and adaptation, including through well-defined obligations under international frameworks such as the UN Sendai Framework on Disaster Risk Reduction⁶⁰.

Carry out audits of existing climate-related legislation to identify gaps and propose amendments to existing legislation or consider new legislation. Consider for example introducing mandatory annual reporting of climate risks that includes security risks.



Oversight:

Consider establishing an all-party group/ parliamentary committee on climate change which ensures climate risks are considered across government policy and departments. In addition, Defence and Foreign Affairs parliamentary committees should include climate security risks in their oversight.

Increase the focus on climate security risks through use of parliamentary debates and parliamentary questions. Require annual reports to parliament by Ministers responsible for climate change on strategic and operational impacts of climate and progress towards a risk management strategy.

Ensure relevant parliamentary committees are empowered with all relevant fiscal data and analysis to ensure climate risk assessments can be integrated in budget review processes. Parliamentary committees should climate proof the budget and infrastructure planning to ensure investments are resilient to climate change.



⁶⁰ The Sendai Framework was agreed by the UN General Assembly in 2015 and outlines seven concrete actions for member states for protecting development gains from disaster risk.

Representation:

Ensure government data is sufficiently disaggregated by location to facilitate parliamentarians' engagement with constituents on climate risk issues.

Use constituency clinics / engagement to proactively meet local climate groups and citizens concerned by climate change security risks and raise their concerns in parliament.



Capacity:

Build relationships with parliamentarians / parliamentary committees through Commonwealth, international and regional parliamentary structures to share good practices on legislation, oversight and to share climate-intelligence.

Increase awareness of climate security risks among parliamentarians through training programmes, briefing notes, improved access to information and research capacity within parliament.

Ensure national climate security assessments involve and are communicated to sub-national authorities, agencies, and legislatures, including metropolitan regions and cities. Parliamentarians should be empowered with relevant data pertinent to their constituencies, to enable local response and capacity to be developed.



Annex 1: Case studies from the Commonwealth



Case Study 1: Bangladesh

The Risk: As a low-lying delta, Bangladesh has been referred to as one of the countries most vulnerable to climate change⁶¹. One-fifth of the country is in low-lying coastal zones leaving it highly exposed to sea level rise which is already having health impacts and damaging ecosystems. Saltwater intrusion is also causing agricultural damage leaving farmers unable to make a living. Cyclones, flooding, and sea level rise have led to largescale movement of people from rural to urban areas – natural disasters displace 700,000 people per year⁶². Floods inundate between 20-70% of the country's landmass each year leaving six million people under direct threat of flooding⁶³.

Displaced people make up around 80% of the urban population [in Bangladesh]

Displaced people make up around 80% of the urban population and most migrants attribute their move to environmental causes. One study found that climate change is increasing security risks in refugee camps, heightening tensions along the border with India and causing rapid urbanisation. The interaction between climate change and high rates of poverty and inequality in Bangladesh is a further risk factor. There is evidence of competition over land that has been made scarce due to flooding, including disputes in areas with migrant populations that have erupted into violence⁶⁴.

The response: Bangladesh has been a global leader in integrating climate change into its national policies and planning. It has an extensive Climate Change Strategy and Action Plan and has been at the forefront of efforts to improve adaptation. There are many projects in Bangladesh that focus on supporting disaster risk reduction, adaptation, and resilience – including for example as related to food security and environmental shocks⁶⁵. However, the links between climate change and security or climate and conflict are essentially absent from government policies.

61 [The changing climate | UNICEF Bangladesh](#)

62 [ClimateSecurity_Bangladesh.pdf \(unu.edu\)](#)

63 [ClimateSecurity_Bangladesh.pdf \(unu.edu\)](#)

64 Sarah Dalrymple et al., *Climate Change and Security in Bangladesh: A Case Study* (London: Saferworld, 2009).

65 [ClimateSecurity_Bangladesh.pdf \(unu.edu\)](#)

Case Study 2: Nigeria



The risk: Nigeria is highly vulnerable to climate-related shocks due in part to high levels of poverty, low level of development and dependence on rainfed agriculture. Nigeria ranks as the 53rd most climate vulnerable country and the 6th least ready country in the ND-GAIN index⁶⁶. Environmental challenges include deforestation, biodiversity loss and land degradation, floods, erosion, drought, and desertification – which is already promoting social instability⁶⁷. Nigeria has a diverse geography with several distinct climate zones and is therefore facing numerous climate impacts. These include storm surge in coastal regions, flooding and wildfires in the Niger Delta, and chronic aridity in the middle and northern parts of the country.

In 2012 Nigeria experienced a combination of severe flooding and drought with flood damage alone costing US\$17 billion⁶⁸. Tensions between farmers and pastoralists over land rights and water access as well as food insecurity including for displaced populations are key concerns. As Africa's largest producer of oil and gas, Nigeria also faces significant 'transition' risks from global efforts to reduce greenhouse gas emissions. The Inspector General of Police in Nigeria recently identified climate change as major driver of poverty, crime, and insecurity in the country⁶⁹. The Federal Government's economic growth plan recognises climate change as a threat to sustainable growth. It says climate change is a potential driver of "damaging and irrecoverable effects on infrastructure, food production and water supplies, in addition to precipitating natural resource conflict"⁷⁰.

[In Nigeria] climate change is a potential driver of "damaging and irrecoverable effects on infrastructure, food production and water supplies, in addition to precipitating natural resource conflict"

The response: Nigeria's Third Communication to the UNFCCC in March of 2020 points to desertification as a major concern for socio-economic development and states that it is not unlikely that the rise in conflicts between herdsman and farmers in recent times is an outcome of the desertification process. The communication also points to the environmental drivers of developmental challenges including extreme volatility in energy and food prices, water and food supply crises, rising greenhouse gas emissions, severe income disparity, terrorism, and chronic fiscal imbalances; all leading to conflict-induced migration.

As noted in the UNFCCC communication, part of the impetus of integrating environmental dimensions of the Sustainable Development Goals into its National Economic Recovery and Growth Plan is to improve its environmental security⁷¹. The initiation of research to establish the linkages of climate change factors in poverty, insurgencies and conflict induced migration is identified as one of the potential areas for project development. The government is integrating mitigation and adaptation into development plans and migration and security both feature in the country's climate strategies⁷².

66 [Nigeria | ND-GAIN Index](#)

67 [National Security Implications of Climate Change | Council on Foreign Relations \(cfr.org\)](#)


68 [15918-WB_Nigeria Country Profile-WEB.pdf \(worldbank.org\)](#)

69 [IGP: Climate change one of the drivers of crime in Nigeria | TheCable](#)

70 [Federal Government of Nigeria \(2009\): Nigeria Vision 20: 2020 Economic Transformation Blueprint October 2009](#)

71 [Microsoft Word - TNC Nigeria - 16-04-2020 \(FINAL\).docx \(unfccc.int\)](#)

72 [15918-WB_Nigeria Country Profile-WEB.pdf \(worldbank.org\)](#)



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