Oxford Research Group
Breaking the cycle of violence
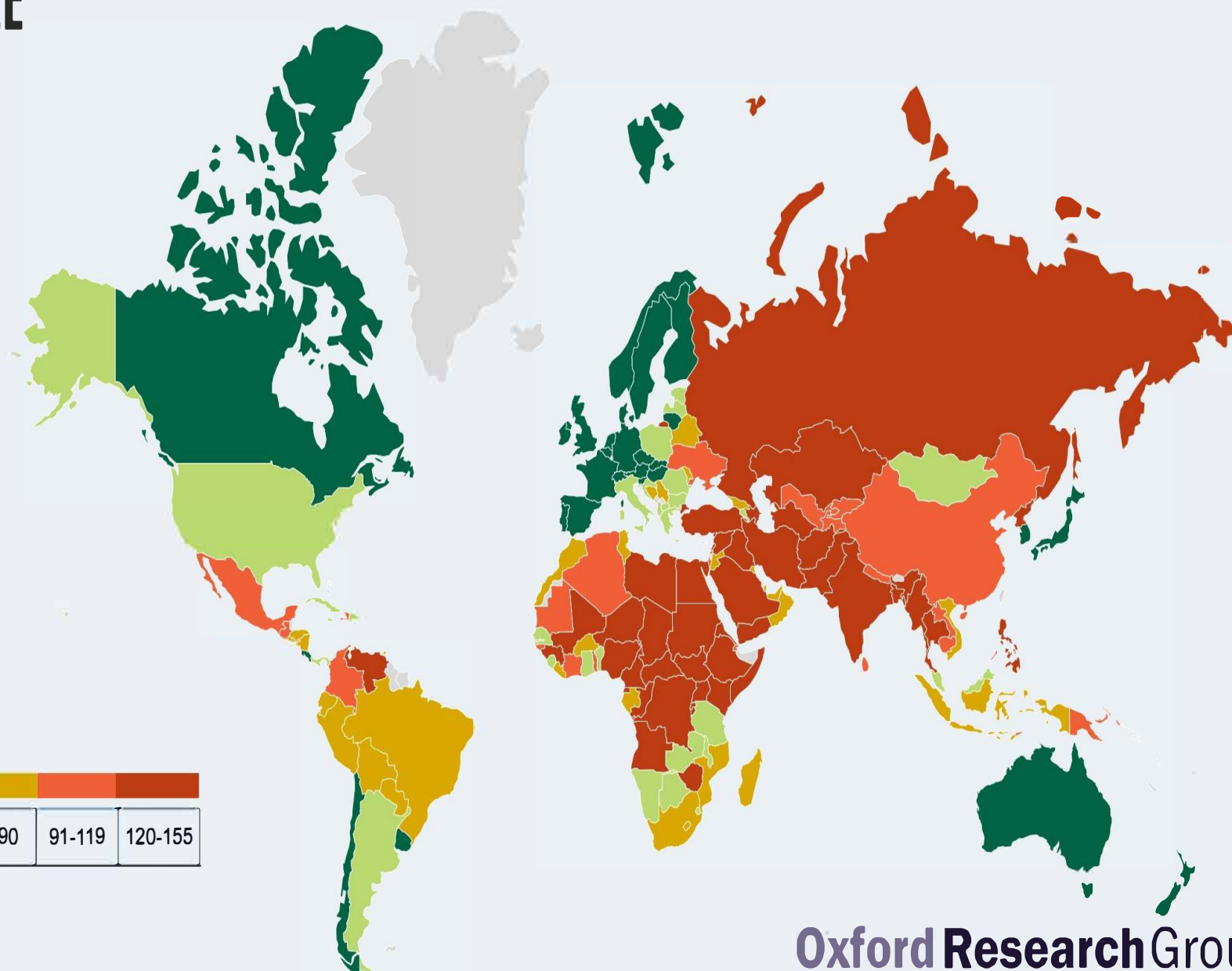
2020 EDITION

SUSTAINABLE

SECURITY

INDEX

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SUSTAINABLE SECURITY INDEX

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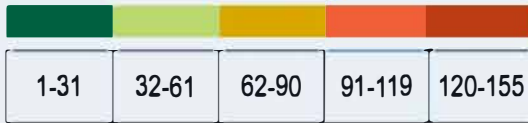
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Breaking the cycle of violence

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Executive Summary

This report seeks to demonstrate the interconnectedness of the drivers of global insecurity and begin a broader conversation about how to benchmark and measure national contributions to such insecurity. The sustainable security approach was developed by Oxford Research Group (ORG) in the mid-2000s as a way to explain the failures of Western counterterrorism campaigns in the Middle East, Africa and South Asia in their attempt to build stability and eradicate violent extremism.

The Sustainable Security Concept

ORG argues that to truly build sustainable security, states need to look beyond militarily-focussed solutions and instead adopt policies that recognise the importance of, and subsequently address, poor governance, inequality, and climate breakdown as key drivers of global insecurity. The report focuses on three drivers of global insecurity, previously identified by ORG as those in need of urgent remedial action.[1]

- Poor governance and marginalisation or prejudice against certain groups which can make conflict more likely.
- Over-reliance on military responses (both internally and externally) which can lead to perpetual conflict and instability.
- Climate change and resource scarcity which can exacerbate the causal factors of conflict and violence.

Support for an integrated approach to addressing insecurity has gathered considerable momentum over the years amongst intergovernmental organisations[2], policymakers[3], non-governmental organisations[4] and think-tanks.[5] However, despite the growing support for this idea, military responses continue to be the "go-to" for states seeking to address instability abroad.

Towards a Sustainable Security Index

The Sustainable Security Index has been created by ORG as a tool to help states understand and tackle insecurity. Unlike conventional indices, this one consciously and explicitly builds on the work that has already been done to measure different areas of instability (such as poor governance, marginalisation of minorities and ineffective environmental policies) by using pre-existing indices and bringing them together. This Index aims to help those with the power to drive positive policy change to gain a more holistic understanding of states' contributions to sustainable security and peace.

This index is intended to be used to inform, and for the benefit of, those pushing for positive policy change. For instance:

- **Political leaders** can consult the Index to help shape policy agendas which are geared towards more sustainable approaches to global security.
- **Civil society groups and NGOs**, spanning the peace, human rights, development and environmental sectors, can use it as an advocacy tool to convince policymakers that the integrated approach is worth taking.
- **The scientific community,** particularly research clusters working on climate change, can use the Index to understand how scientists can build greater connections with policymakers and work together towards change.
- **Journalists** can use the Index as an information source and to help them scrutinise governments for their security policy shortcomings.
- **Researchers**, in academic and think-tank communities, can use the findings to complement their own research, build on the data and take the research further.

Analysing the Key Stories

This report examines sustainable security globally and systematically, seeking to instigate a conversation around how to measure and change policies which exacerbate, rather than alleviate, the drivers of conflict. The report first sets out the results of the Index and then, to unpick what this approach can teach us, explores three key stories based on the data findings:

1. Global insecurity often impacts poorer countries disproportionately – despite the fact they often contribute the least to its creation. As such, richer countries, with the power to drive change towards more sustainable global security, should shoulder responsibility to do so.

2. Examining the bottom 15 in the Sustainable Security Index reveals the continued failures of international intervention and highlights the need for a new approach to tackling global insecurity.

3. While the international community may be increasingly recognising the need to address climate change, national spending patterns reveal it concurrently needs to significantly offset its wider contribution to global insecurity.

It is important to be clear about what this Index can and cannot do. It can challenge traditional understandings of security and conceptions about how we measure and improve global sustainable security. However, the drivers of insecurity do not impact all countries evenly or in the same way. In some ways, then, an index will never sufficiently capture the complexity and nuance of the sustainable security approach. But it can be a useful tool in helping policymakers, academics, civil society and other key stakeholders discuss and debate national approaches. To illustrate how, the report concludes by using the UK as a case study for exploring how a state could adopt a more sustainable approach to security.

Introduction

The Sustainable Security Index measures security more holistically than it has been measured in the past. It goes beyond traditional metrics of security (such as arms sales and violent conflict) to account for other drivers (like governance and climate change), which have not tended to be included but which our own work has shown can drive and exacerbate violent conflict. It brings together four indices (the Global Peace Index, the Fragile State Index, the Global State of Democracy Initiative and the Environmental Performance Index) to measure the state of sustainable security across three drivers: Governance and Equality, the Use of Force and Environmental Governance. In doing so, it builds on almost 40 years of research at ORG to quantitatively measure changes in sustainable security.

Following 9/11, the military interventions in many parts of the Middle East, Africa and South Asia, aimed at creating stability and diminishing violent extremism, failed in some fundamental ways: they did not build stability in the countries where they intervened, nor did they diminish violent extremism. For ORG, part of the reason for these failures was a continued focus on military responses to instability – rather than a focus on the multiple factors which drive and exacerbate conflict.[6] What was needed, then, was a more holistic approach which addressed *all* the most serious threats facing humanity and directly contributing to global insecurity.

ORG's answer to this need was the sustainable security approach which was first articulated in a 2006 report and has since then been developed further into a research enterprise.[7] The central pillar of sustainable security is that states cannot successfully control all the consequences of insecurity but must, instead, work to resolve its causes. At its root, it is a preventative approach to security which prioritises three drivers.[a] The following factors are afforded the most attention because they are the trends that, if left unattended, are likely to lead to substantial global and regional instability, and large-scale loss of life, of a severity unmatched by other potential threats:

- **Poor governance and inequality.**
- **Unsustainable environmental policies.**
- **Over-reliance on military capabilities and responses to threats at home and abroad.**

This is not a pacifist approach; it understands the importance of the military. But it also stresses that without attention to these three drivers, reactively deploying military force serves little long-term purpose and often makes matters worse. Sustainable security sees the causes of insecurity as interconnected and requiring an integrated and comprehensive solution. It shifts the emphasis of creating global security toward the long-term impacts and consequences of policies.

The approach is about redefining and rethinking what security means, moving beyond narrow definitions which simply cater to defence and military power to ones that also encompass broader threats to humanity. This also requires expanding the concept of 'security' beyond the territorial state in geo-political terms; sustainable security includes a broadening of the understanding of the concept of national security to encompass threats such as climate change, pandemics and human displacement.

In this sense, sustainable security prescribes to the idea of human security. That is, a "move from a strict focus on the security of the state (national security) toward a broader or alternative focus on the security of people, either as individuals or as a global or international collectivity [sic]."[8] Human security at its most basic level emphasises "the interrelatedness of different types of security... [which] includes both civilian and military elements."[9] The concept recognises that "there are several dimensions related to feeling safe, such as freedom from fear, freedom from want, and freedom from indignity."[10] Beyond this, it means that there is not simply the absence of violent conflict in societies, but also an environment that "encompasses human rights, good governance, access to education and

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[a] The original report which served as the basis for the sustainable security concept, *Global Responses to Global Threats: Sustainable Security for the 21st Century*, identified four drivers. However, the drivers of competition over resources and climate change were combined as one in subsequent analyses because it made conceptual sense to do so due to the extremely close connection between the drivers.

health care and ensuring that each individual has opportunities and choices to fulfil his or her potential". [11] This is important because every "step in this direction is also a step towards reducing poverty, achieving economic growth and preventing conflict".[12]

Though it focuses on widening the conception of security beyond the state, human security also understands that states remain the fundamental suppliers of security. But the point is that, in many parts of the world, the state often fails to fulfil its responsibilities of governance and has sometimes even become a threat to its people.[13] In fact, the Armed Conflict Location & Event Data Project (ACLED) reported that last year "Governments continue to pose the greatest threat to civilians around the world, with state forces responsible for more than a quarter of all violence".[14] To achieve greater human security, a stronger and more integrated response from states is needed globally.

What is Sustainable Security in a time of COVID-19?

At the time of finalising this report, the progress of the COVID-19 pandemic is still in its early stages. There is still a great deal we do not know, both concerning the reasons for its emergence in the first place, and its overall global impact. It is therefore premature to draw any firm conclusions now. At the same time, there are clear indications, even at this early stage, that the COVID-19 pandemic broadly underscores the relevance and importance of the key themes and drivers of insecurity discussed in the Index.

The virus' spread is currently causing significant damage to the socio-economic fabric of the globe and shows why there needs to be a broader understanding of security threats. The pandemic is not only a health crisis, it is a severe human security crisis. Even in states with comprehensive and accessible public health systems, economies have ground to a standstill, the military are building hospitals in conference centres and people are continually concerned about their lives and livelihoods. Nonetheless, it is very likely these countries will prove to be more resilient to the pandemic, sustaining fewer excess deaths and be able to pursue more sophisticated adaptation options than those without such health systems.

Those most at risk from the pandemic are people in countries where conflict has weakened state infrastructure or in refugee camps where limited services already struggled to provide for all their residents. In places like Uganda, South Sudan and the Democratic Republic of Congo, COVID-19 represents another pressure in environments already grappling with too many. It could lead to the spread of famine with people unable to farm, the spread of other diseases as health infrastructure is further weakened and, with these things, greater poverty and more deaths.[15]

As the pandemic spreads across the world, it becomes clear that far greater resources and attention need to be pooled and devoted to addressing threats to human security like health, climate change, poverty and inequality.[16]

The Three Drivers of Insecurity

To better understand how the three drivers exacerbate and drive conflict, the following section will deal with each of them in turn.

1. *Poor governance and inequality*

Certainly, in recent weeks, the impacts of COVID-19 have brought a renewed discussion about the importance of good governance in dealing with non-military threats. There are many complex factors at play regarding the likelihood of and preparedness for disease outbreaks, but generally countries with better resourced health systems are more resilient to pandemics.[17] Countries with more democratic, accountable governments and lower levels of inequality are more likely to have better health systems.[18]

Pandemics also cause economic crises and can increase unemployment rates. In states with weak or non-existent welfare systems there are increased risks to health and social insecurity. In countries with weak institutions and political instability, pandemics can increase political and social tensions,

potentially leading to violence.[19] In the case of COVID-19, research has warned that the outbreak could create a "double emergency" in fragile states, having a destructive impact on health systems and exacerbating humanitarian crises.[20] This issue may also lead to the inclusion of additional human development indicators in future editions of the Index.

However, the importance of good governance goes well beyond this. Inequalities and injustices in societies are important because they can be used to mobilise and expand groups and may spark violence.[21] Inequalities between groups are highly significant because it is often minority groups or collectives who rebel, rather than whole populations or individuals. Research suggests that group grievances can be triggered around economic, social, political and cultural inequalities between groups (horizontal inequalities).[22] To mobilise people into action, there must be an issue which they can be organised around. It is much easier to muster individuals around issues or causes when they are already part of a group and where prevailing inequalities can be interpreted and depicted as intentional discrimination against this group.[23] Relatedly, the way states respond to protest and unrest about grievances such as inequality and injustice can, if violent or divisive, often further exacerbate violence and instability.[24]

The Sustainable Security Index therefore asks two key questions in this driver:

1. Are any groups in the state (be they ethnic, cultural, gender, economic or geographic) subject to prejudice or unfair treatment?
2. Is the state fairly governed, and open to criticism when calls for change are raised?

To answer these questions, the Index draws on the Fund for Peace's Fragile State Index's Group Grievances pillar. This pillar considers factors like:

- "[W]here specific groups are singled out by state authorities, or by dominant groups, for persecution or repression"[25]
- "[W]here there is public scapegoating of groups believed to have acquired wealth, status or power "illegitimately", which may manifest itself in the emergence of fiery rhetoric, such as through "hate" radio, pamphleteering, and stereotypical or nationalistic political speech."[26]

The Sustainable Security Index also draws on the International Institute for Democracy and Electoral Assistance's (commonly known as IDEA) Global State of Democracy Initiative, which measures countries on whether there are sufficient checks on government power, whether it is representative, whether its citizens are provided with fundamental rights and whether there is impartial administration.[27]

The Sustainable Security Index does not argue that conditions of poor governance naturally lead to unrest or violence. Nor is it saying that people living in poverty will inevitably engage in political violence. After all, most of those who live in poor conditions do not engage in violence. Moreover, discontent at injustice can also be channelled into non-violent activities such as protest movements. But the point is that structures of poor governance make a society's slide into unrest and violence more likely which is why they need to be addressed.

There is significant evidence that violent extremism thrives in conditions where there has been a serious breakdown in the relationship between the state and society. There is no universal pathway to this breakdown, and cases differ. But, generally, studies have found that when citizens see their own government as unable to provide security and services, and where divisions within communities have emerged, non-state groups often fill the gaps left by the state. Sometimes violent or radical groups, both internal and external to the state in question, can capitalise on these situations.[28]

Corruption plays a significant role. For example, corruption in the police, judicial and military sectors often significantly undermines the rule of law in states, which can, in severe cases, lead to the collapse of those institutions which were designed to prevent violence and conflict. Indeed, corruption in the security sectors is arguably the most dangerous because of the effects it can have on certain sectors of society.[29] As Karolina MacLachlan notes:

> *"[C]orruption in the defence and security forces – those tasked to protect the population and respond to insecurity – is particularly pernicious. In some cases, the effects of corruption are immediately visible, with predatory security forces abusing the populations they were set up to protect."* [30]

Overall, corrupt practices often have been shown to have the worst impact on the poor and most vulnerable groups in society.[31] Poor governance, then, can feed heavily into group grievances. Accordingly, sentiments of injustice and a perpetual feeling of distrust can provide an enabling environment for violent extremist groups to exploit.[32]

Armed non-state groups usually gain a foothold in states suffering from poor governance by employing violence, establishing a presence, and offering services and security that the state has failed to provide.[33] Where a chasm has emerged between citizens and oppressive, corrupt, or unresponsive governments there is fertile ground for extremists' attempts to create alternative political orders through their own governance structures. Research has observed that left-wing paramilitaries in South America and jihadist groups in the Middle East, Africa and Southeast Asia gained important territorial ground in those regions largely because they provided security, and the medical, educational and social services that the local governments failed to deliver.[34] These groups instilled a semblance of order in chaos. Ultimately, communal support from local populations is critical for groups not only to succeed in gaining ground, but also to function.[35] As Scott Atran observes, "without community support, terrorist organisations that depend on dense networks of ethnic and religious ties for information, recruitment, and survival cannot thrive."[36]

The likelihood of discontent and unrest amongst aggrieved groups escalating into internal violence depends heavily on how the state responds. Sometimes states help contribute to already fragile situations by criminalising dissent – especially if they target voices or opposition movements that argue for peaceful alternatives to extremism.[37] In some cases, arrests of political dissidents can serve as symbolic sparks for mass protests and unrest. Most importantly, though, heavy-handed responses by state security forces contribute heavily to intrastate wars starting and these approaches can prolong the duration of conflicts. The next section will explore this further.

Alternatively, there are many studies illustrating that strong democracies not only tend to avoid war with one another, but that they generally also have much lower levels of civil conflict compared to authoritarian states.[38] Democracy, though by no means an infallible system, enables societies to manage conflict through debate, elections, representation and popular participation. Potential conflict can be resolved through the political system rather than through violence. In a fully functioning representative democracy, citizens in a society, including minorities, have a means to influence policies that can resolve grievances. Studies on the relationship between governance and conflict highlight that citizens also judge "good governance" by the extent to which policies benefit the population and the level of corruption.[39] These factors have a significant effect on a government's ability to avoid political violence.[40]

The Index looks at these issues and sees them as important to international sustainable security. As COVID-19 has shown, the internal governance of potential security threats in one country can have huge ramifications for the rest of the world. The UK noted this in its own Biological Security Strategy:

> *"Disease outbreaks that begin overseas, as seen with the Ebola epidemic, can quickly affect the UK and UK interests. This impact can be either direct, or indirect through the loss of regional stability negatively affecting trade, causing migration pressures and creating ungoverned spaces in which terrorism and criminality can flourish. In this context our international development programmes – which save and improve the lives of millions of people in the poorest areas of the world by building capacity to combat infectious diseases and address increased drug-resistance through supporting the development of new diagnostics, drugs and vaccines – contribute to protecting UK citizens from significant disease threats and securing the UK's long term national security."* [41]

Similarly, domestic strife and internal war can, and often do, become very serious issues of regional and global insecurity. Both episodes of unrest and, in more severe cases, internal wars frequently produce large dislocations of population and refugee flow across state borders.[42] The spill-over from

civil wars can cause conflicts to occur in neighbouring countries.[43] Moreover, the consequences of mass unrest and civil war can entail large scale interventions by external forces who attempt to stop the violence and restore order. These interventions can take the form of third-party peacekeeping operations and a panoply of aid programmes. In some instances, they can also attract interventions from states and coalitions of states who often exacerbate the conflict and can prolong its duration. This is particularly true if the intervening states support opposing sides in the conflict.[44] In sum, civil wars do not stay civil for very long and often have an international dimension.

Several global trends reveal the need for urgent action in this driver of Governance and Equality:

- The UN recently observed that inequality has reached "unprecedented levels", with more than 70% of the global population living in countries where the wealth gap is significantly growing.[45]

- Another study noted that inequality varies greatly across world regions. It is lowest in Europe and highest in the Middle East and Sub Saharan Africa. The former is the world's most unequal region where there is a top decile income share as large as 64%.[46]

- The World Justice Project's annual Rule of Law Index reported that an estimated 5.1 billion people are being failed by their justice systems.[47]

- Recently, the World Bank reported that an estimated 50% of the world's population cannot obtain essential health services.[48]

- In 2018, the Freedom in the World survey reported that "democracy is in retreat" after documenting the 13th consecutive year of decline in global freedom. The reversal has spanned a variety of countries in every region, from long-standing democracies like the United States to consolidated authoritarian regimes like China and Russia.[49]

- Transparency International's Corruption Perceptions Index recently concluded that "the continued failure of most countries to significantly control corruption is contributing to a crisis of democracy around the world."[50]

- Finally, many parts of the globe saw significant episodes of popular unrest in 2018-2019, and some of these have continued into 2020. According to ACLED, this represented a 51% rise in the overall number of demonstrations worldwide.[51] These episodes have been described as the "Global Protest Wave."[52] Russia, Serbia, Ukraine and Albania all recently saw major demonstrations. So, too, have France, with its "gilets jaunes" (yellow vest) movement, and Spain in its Catalonia region. The Middle East and Africa witnessed mass demonstrations in Sudan, Tunisia, Egypt, Iraq, Algeria, Jordan, Lebanon and the Gaza Strip. In South America, Brazil, Peru, Ecuador, Bolivia, Colombia, Chile and Venezuela all experienced popular unrest. Some of the protests have complex and deeply embedded historical causes. But many of these episodes of unrest have been characterised by frustration and anger at the levels of socio-economic marginalisation, elite corruption, and deeply uncertain futures, especially for younger people.[53] In several cases, government responses have included excessive use of force against the initial protestors, leading to injuries and deaths. In fact, research observes that there was a 106% rise in the number of fatalities reported during demonstrations last year.[54]

2. Over-reliance on military capabilities and responses

The drivers of insecurity and conflict are deeply political and, as such, hard security solutions alone are unlikely to address them. These types of responses are also likely to make matters worse.[55] Military-focussed solutions to global instability (whether great power competition or local insurgency) are likely to exacerbate tensions, create more conflict and add to the violence. The same is true internally. If states violently crackdown on opposition, it is likely to lead to a false peace which, as demonstrated by the Arab Spring, may lead to further violence and long-term instability in the future (a point deeply connected to the first driver).

The Index therefore asks two questions in this driver:

1. Do state security forces work in the interests of the population or are citizens subjected to violent internal repression?
2. Is a state focussed on hard power solutions to global or regional insecurity?

To answer these questions, the Index uses two indices. First, we draw on the "Militarisation" and the "Internal and External Conflict" pillars of the Institute for Economics and Peace's Global Peace Index. These two pillars consider factors like military expenditure, arms sales, contributions to peacekeeping missions (marked positively), nuclear and heavy weapons capabilities, and number and duration of internal and external conflicts. The other pillar is the "Security Apparatus" pillar of the Fragile State Index. This looks at how well a state has hold of the monopoly of the use of force and, importantly, how well it treats its citizens. It asks, for example, if there have been instances of police brutality and how professional the police force is.[56]

Internally, heavy-handed responses can see intrastate violence eventually occur. Research by ORG and others has demonstrated that real or perceived abuses from a state's security forces "is the number one factor behind young people's decision to join violent extremist groups."[57] Additionally, states may suppress unrest through their own forces or, sometimes, through local militias.[58] When doing the latter, states sometimes exploit pre-existing divisions (often ethnic or religious) between groups.[59] Evidence suggests that repression, particularly the use of violence, can keep a discontented part of the population suppressed temporarily, but it also fuels the sense of injustice and deepens social divisions that extremists can exploit.[60]

These responses have been common in some domestic responses to COVID-19 but risk being dangerously ineffective. There have been "reports of the brutality of South Africa's and Kenya's police, [and] Rwanda's decision to arrest anyone found flouting the curfew."[61] However, these actions could have huge implications for stopping COVID-19 from spreading, when populations with little trust in government are asked to follow public health directives. Mais S., a journalist from Damascus interviewed in a piece by Mazen Gharibah and Zaki Mehchy for LSE said: "Since people do not trust government reports, and given the deliberate delay to announce cases of coronavirus in Syria, people are continuing their daily lives in a regular manner, which raises the risk of infection and outbreak."[62] This has a similar ring to responses to the Ebola outbreak in Guinea, Liberia and Sierra Leone, where "the virus initially spread unchecked not only because of the weakness of epidemiological monitoring and inadequate health system capacity and response, but also because people were sceptical of what their governments were saying or asking them to do".[63]

Repressive policies can also be ineffective and counterproductive when dealing with organised crime and gangs. Research has shown that "iron fist" responses can have the effect of driving offenders towards more violent groups, increasing the brutality of such groups as a retaliatory measure and having broader detrimental impacts on societies.[64] In the cases of Colombia and Mexico, for example, the heavily militarised drug wars waged by these states have proven to not only be ineffective in halting the drug trade, but have also had hugely negative impacts on the countries' security, human rights, development and governance.[65]

Internationally, foreign forces intervening militarily to address political problems, like terrorism or ethnic tension, may exacerbate instability and violence by adding more weapons and military personnel to an already tense and militarised situation.[66] Numerous studies have now questioned the effectiveness of the Western military campaigns after 9/11 in defeating extremist groups.[67] Despite years of military intervention, terrorism has not been eradicated and, in some countries, an anti-Western narrative has driven recruitment for terrorist groups.[68]

A country's military spending often simply triggers more military spending by neighbours with whom relations are less than cordial, locking conflict "dyads" and, in some cases, entire regions, into cycles of defence hikes in the fruitless pursuit of "security." India-Pakistan is a good example of the former, and the Middle East the latter. According to SIPRI, in 2018 the Indian and Pakistani defence budgets increased by 3.1% and 11% respectively. While military spending in the Middle East decreased overall by 1.9%, the region is still home to six countries with the highest military burdens in the world.

Turkey's astonishing 24% increase in defence spending in 2018 is very likely to be directly related to the ongoing Syrian imbroglio.[69]

More generally, Western interventions have had several unintended consequences.[70] The US, the UK, France and others have focussed on providing military support to states without looking at the broader political problems, such as corruption or poor civilian oversight of the military, facing the country. This support "can lead to a situation where rights-violating security forces become better equipped to do what they have always done."[71] Similarly, in some countries these states have worked with groups who have real or perceived ethnic, geographical or community bias.[72] This support has undermined the legitimacy of these groups among local and regional actors, exacerbated local and regional tensions and, arguably, contributed to more fragmentation and instability in the future.[73] Again, the trends in this driver are deeply concerning:

- Since 2001, at least half a million people have been killed in wars and counter-terror activities in Afghanistan, Pakistan and Iraq alone.[74] The Global Terror Database has observed that terrorist attacks are dramatically more frequent than before 9/11.[75]

- SIPRI recently reported that in 2019 global military expenditure is estimated to have totalled $1917 billion, representing the highest annual increase since 1988.[76] This means that global military spending in 2019 represented 2.2% of the global gross domestic product. In the previous year, just $15 billion was invested in peacebuilding and peacekeeping activities.[77] 60% of all global military spending comes from just five countries: the United States ($649 billion), China ($250 billion), Saudi Arabia ($67.6 billion), India ($66.5 billion) and France ($63.8 billion). Russia ($61.4 billion) and the United Kingdom ($50 billion) are also big defence spenders.[78]

- Despite the implementation of the Arms Trade Treaty (2014), global arms trading is still rising. Major weapons sales between 2012 and 2017 were 10% higher than in the previous five years.[79]

3. *Environmental Governance*

Climate change is commonly understood as a threat multiplier by scientists, civil society actors and policymakers because it exacerbates pre-existing problems in societies.[80] It can worsen inequality and increasing competition over resources. While developed states are historically the greatest drivers of climate change, its impacts on the developing world are the heaviest.

The Index therefore asks two questions in this driver:

1. How effective is a state's environmental governance, including efforts to address climate change?
2. How far is it helping or hindering other states to do the same?

To answer the first of these questions, the Index looks at the Yale Centre for Environmental Law & Policy's Environmental Performance Index. This measures air quality, water and sanitation, heavy metals, biodiversity and habitat, forests, fisheries, climate and energy, air pollution, water resources, and agriculture. To assess external impact, the Index looks at how much carbon countries export through fossil fuels and how much money each state gives to developing countries to address the impact of climate change.

Fossil fuels are finite resources which have caused tensions between states, with many reliant on them for the functioning of their country, particularly those in the Global North. As Michael Klare observes "we live in an energy-centric world where control over oil and gas resources (and their means of delivery) translates into geopolitical clout for some and economic vulnerability for others."[81] Similarly, resource competition within a state can contribute to discontent if resources are inadequately managed or perceived to be distributed unfairly.[82]

In fact, the discovery of resources such as oil and gas can cause sharp increases in regional inequality in states and, when these resources are found in communities with distinct ethnic or religious divisions, conflicts may emerge. It has been observed by researchers that there is a greater likelihood of conflict if communities are relatively poor compared to the country's elites and they feel that they are not reaping the benefits from the resources.[83] This situation often creates growing frustration amongst marginalised groups who may potentially turn to violence to improve their situation.[84] According to Phillipe Le Billon, in many cases national and regional governments often employ brutality towards populations to suppress unrest caused by grievances over resource distribution.[85] Broad statistical studies have shown that the risk of civil war greatly increases when countries depend on the export of primary commodities, particularly fossil fuels.[86] So, overall, the presence of oil and gas resources within developing nations exacerbates the risk of violent conflict often due to factors of inequality, marginalisation and poor governance in those countries. These problems are made worse by the fact that consumption of fossil fuels is the main driver of climate change.

Developing countries are disproportionately exposed to climate change and will bear the worst of its effects in the future, despite the fact they have historically contributed the least carbon emissions (the Centre for Global Development has found that developed countries are responsible for 79% of historical carbon emissions).[87] Developing states often lack the capabilities and governance structures to adapt to severe weather related incidents, as has already been seen in many cases.[88] For instance, poor infrastructure may make cities harder to evacuate during climate-related emergencies.[89]

Moreover, the majority of people in developing states are highly dependent on agricultural, fishing and other ecosystem-related resources for both consumption and income. Intense weather events like flooding, hurricanes or extreme drought can cause serious disruptions to people's livelihoods. People living in developing states are also more affected by infectious and respiratory diseases that climate change aggravates.[90] They have fewer resources to help them cope with and recover from both sudden- and slow-onset effects of climate change. Climate change, then, seriously adds to the vulnerability of those in developing states, particularly the poorest people.

Though they are better equipped to respond to climate disasters, developed states are not immune to the effects of climate breakdown. States like the US have already seen a rise in the number of extreme weather incidents in the past 25 years.[91] Developed states will also not escape desertification caused by climate change; climate scientists have warned that Australia is more vulnerable to climate change than any other developed nation, mainly because it is the driest inhabited country based on rainfall levels and temperature.[92] Some investigations have also suggested that large-scale human migration from developing countries due to factors related to climate in the earth's low latitudes could place huge migratory pressures on states in both the Global North and South.[93] However, there needs to be some caution in accepting these predictions. Analyses have also suggested that scenarios could emerge where people become "'trapped' by climate change" which "is likely to represent just as important a policy concern as those who do migrate."[94] There is much debate over how climate will affect future migration, but there are few who would see the potential long-term consequences of climate breakdown as positive for human security.

Yet despite the seriousness posed by climate change, many developed nations have continued to address it inadequately. It is deeply concerning that US President Donald Trump has continued to flirt with climate change denialism (he previously described it as a "hoax"[95]), and has rolled back a number of climate change initiatives, including the Paris Agreement and Barack Obama's Clean Power Plan.[96]

In fact, problems of environmental governance, besides climate change, continue to pose a major threat to people's security. Lack of access to safe water is responsible for 1.2 million deaths every year, including 6% of all deaths in the Global South.[97] Air pollution, particularly exposure to PM (particulate matter) 2.5, is another example. The World Health Organisation (WHO) estimates that 4.6 million people die prematurely every year because of the air they breathe.[98] The adequate protection of ecosystems is also crucial; quite apart from the role of forests as carbon sinks, the increasing loss of biodiversity has detrimental impacts on human health and well-being. The long-term detrimental impact of these losses for the stability of societies is potentially of the same order as climate change.

This also has implications for COVID-19; there is a strong scientific consensus emerging that future pandemics are most likely to emerge from ecosystem degradation, climate change and the interaction of the two trends.[99] As Daniel Mira-Salama of the World Bank explains:

> *"Biodiversity provides a key service many of us are less familiar with: disease regulation. Natural biodiversity limits the exposure and impact of many pathogens through a dilution or buffering effect, thus minimizing opportunities for pathogen spillover to humans. Deforestation and land use change, habitat fragmentation, encroachment, rapid population growth and urbanization are some of the ecological, behavioral and socioeconomic factors that amplify human exposure and multiply chances of contagion. Climate change is an additional, known driver of emerging infectious diseases, creating new opportunities for pathogens, accelerating the appearance of invasive species and displacing the range where natural species occur."[100]*

In this sense, if the stated aim of a country's "security policy" is to keep its citizens safe, then, environmental governance is an essential piece of the puzzle.

There are contested research findings on the relationship between climate and conflict. But a collaboration of experts agreed that climate has played a role in several armed conflicts. It is not often seen as a sufficient driver in itself. Importantly, though, it often combines drivers of poor governance, corruption, existing tensions between groups and socio-economic inequalities to drive insecurity.[101] For instance, a study of conflict between 1980–2010 suggested that "the risk of armed-conflict outbreak is enhanced by climate-related disaster occurrence in ethnically fractionalized countries."[102] Another study found "strong causal evidence linking climatic events to human conflict across a range of spatial and temporal scales and across all major regions of the world."[103] After conducting an extensive literature review on the climate-conflict connection, the Swedish International Development Cooperation Agency concluded that "under certain circumstances climate-related change can influence factors that lead to or exacerbate conflict."[104]

If this is true, recent changes are moving the world closer and closer to conflict and instability:

- In 2010 BP's Statistical Review of World Energy estimated that there are 188.8 million tons of oil left in the known oil reserves. If our current demand continues, this oil will only be enough to supply the world's demand for the next 46 years.[105] In 2016, it was estimated that the known reserves of natural gas would last only six more decades with the current global production.[106]

- While COVID-19 may reduce carbon emissions, this is likely to be short-lived. In the longer term, the pandemic may cause additional problems. It could lead to reduced investment in renewable energies because of the drop in oil prices. It may also create a "global economic recession, which would constrain the already limited time and resources available to policymakers on many other issues, including climate change."[107]

- A recent report by the Intergovernmental Panel on Climate Change (IPCC) warned that carbon dioxide emissions must reach net zero by 2050 in order to keep global warming below 1.5 °C.[108] The world may be shifting towards renewable energy, but the International Energy Agency has warned the pace is not rapid enough to offset the impacts of worldwide economic expansion and a growing population.[109]

Towards a Sustainable Security Index

When the sustainable security concept was first articulated, it was stressed that there was an urgent need for the three drivers of insecurity to be addressed more adequately than they were at the time to avoid greater instability. However, recent events have illustrated why a shift towards sustainable security is now more essential than ever. As ORG has commented "never before has humanity faced a world as interconnected yet so socio-economically divided, where environmental limits are so apparent and where traditional approaches to war-fighting and the use of force are so counter-productive."[110]

ORG has devoted considerable research to understand how to achieve change, but what has been missing is a clear way to understand the global state of sustainable security.[111] The Sustainable Security Index is a tool designed to better enable practitioners and experts to assess the state of global insecurity and help them move towards achieving this change. It is difficult to quantitatively measure something as complex as sustainable security with the many factors that feed into it; however, there is merit in attempting to gain an insight into the global state of the drivers listed above. As such, this Index ranks 155 countries across variables that measure the three drivers of global security, including assessing the quality of a countries governance, the treatment of its minorities, examining the international and external use of force, and appraising its internal and external environmental policy.

To create six measures of sustainable security (discussed in more detail in the Methodology at the end of this report), the Index uses four well established global indices (the IDEA's Global Democracy Initiative, the Global Peace Index, the Fragile State Index and the Environmental Performance Index). It also employs data on national carbon exports and funding to lower-developed countries to assess climate change resilience and adaptation:

1. Governance and Equality
   a. The quality of a country's democracy, measured by the Global Democracy Initiative
   b. A country's treatment of its minorities, measured by the Fragile State Index Group Grievances pillar
2. The Use of Force
   a. Internal use of force, measured by the Fragile State Index Security Apparatus Measure
   b. External use of force, measured by the World Peace Index "Ongoing Conflict" and "Militarisation" pillar
3. Environmental Governance
   a. Internal climate change and environment policy, the Environmental Performance Index
   b. External climate change and environment policy, carbon exports and funding for climate change resilience projects as a percentage of Gross Domestic Product (GDP)
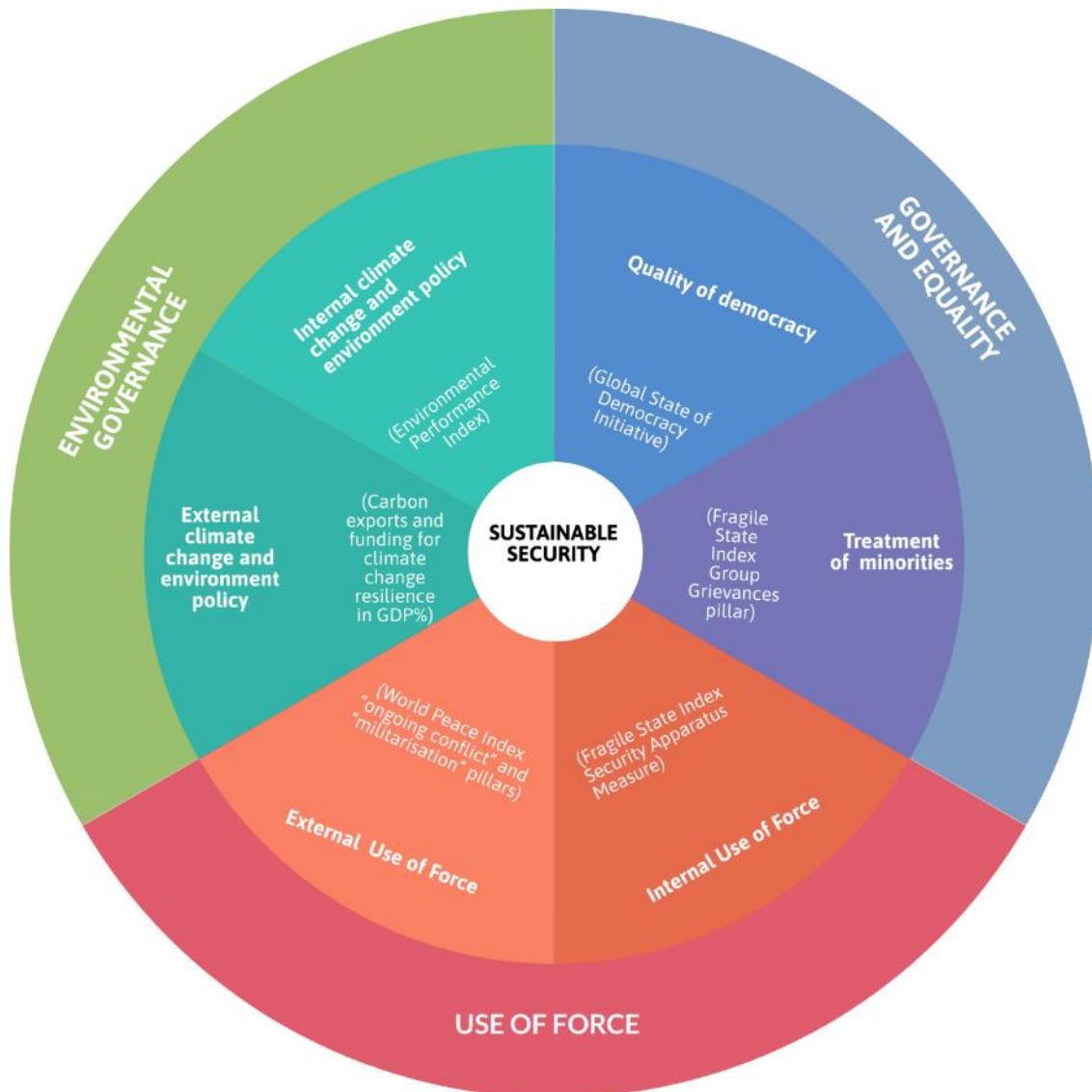
Figure 1: Diagram of the Index's composition.

Creating a simple measure that can track global sustainable security, the Index seeks to aid a shift in security thinking and practice towards a sustainable global system that promotes a shared responsibility for managing the drivers of insecurity, upholding international law and respecting human rights. The creators of the Index are under no illusion about the scale of this task, but they also believe that change will only be possible if various actors begin to work in greater collaboration rather than in opposition to, or separation from, one another. The goal is that the results and stories of this Index will help move steps in that direction.

Sustainable Security Rankings Table 2020

Ranking	Country	Governance and Equality	The Use of Force	Environmental Governance	Overall score
1	Sweden	86	70	88	81
2	Finland	86	72	77	78
3	Switzerland	77	79	74	77
4	Ireland	86	74	67	75
5	Portugal	81	83	62	75
6	Denmark	73	80	71	75
7	Japan	74	78	70	74
8	New Zealand	75	82	61	73
9	Germany	69	73	73	72
10	Belgium	69	73	71	71
11	Norway	78	71	64	71
12	Austria	66	80	65	70
13	Slovenia	68	82	60	70
14	Singapore	70	80	56	69
15	United Kingdom	59	64	83	69
16	Uruguay	79	65	57	67
17	South Korea	75	68	57	67
18	Netherlands	71	74	55	67
19	Mauritius	67	79	53	66
20	Lithuania	68	71	60	66
21	Costa Rica	72	67	59	66
22	Spain	60	67	68	65
23	Chile	73	68	54	65
24	Czech Republic.	62	72	58	64
25	Slovak Republic	54	77	60	64
26	Canada	76	73	42	64
27	France	54	63	74	64
28	Australia	76	72	41	63
29	Hungary	58	73	57	63
30	Italy	64	59	66	63
31	Croatia	56	70	58	61
32	Estonia	54	71	58	61
33	Greece	62	58	62	61
34	Poland	52	73	56	60
35	Bulgaria	57	65	59	60
36	Botswana	62	68	51	60
37	Romania	47	73	57	59
38	Jamaica	71	52	54	59
39	Argentina	62	61	54	59
40	United States	58	57	62	59
41	Albania	58	60	56	58

Ranking	Country	Governance and Equality	The Use of Force	Environmental Governance	Overall score
42	Latvia	44	71	58	57
43	Ghana	62	60	49	57
44	Panama	54	60	57	57
45	Namibia	56	59	54	56
46	Benin	69	54	44	56
47	Cuba	47	60	57	55
48	Malawi	53	61	50	55
49	Mongolia	64	71	29	55
50	Gambia	64	52	46	54
51	Tanzania	53	58	50	54
52	Armenia	51	54	56	54
53	Senegal	54	56	50	53
54	Zambia	48	60	50	53
55	Dominican Republic	48	53	57	53
56	Macedonia	45	57	56	52
57	Eswatini	56	56	45	52
58	Malaysia	48	59	48	52
59	Sierra Leone	47	62	46	52
60	Paraguay	51	52	52	52
61	Trinidad and Tobago	69	51	34	51
62	Lesotho	62	49	42	51
63	Bolivia	51	53	49	51
64	Moldova	43	57	51	50
65	Kuwait	56	64	31	50
66	Qatar	44	72	34	50
67	Serbia	38	58	54	50
68	Peru	42	52	56	50
69	Vietnam	40	61	48	50
70	Tunisia	50	45	55	50
71	Georgia	46	51	53	50
72	Liberia	52	51	46	50
73	Madagascar	56	51	42	50
74	United Arab Emirates	55	64	29	49
75	El Salvador	46	49	52	49
76	Ecuador	46	53	48	49
77	Burkina Faso	60	41	46	49
78	Brazil	45	48	54	49
79	Oman	60	61	26	49
80	Belarus	36	54	57	49
81	Morocco	34	55	57	49
82	Honduras	46	48	51	48

Ranking	Country	Governance and Equality	The Use of Force	Environmental Governance	Overall score
83	South Africa	51	50	43	48
84	Jordan	33	55	56	48
85	Mozambique	47	49	46	47
86	Bosnia and Herzegovina	40	56	46	47
87	Indonesia	43	56	42	47
88	Nicaragua	36	53	53	47
89	Gabon	59	58	23	47
90	Sri Lanka	35	48	55	46
91	Papua New Guinea	46	51	40	46
92	Kyrgyz Republic	36	49	52	46
93	Togo	44	47	46	46
94	Colombia	43	45	48	45
95	Laos	30	59	46	45
96	Guinea-Bissau	49	38	47	45
97	Israel	33	38	63	45
98	Cote d'Ivoire	40	46	47	44
99	Mexico	46	34	53	44
100	Ukraine	43	38	51	44
101	Haiti	41	48	42	43
102	Mauritania	35	51	45	43
103	Cambodia	33	50	47	43
104	Guatemala	31	47	51	43
105	Djibouti	33	51	45	43
106	China	27	52	50	43
107	Tajikistan	29	50	49	43
108	Timor-Leste	50	52	25	42
109	Uzbekistan	32	46	47	42
110	Nepal	31	53	41	42
111	Rwanda	25	53	47	42
112	Algeria	34	46	45	42
113	Lebanon	34	34	56	41
114	Uganda	32	44	47	41
115	Philippines	38	32	54	41
116	Kenya	32	40	49	40
117	Niger	40	36	43	40
118	Zimbabwe	37	35	47	40
119	Turkmenistan	32	52	34	39
120	Kazakhstan	28	60	28	39
121	Thailand	26	40	50	39
122	Azerbaijan	33	48	35	39
123	India	40	36	40	39

Ranking	Country	Governance and Equality	The Use of Force	Environmental Governance	Overall score
124	Ethiopia	30	38	47	39
125	Iran	22	43	49	38
126	Equatorial Guinea	30	54	30	38
127	Angola	35	50	29	38
128	Guinea	25	39	48	38
129	Bangladesh	29	44	40	38
130	Egypt	23	35	55	37
131	Eritrea	18	49	45	37
132	Venezuela	25	44	43	37
133	Mali	35	30	47	37
134	Nigeria	32	29	49	37
135	Republic of Congo	30	47	34	37
136	North Korea	27	30	52	36
137	Myanmar	26	36	47	36
138	Central African Republic	31	30	43	35
139	Cameroon	24	35	45	35
140	Turkey	18	34	51	34
141	Chad	24	30	46	34
142	Burundi	22	38	39	33
143	Pakistan	27	27	44	33
144	Sudan	16	31	50	32
145	Somalia	18	24	53	32
146	Afghanistan	31	20	44	32
147	Bahrain	17	48	28	31
148	Saudi Arabia	20	45	29	31
149	Russia	25	28	39	30
150	Democratic Republic of the Congo (DRC)	17	30	40	29
151	South Sudan	11	21	50	27
152	Iraq	29	28	24	27
153	Yemen	12	19	50	27
154	Libya	27	25	25	25
155	Syria	7	18	48	25

Driver 1
Governance and Equality

Driver 1: Governance and Equality

In the Governance and Equality driver the best scoring countries have stable polities and engaged citizens, electoral systems that tend to maximise representation and high political decentralisation – including referendums (and, in Ireland's case, citizens' assemblies) on key political issues and constitutional reform.[112]

Most countries, particularly Scandinavian ones, also boast strong economies and the lack of major security threats (either within or beyond their borders). This has meant that, despite some continuing problems, the majority of people within their borders enjoy relatively high employment, good healthcare and low mortality rates. [113] Some that do well in the Index, particularly Sweden, have also shown a willingness to welcome refugees, although this cannot be said for all the top ten countries in the driver.[114]

Henrietta Moore recently said in *The Guardian*: "With high levels of equality, low unemployment and sophisticated social services, Norway, Denmark and Sweden represent models many strive to emulate." However, she went on to note that, while strong economies mean that "the Scandinavian countries might look like league champions… they don't necessarily provide a desirable model for future prosperity in the rest of the world."[115]

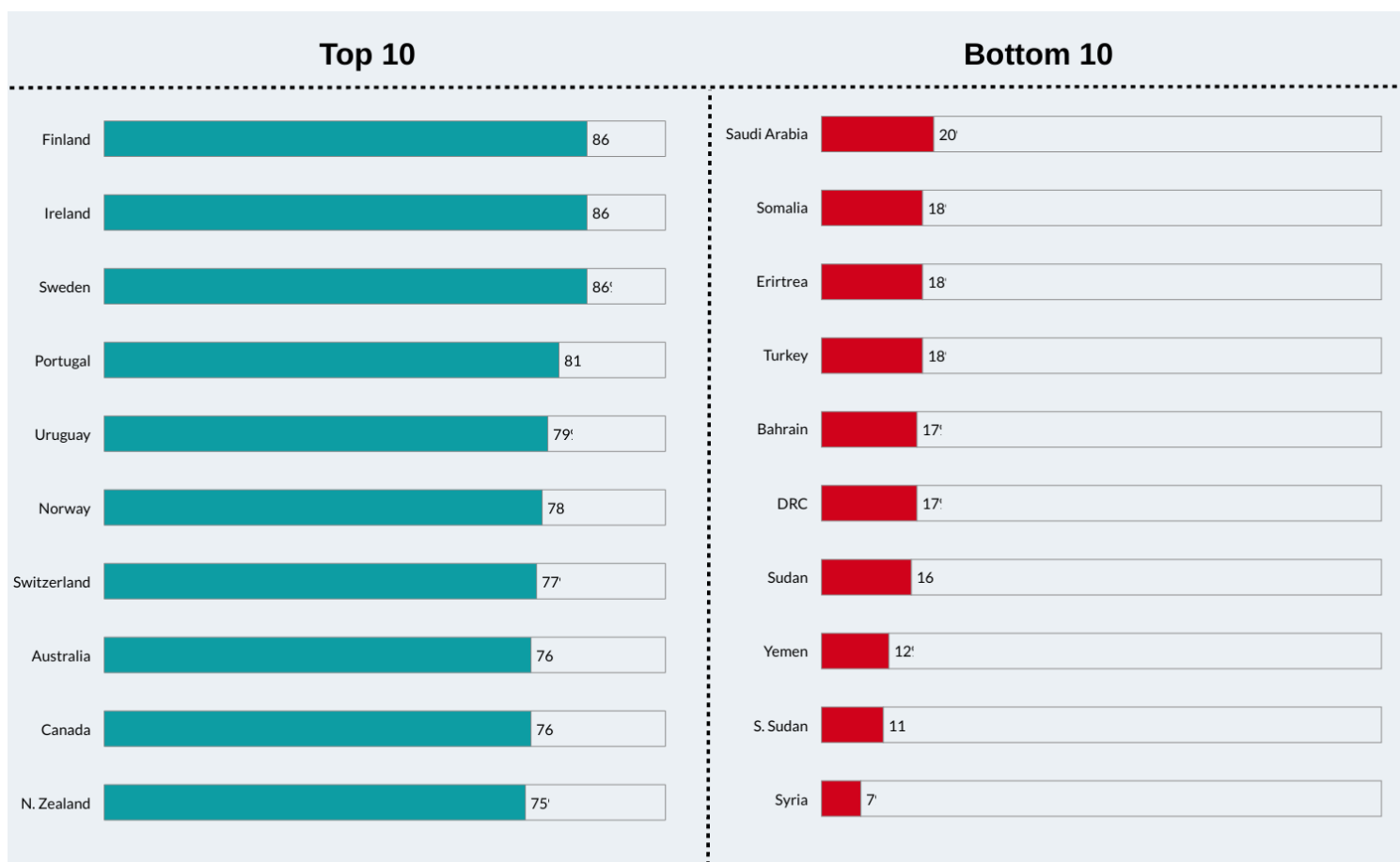| Top 10		Bottom 10	
Finland	86	Saudi Arabia	20
Ireland	86	Somalia	18
Sweden	86	Erirtrea	18
Portugal	81	Turkey	18
Uruguay	79	Bahrain	17
Norway	78	DRC	17
Switzerland	77	Sudan	16
Australia	76	Yemen	12
Canada	76	S. Sudan	11
N. Zealand	75	Syria	7

Figure 3: Map of top and bottom ten states for Governance and Equality.

In this respect, it is instructive to look at the non-Scandinavian countries in the top 10. For instance, while Ireland still faces a number of problems (including abuses against the Traveller population), the Index reflects its increasing commitment to gender equality and fair governance.[116] Again, while Portugal faces a number of problems with corruption, it "is a stable parliamentary democracy with a multiparty political system and regular transfers of power between the two largest parties [and c]ivil liberties are generally protected."[117]

It is also worth commenting on Uruguay's high place in the Index. The World Bank recently noted: "Uruguay stands out in Latin America for being an egalitarian society and for its high per capita income, low level of inequality and poverty and the almost complete absence of extreme poverty."[118] It is noteworthy because despite having a much smaller economy (although a thriving one) than others in the top 10, and below, it has committed to a fair system of governance and, as such, does very well in the indicator.

This state of affairs stands in stark contrast to those at the bottom of the Index. In these countries, citizens face persecution for political opposition or dissent, ongoing violent conflicts, unstable polities, emergency law, external and internal threats, poor life expectancy, unstable or contested borders and internal political institutions, weak civil society institutions, less robust mechanisms for protection of minorities, weaker economies and higher levels of poverty. While such conditions lead to tragedy for many, they are at times used deliberately to serve as a means to expand and solidify power for the few.[119]

Take the bottom three in the governance and equality driver: Yemen, South Sudan and Syria. In each case, while the state is weak (and does not control all of the country), it serves a select or favoured few, abuses against civilians are widespread and gross inequalities are rife. As will be unpacked later, many of these problems are also exacerbated by international intervention. In Yemen, indiscriminate air campaigns, the destruction of fundamental infrastructure (including hospital and water plants), lack of affordable food and the Kingdom of Saudi Arabia's long-held naval blockade have caused the largest humanitarian crisis in the world, widespread cholera, displacement and death. Now, the first few reported cases of COVID-19 have led many to worry that this could cause more death in the country.[120] For many Yemenis, there is a greater sense of inclusion in (and appeal to) particular groups, rather than to the Yemeni state as a whole. Similarly, since the start of South Sudan's civil war in 2013, the country has seen societal and political divides and cycles of violent conflict.[121] Finally, few will be surprised that Syria comes last in this driver. The Assad regime not only refused to honour peaceful public calls for political reform in 2011 but has since shown a willingness to target its own people (including through indiscriminate bombing and the use of chemical weapons) in its attempts to hold on to power.[122]

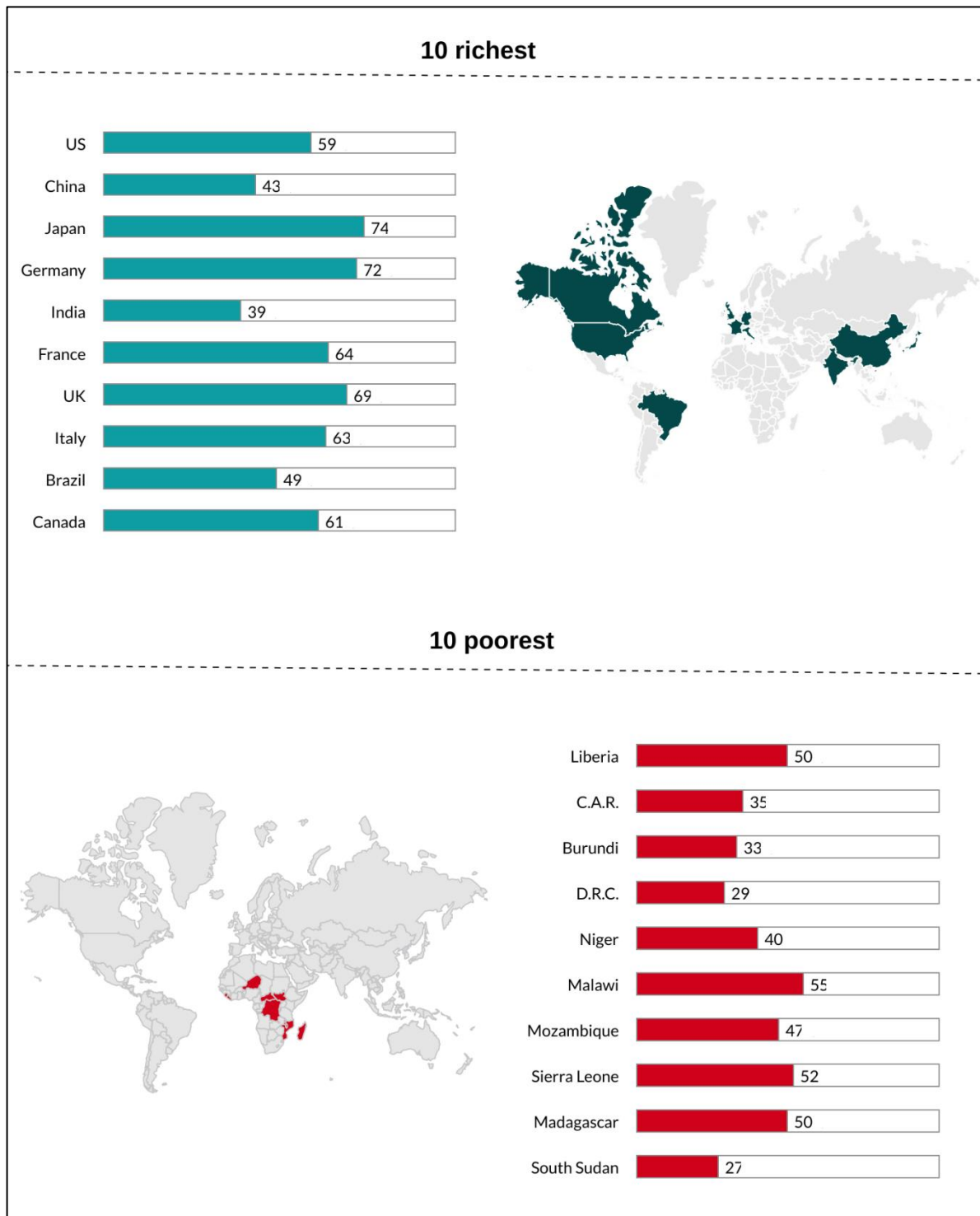## Sustainable Security: The Rich and the Poor

10 richest

Country	Score
US	59
China	43
Japan	74
Germany	72
India	39
France	64
UK	69
Italy	63
Brazil	49
Canada	61

10 poorest

Country	Score
Liberia	50
C.A.R.	35
Burundi	33
D.R.C.	29
Niger	40
Malawi	55
Mozambique	47
Sierra Leone	52
Madagascar	50
South Sudan	27

Figure 4: Ten richest states compared to the ten poorest states ranked on their overall scores.

The comparison between the top and bottom countries in the governance and equality driver speaks to a larger global issue: that, in many cases, those with the strongest economies are those with the greatest ability to exacerbate or alleviate global insecurity. This comparison becomes clearer if we break the Index down into the richest and poorest countries (Figure 4). This reveals two things:

- First, like all measures of security, the poorest countries in the Index are more likely to be caught in some type of violent conflict, with weak institutions, greater group grievances, external and internal military aggression, and poor responses to the global climate crisis.
- Second, there is a huge disparity among the richest countries in the Index, indicating that while all these nations have the ability to develop sustainable security policies, only some have done so.

To the first of these, those with the lowest scores across many areas of the Sustainable Security Index are also some of the world's poorest countries. In some cases, this score is driven by internal policies, such as a failure of the state to address rampant corruption, the marginalisation of minorities or the use of violence against civilians by a country's own defence and security forces.[123] However, the world's poorest countries are, in many respects, those most vulnerable to the failed policies of the richest. Take climate change; "[w]hile rich industrialised countries may be able to cope, albeit at a cost, the changes affecting poor countries will be well beyond their capabilities to handle." As a result of this disparity, tackling climate breakdown has gradually been understood as an issue of global justice.[124] As Kofi Annan has commented: "the countries most vulnerable … contribute least to the global emissions of greenhouse gases. Without action, they will pay a high price for the actions of others."[125]

This links to the second issue: the richest countries in the world contribute most (either negatively or positively) to global sustainable security and, thus, they bear the greatest responsibility for improving their own national policies and contributing positively to global peace and stability. It is clear from the Index that some of these countries are making positive contributions to global sustainable security. For instance, wealthy countries like Switzerland, Japan and Germany do relatively well across the indicators. The scores for these countries demonstrate their holistic and integrated approach to security. They have democracies that work for the majority of their people. They have defence and security forces that do not exacerbate domestic or global instability. And they have domestic and international climate and environmental policies which seek to reduce the impact of climate change. Conversely, others, such as Saudi Arabia, do badly across the drivers of conflict. Their scores indicate that, despite their ability to positively impact global insecurity, they are having a powerful and detrimental impact on global insecurity.

This kind of analysis is essential to understanding how to create more sustainable security. In doing so, the international community must look beyond the extremes of the Index to highlight those with the power to create change and critically analyse whether they are doing so.

Driver 2

The Use of Force

Driver 2: The Use of Force

The top of the Index for the Use of Force driver is, again, populated with liberal democracies with a good record (both internally and externally) of looking beyond hard security solutions to address instability. That is not to say that these countries do not have problems (both internally and internationally).[126] Overall, though, these countries have not experienced rampant corruption in the security sector or the extortion or abuse of civilians by the police. For instance, New Zealand (which does well in the Index) scores highly on the 2020 Transparency International Corruption Perception Index.[127] It has also sought to shift to a "policing by consent" approach which looks at the social causes of violence in their countries.[128]

Externally, countries that do well in the Index are ones that do not repeatedly look for military responses to instability in the world. They are not engaged in large-scale military interventions abroad and – when they do engage abroad – they tend to support international cooperation, such as through UN missions. For instance, Japan does well in the Index and is one of the largest financial contributors to UN peacekeeping missions.[129] In some ways, because the Index only measures negative contributions to sustainable security (for instance, it measures conflicts engaged in but is unable to capture successful diplomacy which avoided conflict), countries tend to do well based on what they don't do rather than what they do. Many countries in the top half of the Index do not have nuclear weapons; in fact, the highest scoring nuclear state is the UK. They do not have large defence industries within their country, Japan is the only country in the top ten with a large arms industry. They also have relatively small national military budgets.
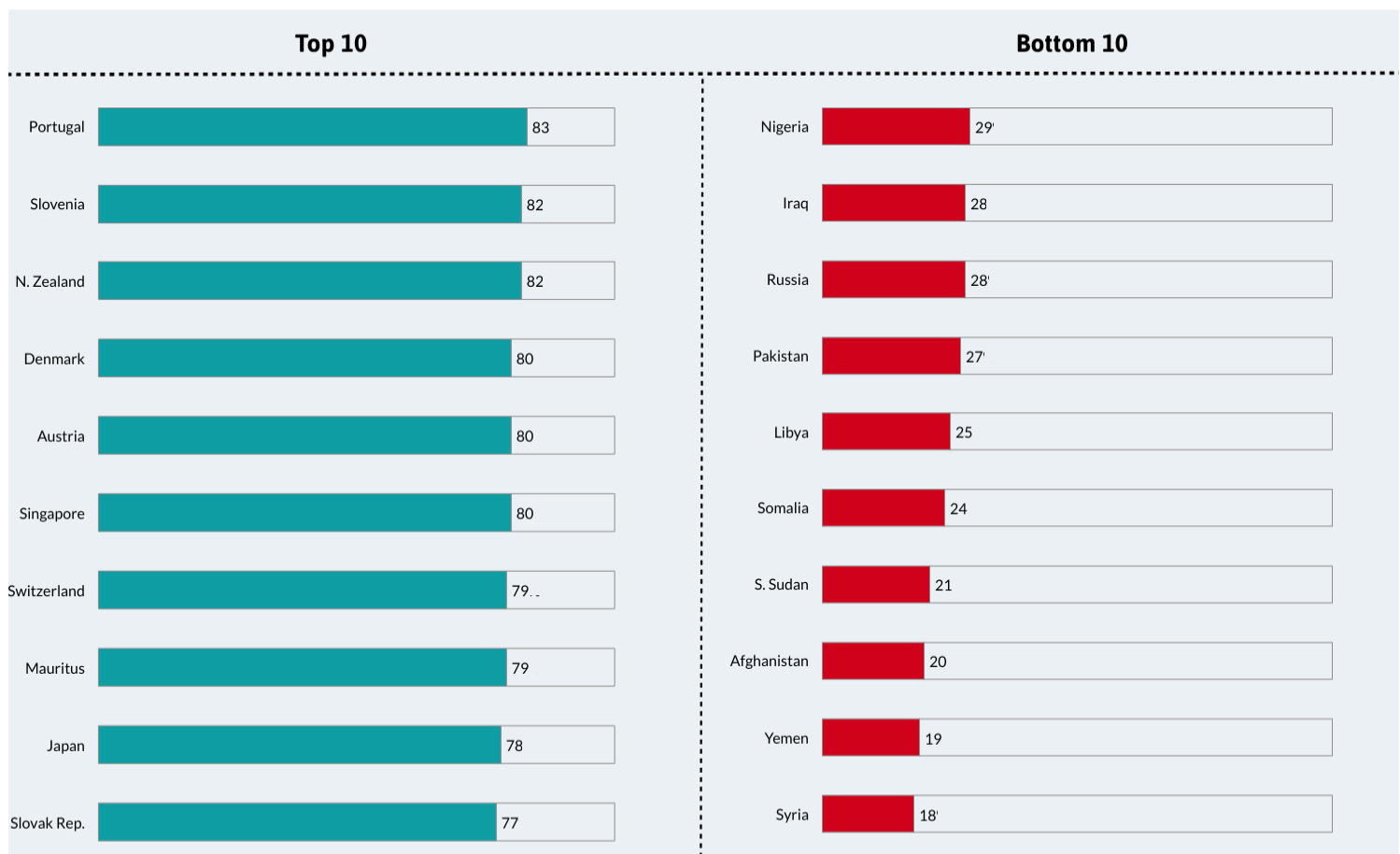
Top 10		Bottom 10	
Portugal	83	Nigeria	29'
Slovenia	82	Iraq	28
N. Zealand	82	Russia	28'
Denmark	80	Pakistan	27'
Austria	80	Libya	25
Singapore	80	Somalia	24
Switzerland	79..	S. Sudan	21
Mauritus	79	Afghanistan	20
Japan	78	Yemen	19
Slovak Rep.	77	Syria	18'

Figure 5: Table of top and bottom ten states for the Use of Force.

A very different story is true for the bottom countries in this driver, where countries have been engaged in prolonged and intense conflict, security forces have been accused of abusing civilians and there have been reports of rampant corruption.[130] For instance, Crisis Group reported that South Sudan's security services had engaged in "appalling levels of brutality against civilians, including deliberate killings inside churches and hospitals" in the country.[131] There is rising concern over Russia's treatment of some in society, particularly the LGBTQ community.[132] In Syria, since 2011 (and even before), tens of thousands of people have been tortured, ill-treated and killed in prisons and detention facilities operated by the Syrian government, in flagrant violation of international law.[133]

The bottom countries in this driver (like the bottom of the whole Index) have also seen intense and enduring international intervention. States like the UK, the US, France and others have publicly stated a desire to address instability in the world's "ungoverned or weakly governed spaces" and so have intervened in some of the poorest and most conflict affected countries in the world.[134] In a now famous conversation between then-newly appointed President Trump and then-US Secretary of Defense James Mattis, Mattis explained that Trump needed to send more soldiers to Afghanistan "to prevent a bomb going off in Times Square."[135] Similarly, when former UK Prime Minister Theresa May stated that preventing terrorist attacks in the UK meant addressing "the safe spaces that continue to exist in the real world", she added: "Yes, that means taking military action to destroy ISIS in Iraq and Syria."[136] French President Emmanuel Macron has also said that France's presence in the Sahel is based on "just one goal: to protect us."[137]

Many commentators have now noted the problems of seeing weak or failing states as potential safe havens for terrorist organisations, especially when the response from these same countries is militarily-focussed.[138] These warnings have also been born out in the experience of Western military intervention since September 2001. As Susanna P. Campbell notes: "Over the past two decades, an entire industry has emerged to help fix the problem of fragile and conflict-affected states."[139] Yet, this Index, like many like it, shows that these countries are still performing badly across all the drivers of sustainable security.
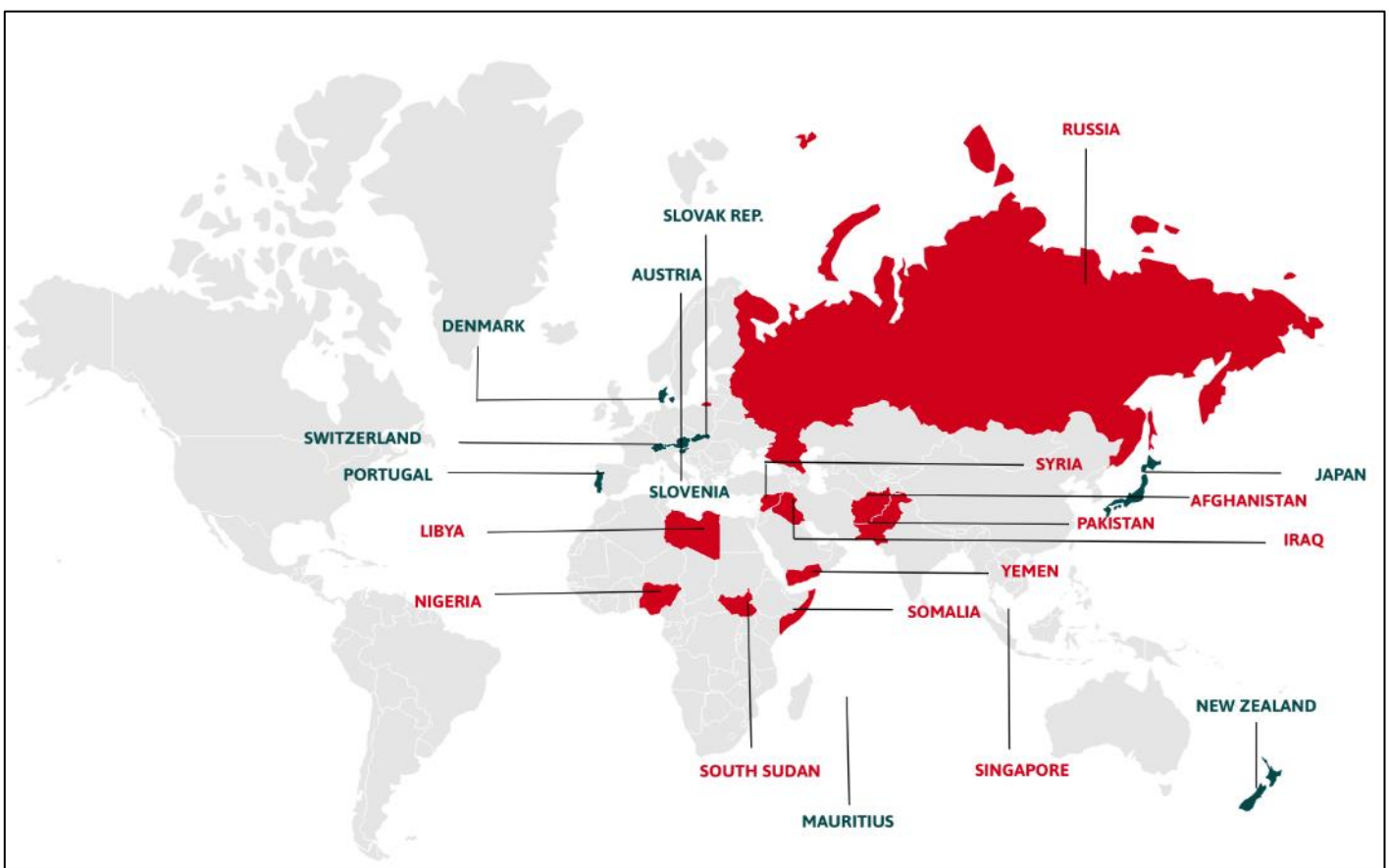

Figure 6: Map of top and bottom ten states for the Use of Force.

The low scores of these countries, arguably, indicate that Western approaches to instability have largely failed. Reflecting on engagements such as these, it is now widely accepted by practitioners and policymakers that to address violence in a country, the root causes of instability must also be addressed. For instance, the UK's own policymakers' guide to stabilisation distinguishes between negative peace (which sees "the absence of war or direct physical violence while the root causes of conflict remain ignored") and sustaining peace (where there are "activities aimed at preventing the outbreak, escalation, continuation and recurrence of conflict, addressing root causes, assisting parties to end hostilities, ensuring national reconciliation, and moving towards recovery, reconstruction and development.")[140]

Similarly, the US Stabilization Assistance Review noted that "the international community is providing high volumes of security sector training and assistance to many conflict affected countries, but our programs are largely disconnected from a political strategy writ large, and do not address the civilian military aspects required for transitional public and citizen security."[141] In such circumstances, the consequences for civilians can be devastating; since 2007, 23% of violent incidents against civilians were perpetrated by state forces rather than anti-regime groups.[142] In such contexts, the militarily-focussed solutions that have come to define international support in places like the Middle East and the Horn of Africa are not going to work and will likely feed a self-perpetuating cycle of violence and conflict that currently sees almost half of all post-civil war countries relapse within five years.[143]

The fact that policymakers and experts alike have recognised this failure raises serious questions around why many states still reach for military solutions to political problems when engaging abroad. The Index was created to highlight the full range of drivers that need to be considered to build true peace and stability in a country and a region. The Index attempts to show that the international approach cannot just look at security solutions but must be thinking about other factors, including how much the system works for the good of all its people, how much a state's defence and security forces are a force for good both internally and externally and how much it contributes to the health of our planet. The Index adds to the continuing growth of literature now calling for the international community to look at all these other issues when engaging abroad.

Soldiers on border patrol in Niger. Image credit: USAFRICOM/Flickr.
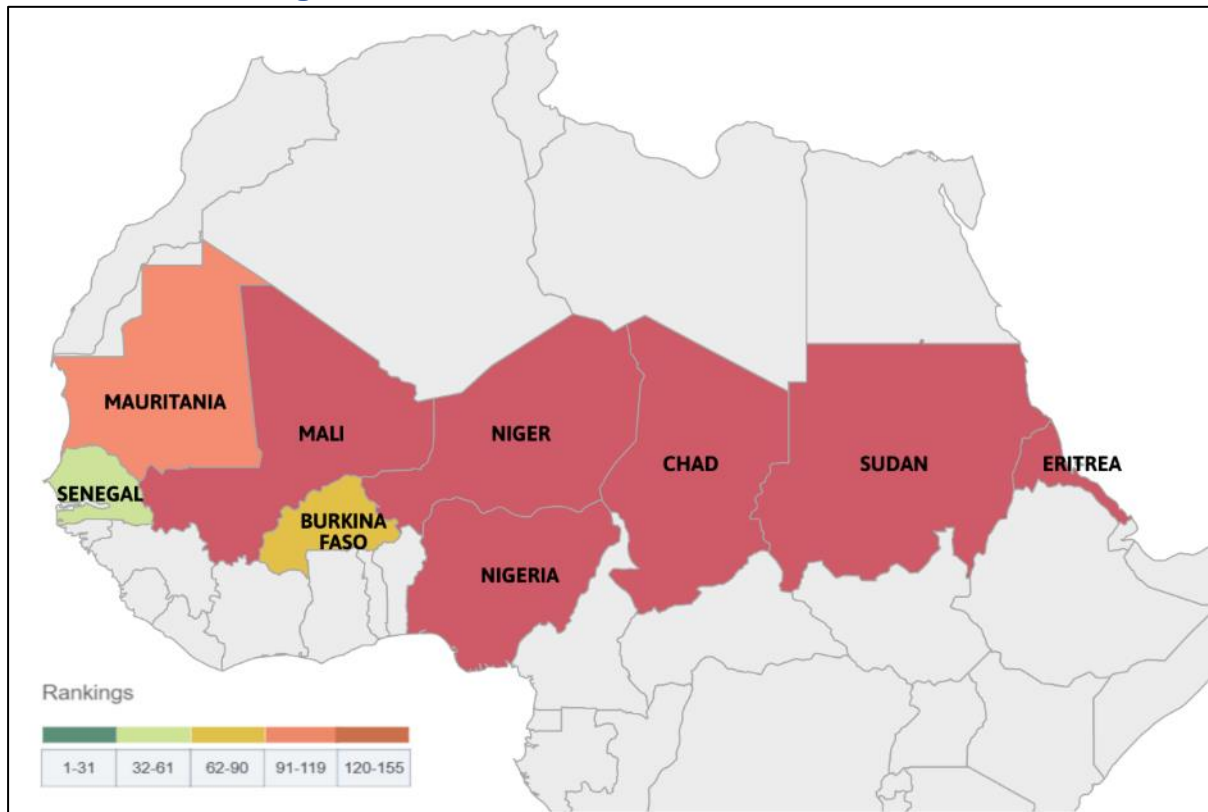
The Sahel: Avoiding the Same Mistakes

Figure 7: Map of Sahel based on overall Index scores.

An area to watch in this regard is the Sahel. The Sahel is a region that has historically been troubled by weak governance, ethnic tensions, marginalisation of minorities, high levels of youth unemployment, frequent drought, high levels of food insecurity and low development progress.[144] Since the 2012 crisis in Mali, the region has also witnessed an escalation in jihadist activity and a burgeoning of criminal networks and trafficking.[145] The area is therefore subject to increasing international concern.[146]

The central Malian government has, since the 2012 rebellion, been unable to fully restore public administration and provide security over large parts of the country. In the absence of the state's governance, the populations have looked elsewhere for basic services and security. Groups like al-Qaeda and the emerging Islamic State in the Greater Sahel have tapped into anti-government grievances in Mali to help them gain support and offered services to local populations.[147] In turn, they have filled the vacuum and offered alternate forms of governance in such areas. As research from SIPRI has documented:

> "[S]ome armed groups, after establishing their security role among the population, have also attempted to present themselves as social and political actors … This is particularly true for jihadist groups with an explicit social and political programme—their interactions with the communities of central and northern Mali have contributed to a change in the perception of the role of the state and the customary authorities."[148]

Despite large international investment in the Sahel, violence has increased. The northern region of Burkina Faso, Mali and Niger has been suffering some of the deadliest attacks to date, with the area ravaged by inter-community conflict and attacks on military, peacekeepers and civilians. The number of reported violent events linked to militant Islamic group activity in the Sahel has been doubling every year since 2016 (from 90 in 2016 to 194 in 2017 to 465 in 2018).[149] Added to this, there have been abuses of civilians by state forces. For instance, the Malian armed forces have been accused of shooting civilian marketgoers and burning members of a pro-government self-defence militia.[150]

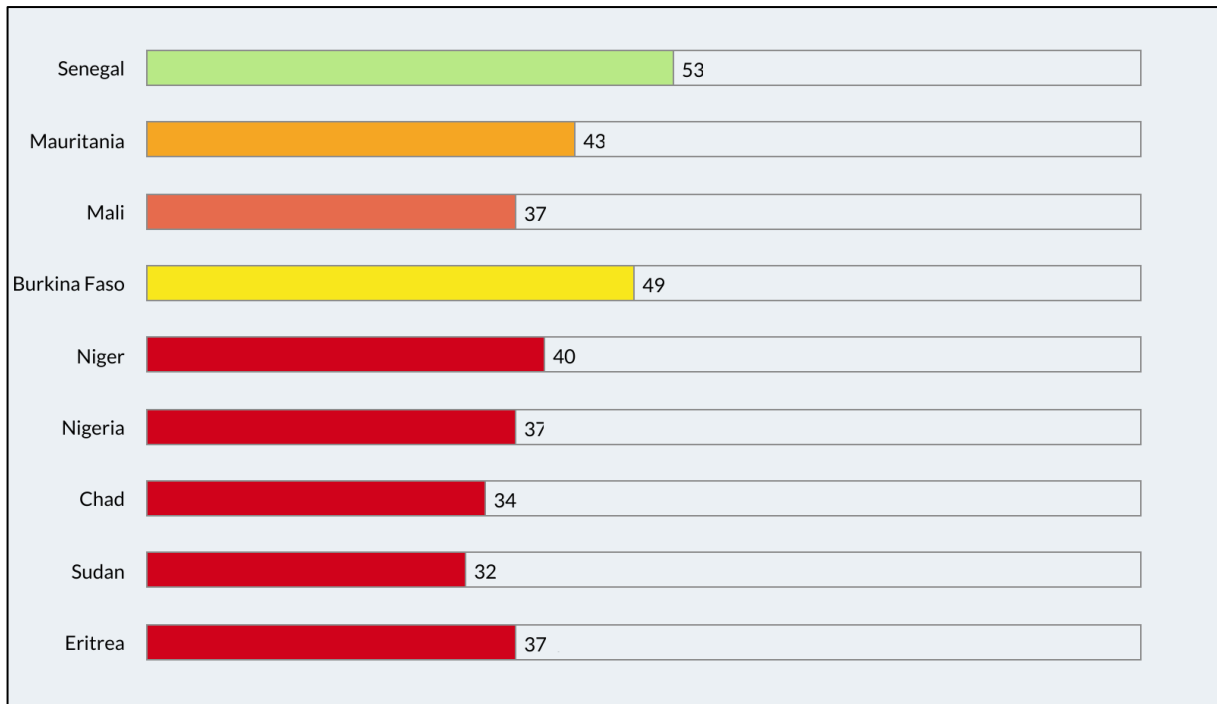| Senegal | 53 |
Mauritania	43
Mali	37
Burkina Faso	49
Niger	40
Nigeria	37
Chad	34
Sudan	32
Eritrea	37

Figure 8: Overall scores of states in the Sahel.

This violence has worsened the humanitarian situation. Since January 2018, more than one million people have been internally displaced across the Sahel region.[151]

The drivers of this instability go well beyond military causes. During interviews ORG conducted in Mali, we heard that "[i]njustice is actually a huge motivator among the people I've spoken to who end up joining [extremist] groups."[152] Similarly, an International Alert study on young Fulani people in the regions of Mopti (Mali), Sahel (Burkina Faso) and Tillabéri (Niger) found "real or perceived state abuse is the number one factor behind young people's decision to join violent extremist groups."[153]

These problems are also made worse by the effects of climate change. The International Committee of the Red Cross (ICRC) recently stated: "The effects of climate change are exacerbating conflict between communities in both Mali and Niger, leading to a deepening of poverty, a weakening of public services and a disruption to traditional means of survival."[154] The Sahel Alliance (an initiative aimed at improving the cooperation between international actors engaged in the Sahel region) has also stated that the situation in the Sahel is "worsened by climate change" and has made it one of its six priorities for the region.[155]

However, while this recognition is an important step forward, much of the international engagement in the Sahel is still militarily focussed. For instance, the EU Training Mission to Mali is currently training large numbers of local troops in basic soldiering without exerting much pressure on the government in Bamako to introduce structural reforms.[156] This disparate training occurs despite the fact the Malian Armed Forces (and government) have been accused of ethnic bias."[157] Accelerating the growth of an unrepresentative force in the context of ongoing conflicts between different ethnicities in Mali could be extremely detrimental to long-term security.

If the international community wants to have a positive impact on sustainable security, then these military training efforts are unlikely to help – and are likely to make things worse. To end the cycle of violence following international military engagement, policymakers must bear in mind all the drivers of sustainable security, not just the militarily focussed ones.

Driver 3
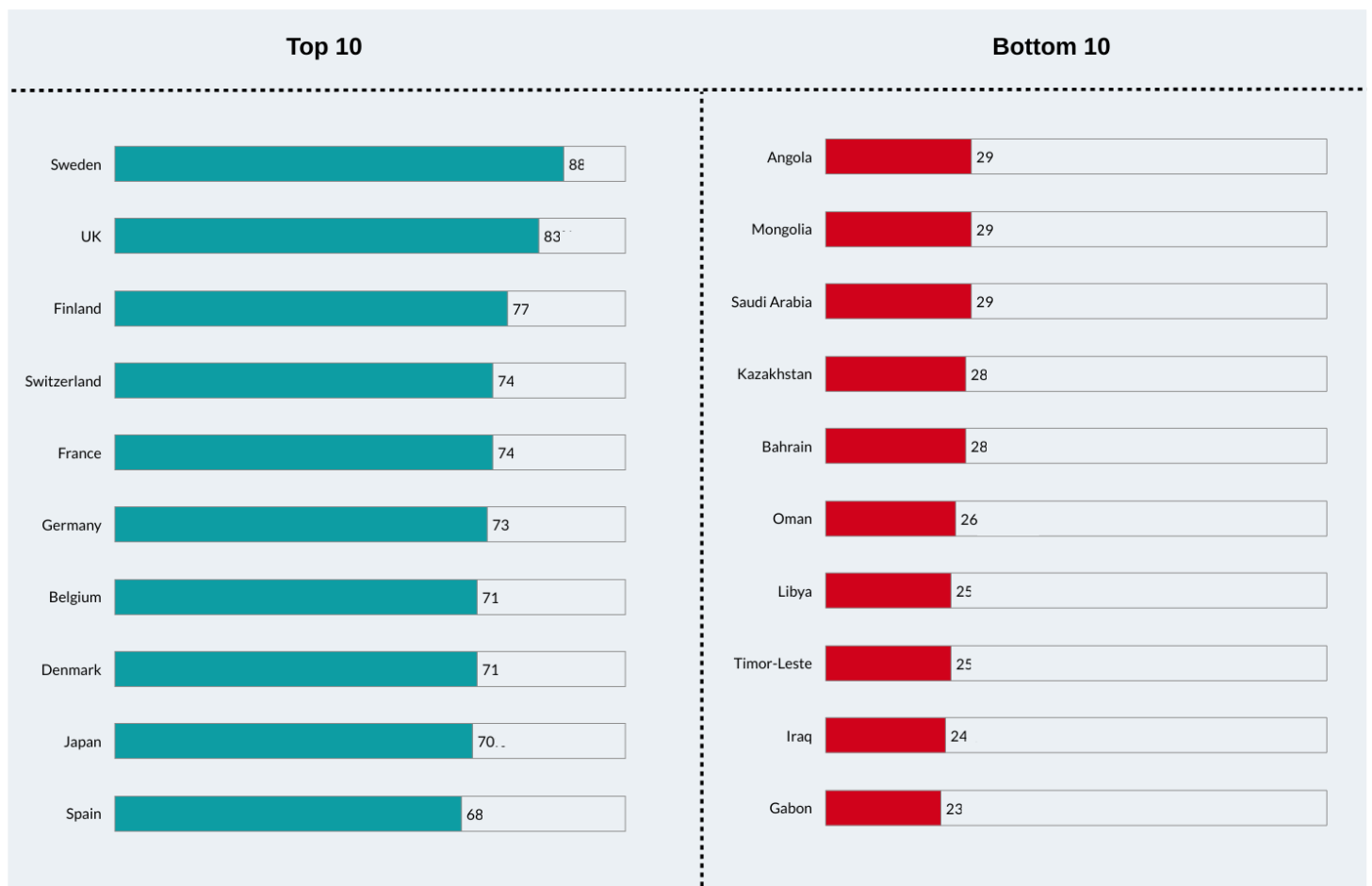Environmental Governance

Driver 3: Environmental Governance

Top 10		Bottom 10	
Sweden	88	Angola	29
UK	83	Mongolia	29
Finland	77	Saudi Arabia	29
Switzerland	74	Kazakhstan	28
France	74	Bahrain	28
Germany	73	Oman	26
Belgium	71	Libya	25
Denmark	71	Timor-Leste	25
Japan	70	Iraq	24
Spain	68	Gabon	23

Figure 9: Table of top and bottom ten states for Environmental Governance.

The bottom of the Environmental Governance driver tells three stories. The first is that war, and the institutions that prepare for it, exacerbate climate change.[158] For instance, in the US, which has the largest military budget in the world and is one of the largest contributors to climate change, 70% of all energy gets consumed by moving troops and equipment around the world. Brown University's Neta Crawford has estimated that since 2001 the US military has emitted 1,212 million metric tons of greenhouse gases.[159] In fact, the Department of Defense "is the world's largest institutional user of petroleum" and "[i]f the Pentagon were a country, it would be the world's 55th biggest emitter of carbon dioxide."[160] The US military alone emits more greenhouse gases than several other countries, including Morocco, Peru, Hungary, Finland, New Zealand and Norway.[161]

This is also evident in countries that are affected by war. For instance, Iraq and Libya are at the bottom of the Index and demonstrate how conflict can dramatically decrease the environmental health of a country. Riyad Abdullah Fathi *et al* (2013) note how two major conflicts in Iraq since 1990 have greatly damaged the global health of the country and, as a result, Iraqis have been exposed to increased levels of uranium. They state that Iraq's citizens:

> "…are facing about 140,000 cases of cancer, with 7000 to 8000 new ones registered each year. In Baghdad cancer incidences per 100,000 population have increased, just as they have also increased in Basra. The overall incidence of breast and lung cancer, Leukaemia and Lymphoma, has doubled, even tripled."[162]
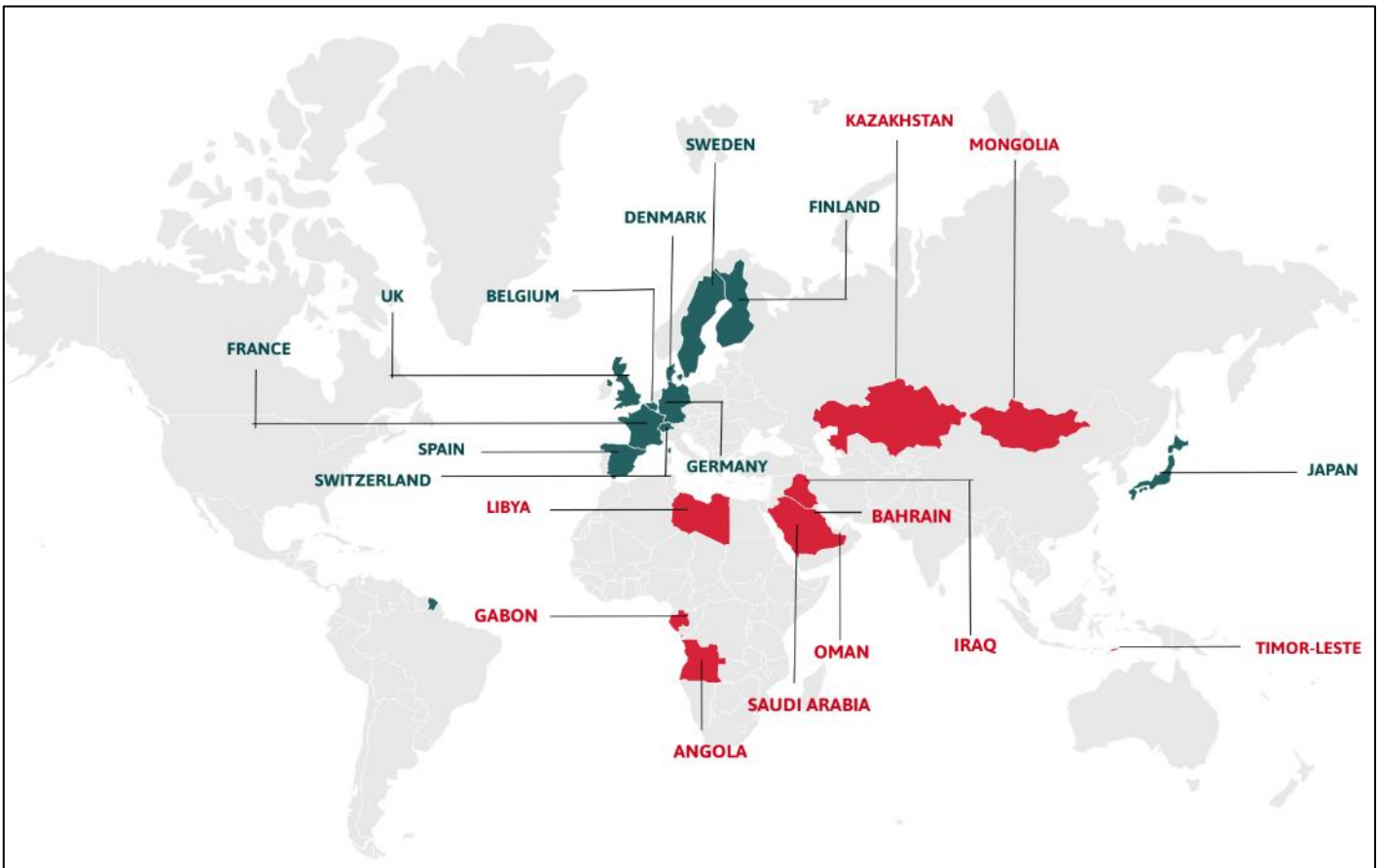
Figure 10: Map of top and bottom ten states for Environmental Governance.

The second story is that very poor countries are often unable to sufficiently adapt and deal with the consequences of climate change; for instance, Gabon and Timor-Leste seem to do especially badly in the Index for this reason. The latter is one of the world's most vulnerable countries to natural disasters due to a high-risk of extreme weather events and natural disasters like earthquakes, tsunamis and heavy rainfall. Around 80% of the population relies on agriculture as its main source of income and consumption. Climate change puts pressure on food security due to low yields and post-harvest losses caused by events like flooding.[163] The country's temperature is predicted to rise by 1.5 °C and its rainfall levels by 10% in the next thirty years. By 2050, the population is expected to increase from 1 to 2.5–3 million. These developments could have huge implications for human security in the country due to the stresses they may potentially place on resources.[164]

Despite its low score, Gabon represents an interesting case study of a developing state adapting to climate change. Gabon is densely covered by tropical rain forest which means it has also attracted logging companies who have contributed to deforestation and subsequently to the country's carbon emissions. In the past, the dilemma for the country was to find a way to reconcile its climate commitments in the Paris Agreement with its economic dependence on logging.[165] Nevertheless, it has developed initiatives through improved forestry practices, designed to reduce carbon dioxide emissions and maintain wood production at a sustainable level. Gabon recently entered a global partnership of other state governments, businesses, and civil society to reduce the contribution of logging to climate change and biodiversity loss in the country.[166] Last year, it received $150 million from Norway for its rainforest conservation work.[167] Gabon's performance in the field of climate and the environment will be one to watch in the future.

The World Climate Security Report 2020 stated that "climate change often poses a double burden in already fragile states or societies":

1. "[C]limate change stressors can make it difficult for fragile states, or brittle states that seem stable but contain serious vulnerabilities, to handle increasingly intense or frequent phenomena such as persistent droughts, flooding, or natural disasters.
2. "…[C]limate change [is linked] to an increased likelihood of conflict, especially in places with existing tensions."[168]

The final story, related to the two prior points, is the fact that some relatively rich countries have not done enough to improve their national impact on climate change. Part of the 2015 Paris Agreement stipulated that climate finance would be used to help developing countries cut greenhouse gases and protect their people from climate breakdown's consequences.[169] In the agreement, wealthy countries pledged to provide $100billion (£81billion) a year to the poor by 2020.[170] But a recent study found that current climate finance is not reaching those most vulnerable to the effects of climate breakdown. The report found that half of all developing countries in the study receive less than $5 per person per year in climate finance.[171] This suggests that the commitments made in the Paris Agreement are not being met by some considerable margin.

A case in point is the difference between Oman and Uruguay. The country is the 26th wealthiest country in the world by GDP per capita[172] and a signatory of the Paris Agreement, yet the World Bank Group said of Oman:

> "Oman's economy is dominantly dependent on crude oil, though investments in economic diversification are being made. Oman imports more than 50% of its food to meet the needs of its population. Increasing climate variability is likely to negatively impact the country's already-struggling agricultural sector. Oman's economic development is at risk to the potential impacts of climate change."[173]

In contrast, Uruguay is the 61st richest country in the world per capita[174] and, yet, has delivered far better outcomes for its citizens in terms of access to clean water and air pollution. This basic cross-country comparison also demonstrates the virtuous (or vicious) circle effect of mutually reinforcing policy decisions. On the one hand, Oman is contributing substantially to a changing climate that will increase water stress for citizens that already lack access to clean water. On the other hand, Uruguay is protecting its people from lethal air pollution, simultaneously limiting its contribution to a changing climate while ensuring that it is more resilient to the detrimental effects of higher water scarcity imposed by changing environmental conditions. Underlying these differences are the strikingly better scores Uruguay receives for governance from the Global State of Democracy Initiative indices when compared with Oman. This same problem can be seen globally through global expenditure on climate change and military might.

The Wrong Priorities: Comparing Military and Climate Change Expenditures

In 2018 National Governments' military expenditures outstripped climate change spending by up to twenty times as much. This encapsulates the dramatic mismatch between ends and means that has been the focus of the sustainable security critique since its foundation. A rational analysis of how much "security per dollar" is realised through military spending versus other avenues would logically suggest a substantial transfer of resources away from defence to climate change.

One helpful way of thinking about sustainable security as a concept is through the fiscal lens: people arguably get less "security" per dollar spent on those areas most closely associated with security and defence compared to others. This constitutes a mismatch between ends and means; if the ends of security include, for example, the priority to keep citizens safe from harm then a new aircraft carrier represents a very inefficient and expensive "means" to deliver this objective. A stark illustration of this point is provided by comparing global military and climate change expenditures.

This is not a straightforward task: while reliable figures for defence spending are annually published by SIPRI, reputable estimates of climate change expenditures are hard to come by, partly because there is still no internationally agreed definition of "climate finance."[175] The Climate Policy Initiative (CPI) annually publish what is arguably the most forensic and comprehensive open-source estimate of climate finance available according to a consistent methodology.[176] Two years ago ORG published

a comparison of military and climate change spending drawing on CPI data for the year 2016; the first exercise of its kind.[177]

Trying to ensure we were comparing "like with like" we compared public sources of climate finance with defence expenditures, finding that in 2016 national governments spent a total of $141 billion addressing climate change, compared with $1.66 trillion in global defence spending, a ratio of 12:1. CPI have since revised their figures for 2016, incorporating additional spend at the project level reported after that year, the ratio drops to roughly 8:1.[178] Performing the same exercise for the latest year where data is available (2018) we find that the ratio has dropped again to 7.2: 1 ($253 billion in climate finance from public sources versus $1.8 trillion global defence expenditure).[179]

Ostensibly, the picture is therefore of a smaller overall disparity than first thought, which has narrowed over the past two years. Even taking this into account, there remain profound questions about whether this constitutes a sensible allocation of resources from a security perspective. To take one example, the Australian Government committed $3.8 billion AUS / $2.5 billion USD to emissions reduction in its 2019 / 2020 budget.[180] Even if we ignore the many domestic criticisms of this pledge and take it at face value, does this commitment make sense compared with an annual military spend of $26.6 billion USD? If the aim of the Australian Government is to keep the country "safe", is a spending plan that allocates a sum to conventional defence ten times that spent on climate change the best way to go about it?

Conservatives in Australia have been quick to leap on the "attributability" problem. The nature of climate science largely precludes specific predictions, concentrating instead on general trends; it is very difficult if not impossible to alight on a single climatic event and say, "that's climate change." However, a trend of increasingly severe bush fires was repeatedly predicted by several authorities, some dating back to the 1980s.[181] The second "Garnaut Review", published in 2011, explicitly cited 2020 as the year to expect this trend to become evident. The "weather" (what you get) is ever more reliably corresponding to "the climate" (what climate scientists predict). The bush fires will happen again, and similar events will occur globally with greater frequency and severity.[182]

World leaders celebrate after the historic adoption of the Paris Agreement on climate change in 2015. Image credit: UN Photos/Flickr.

However, this is not the end of the story. Looking more closely at CPI's figures, they also provide a breakdown of climate finance by "instrument" (grants, soft loans, market rate loans, balance sheet financing etc). While no military programme in the world is funded by commercial debt, the same cannot be said for publicly funded climate change projects: of the $253 billion in 2018 climate finance from public sources, $160 billion was made available through debt charged at the market rate, with the expectation of a financial return. "Grant" financing (which in effect comprises all global military spending) accounted for $93 billion, giving us a very different picture; a world where national governments actually spend twenty times more on defence than climate change.[183]

This bleaker scenario seems even more perverse when dual or co-benefits are taken into account. One of the many reasons that there is no international definition of climate finance is that it is extremely difficult to pin-point what exactly climate change spending is. There are many initiatives, from mass-transit investments to domestic heating efficiency measures, that provide additional benefits beyond contributing to emissions reduction or adaptation.[184] Scientific work led by Diana Urge-Vorsatz and Sergio Herrero provides the clearest overview: not only is it the case that practically every dollar spent on "climate change" will have additional benefits to society, but in many cases "non-climate benefits are likely to be the primary reasons for pursuing interventions." [185] A key example here is the Delhi subway, which was originally embarked upon to relieve traffic congestion, but also enhances air quality, in addition to reducing GhG emissions.

Reallocating money from defence to climate change would represent a better "deal" for the average citizen in terms of genuine security per dollar. Such a reallocation would also offer budgetary pathways to the necessary Green Economy that would command broader support from voting publics sceptical of deficit spending.

Towards a Sustainable Security Strategy: The Case of the UK

This Index does not profess to provide all the answers when it comes to sustainable security; instead, it challenges traditional conceptions of security to improve the debate over national and global priorities. The implications of this will be different for every country and so, to examine this further, the next section will look at what such a conception of security could mean for the UK.
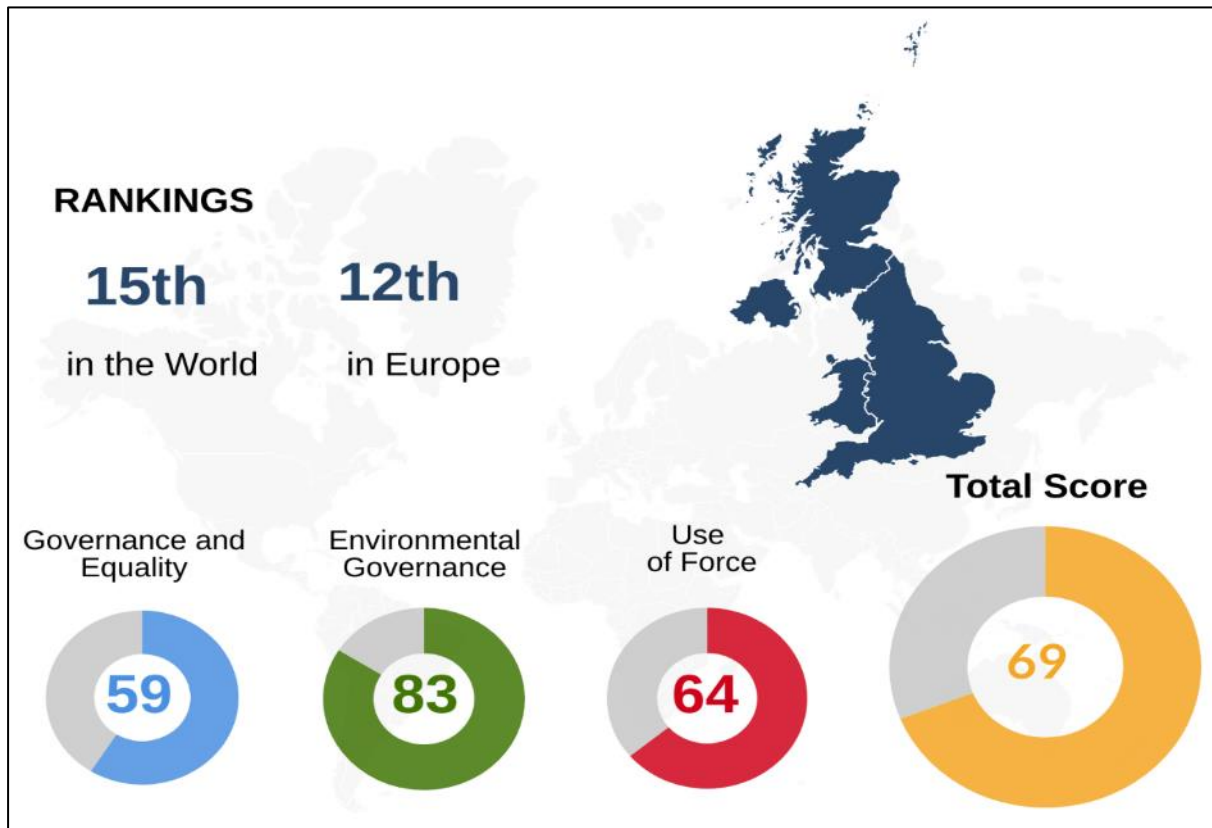

Figure 11: Graphic of scores and rankings for the United Kingdom.

This is particularly pertinent as the next two years will be ones in which the UK rethinks its approach to security. The next Strategic Defence and Security Review – called the Integrated Security, Defence, Development and Foreign Policy Review or the 'Integrated Review' for short – is due early next year (having been postponed because of the COVID-19 crisis). It comes at a critical time for the UK. With the election of Boris Johnson as Prime Minister at the December 2019 General Election, the UK's departure from the EU has now been confirmed. Already it appears that Johnson's Government sees the decisive election outcome as a mandate for a significant shake up of not only the machinery of the UK Government – including the role of the Foreign Office and the Department for International Development – but the way the UK engages internationally. The spread of COVID-19 means the review will also take place during, or in the immediate aftermath of, one of the largest pandemics and global crises in living memory, which is likely to have lasting defence and security implications for the international community. While the threat posed by global pandemics has featured heavily in past UK security reviews, it is likely to feature more prominently than ever before in this one.[186]

At this stage, it appears one of the outcomes sought through the Integrated Review is to establish how the UK can maximise its identity as "Global Britain."[187] The Royal United Services Institute's Malcolm Chalmers argues that "[t]he UK is now on the brink of one of the most important shifts in its international position since 1945."[188] It is essential that this shift is informed by a sustainable security approach.

There is hope it might. Previous defence and security reviews – by the UK Government, the Ministry of Defence and other British departments – have noted the importance of looking beyond traditional

definitions of security to consider factors like climate change, global inequality and good governance.[189] Similarly, over the last decade, there were certainly events which could be described as important achievements in terms of sustainable security. The UK played a key role in the Iran nuclear deal and aided in securing international support for the Paris climate agreement. It has also increasingly recognised the importance of climate change and marginalisation to global security. For example, former Prime Minister Theresa May said: "There is a clear moral imperative for developed economies such as the UK to help those around the world who stand to lose most from the consequences of manmade climate change."[190] Similarly, in his introduction to the Stabilisation Unit's 2018 guide to stabilisation, former joint-DFID-FCO Minister Alistair Burt said: "the UK Government's goal in conflict-affected contexts is to support the development of lasting peace and stability, which is built with the consent of the population."[191]

However, there are also many areas where the UK needs to improve. The UK was part of an intervention in Libya in 2011 which subsequently saw the country descend into anarchy, with warring factions vying for control over resources in oil-rich regions. ORG has also charted how the UK's use of remote warfare[b] in places like Syria, Somalia and Afghanistan has risked exacerbating rather than alleviating the drivers of conflict, placed the brunt of the conflict on civilians and undermined the transparency and accountability of military operations abroad.[192]

Phantoms of older interventions have also haunted Britain in the past decade, especially the Iraq War.[193] The Chilcot Report, published in 2016, determined that the lack of strategy for post-invasion Iraq left it open to the sectarian violence and extremism. This wreaked havoc in Iraq and the surrounding region, one consequence of which was the rise of the Islamic State in Iraq and Syria (ISIS). UK arms exports also rose substantially recently, rising to a record £14 billion in 2018, and have been central to the ongoing Saudi-led bombardment of Yemen which is regarded as the world's worst humanitarian crisis.[194] The UK also continues to focus on hard power solutions to global insecurity. The UK is one of the largest spenders on military equipment, including investing large sums on aircraft carriers and in ways to replace its nuclear weapons and the submarine delivery system.[195]

The important changes that the UK is undergoing this year and next provide space to take stock of what the UK does well and what it does badly and to develop a better national strategy for global sustainable security.

What could a more sustainable security strategy look like for the UK?

A starting point for answering this question could be to rethink what security means beyond the use of military capabilities. This means designing a foreign policy that would enable Britain to be a world leader in conflict prevention, peacekeeping, peacebuilding and economic and environmental reform.

The Index suggests that Britain does a relatively effective job in tackling some of the issues related to achieving sustainable security. It could assume a role as a world pioneer of this approach. Paul Rogers, ORG Fellow, outlined several ways the UK could do this.[196]

In the short-term some changes could include:

- Prioritising its commitment to the United Nations and all its agencies. The UK can play a core role in the expansion of UN peacekeeping capabilities, including the establishment of a standing force, and commit a significant part of UK military forces to this, equipping and training them as necessary. As Williams and Curran convincingly argue, greater British participation in UN peace operations would increase their effectiveness and strengthen the overall UN system.[197] This would be especially true if it is part of the UK's continued efforts to encourage other countries to do the same.

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[b] Remote warfare refers to the trend "in which countries like the United Kingdom choose to support local and regional forces on the front lines rather than deploying large numbers of their own troops."

- Pledging to reverse recent cuts to Foreign and Commonwealth Office (FCO) budgets and their impact on the diplomatic service and expand the FCO's resources in the areas of dialogue, mediation and conflict resolution. According to the Global Peace Index report, the global annual expenditure on peacebuilding in 2016 was equivalent to less than 1% of the global cost of war that year.[198] Britain has been a keen supporter of the Sustaining Peace agenda.[199] This initiative involves the United Nations renewing its commitment to peacebuilding, placing greater emphasis on conflict prevention and addressing the drivers of conflict – as well as highlighting the need for international partnership and co-operation. The UK should continue to support this agenda.
- Building dialogue with international and local actors in addressing the social, economic and political implications of COVID-19. The global pandemic has shown the need for governments to facilitate frank and open debate. The UK has shown its willingness to do this through daily press briefings. This is no less true with discussion beyond national borders. The UK should encourage the international community to work even harder to overcome the barriers to effective diplomacy in a time of COVID-19 to share lessons and come together to find solutions. The UK should also use its expertise to ensure these conversations include those most impacted by the spread of the disease: people in weak and conflict affected states. Engaging with civil society groups when responding to the outbreak of COVID-19 will not be easy, but is essential to stop the disease and mitigate the risk of more conflict in the future.
- Improving capabilities for providing emergency relief in responses to natural and other disasters, including epidemics. Given the RAF and Royal Navy/Fleet Auxiliary's advantages in global logistics and the Army's advantages in engineering and healthcare, these may be built into existing capacities even while resourcing a more efficient civilian capability to "project" humanitarian assistance. In fact, Anne-Marie Trevelyan, the Secretary of State for International Development, is said to be examining proposals for her department to buy a ship similar to the Mercy-class vessels used by America.[200]
- Placing more emphasis on a positive UK role in arms control, not least in the areas of biological and chemical weapons, but also supporting the long-term aim of a UN Nuclear Weapons Convention. Successive UK Governments have shown some global leadership in the establishment and the 2014 ratification of the Arms Trade Treaty, which sets global regulation standards to the international trade and sale of arms. But recently, the UK was the world's second largest arms exporter. British defence exports were worth £14bn in 2018, with sales to Saudi Arabia, the United Arab Emirates, Qatar and other countries in the Middle East accounting for nearly 80% of that figure.[201] The UK could strengthen the licensing process and its scrutiny of arms sales by utilising DFID's expertise in assessing the risks of arms sales and the role that Parliament can play in providing effective scrutiny over the UK Government's arms exports. Most importantly, the UK could work towards stopping the transfer or licensing of any arms where there are clear risks to human rights and political stability.

Beyond these steps, the UK can also start to understand the much wider conception of security and focus on environmental limits and marginalisation. This could include:

- Improving its commitments to reduce carbon emissions. The UK's CO2 emissions peaked in the year 1973 and have declined by around 39% since 1990, which is quicker than any other major developed country.[202] But it has increased its number of carbon imports. The Office of National Statistics recently warned that Britain had increased its net imports of CO2 emissions per capita from 1.7 tonnes in 1992 to 5.1 tonnes in 2007, which potentially offsets the domestic progress made on shifting the country's economy away from fossil fuels.[203] While the Government is one of the few which has committed to a zero-carbon economy by 2050, there is now overwhelming evidence that this is far too modest an aim.[204] It can help reduce its footprint further by expanding support for renewable energy research and development and couple this with public investment and diverse fiscal measures to move rapidly towards a zero-carbon economy. It is also important to utilise Britain's abundance of renewable energy resources, which recently overtook fossil fuels as the country's main energy source, and make it clear that the UK under a new government will exceed the Paris targets and work persistently with other states to ensure that this expands to a global commitment.

- Expanding the UK commitment to global environmental understanding by supporting world-class research. The UK could greatly expand climate, oceanographic and polar research, including filling any emerging gaps in US capabilities resulting from Trump's policies.

These types of measures should not and cannot stop with the UK. As the Index notes, the UK could be doing more to address global insecurity by adopting some of these policies, but it cannot make these changes alone. Instead, other states, experts and key stakeholders should hold their own governments to account by these same standards – demanding that they also change their approach.

Methodology

Figure 12: Diagram of the Index's composition.

Over the last decade, several impressive, well-researched and thoroughly considered indices have already been adapted to measure the drivers of insecurity (including equality and governance, the use

of force and climate environment). Bringing together many data and content experts, these indices are all important feats in improving the world's ability to measure insecurity. The point of the Sustainable Security Index should not then be to re-invent the wheel or try and create a wholly new index.

Instead, the sustainable security approach believes that, to truly understand a state's impact on sustainable security, the separate indices measuring the three drivers need to be brought together. As such, the Index aims to draw on and combine existing indices to demonstrate the interconnectedness of all these drivers and increase understanding of the overall impact of these combined drivers on the state of security.

It does so by using four existing indices:

1. The Global Peace Index "ranks 163 independent states and territories according to their level of peacefulness." It is produced by the Institute for Economics and Peace and uses "23 qualitative and quantitative indicators..., and measures the state of peace using three thematic domains: the level of Societal Safety and Security; the extent of Ongoing Domestic and International Conflict; and the degree of Militarisation."[205]
2. The Fragile States Index is produced by The Fund for Peace. It focusses on "not only the normal pressures that all states experience, but also in identifying when those pressures are outweighing a state's capacity to manage those pressures." In doing so, the Index "makes political risk assessment and early warning of conflict accessible to policy-makers and the public at large."[206]
3. The Environmental Performance Index ranks 180 countries on 24 performance indicators across ten issues, covering environmental health and ecosystem vitality. "These metrics provide a gauge at a national scale of how close countries are to established environmental policy goals" and, as such, the Index "offers a scorecard" on environmental performance.[207]
4. Global State of Democracy Initiative offers a "quantitative tool for measuring the performance of democracy globally and regionally" across 157 countries. It looks at this across five main democracy attributes: representative government, fundamental rights, checks on government, impartial administration and participatory engagement. [208]

The variables

The Index attempts to be as simple and as easy to use as possible and so it uses six variables (two for each conflict driver):

a. **Governance and Equality**
    i. The quality of a country's democracy, measured by the Global Democracy Initiative
    ii. A country's treatment of its minorities, measured by the Fragile State Group Grievances pillar
b. **The Use of Force**
    i. Internal use of force, measured by the Fragile State Security Apparatus Measure
    ii. External use of force, measured by the Global Peace Index "ongoing conflict" and "militarisation" pillar
c. **Environmental Governance**
    i. Internal climate change and environment policy, the Environmental Performance Index
    ii. External climate change and environment policy, carbon exports and funding for climate change resilience projects as a percentage of GDP

The Sustainable Security Index covers all countries with a population over one million – with the exception of Kosovo and Djibouti. This is based on the coverage of the indices we were using and is something that we would hope to improve in the next iterations. Where a country was missing from one of the indices – as many were in the Environmental Performance Index – we gave them a score based on an average of their "peer countries" (based on GDP, rankings in similar indices – like the Happy Planet Index for the Environmental Performance Index – and greenhouse gas emissions). This was not possible for Kosovo and Djibouti because they were missing from the Fragile State Index which meant they were missing from two pillars.

Conclusion

This Index is based on the argument that the drivers of global insecurity are multifaceted and interconnected. To truly create sustainable security, states must look beyond militarily focussed solutions and recognise the importance of governance, equality and environmental sustainability.

This will come as no surprise to the many policymakers, practitioners and experts who are calling for a more comprehensive approach to security which truly addresses its drivers. However, expanding the number of issues that need to be addressed can also be overwhelming when developing policy and recommendations. As the case study of Britain shows, the list of recommendations which comes from this approach can be long and varied.

This Index seeks to provide an objective way of measuring sustainable security in general terms. In doing so, it gives a global picture of sustainable security in a simple way which is also accessible to 'non-expert' audiences. As such, it provides a starting point for those hoping to develop more sustainable security approaches for their country, region or in their area of expertise. In this way, the Index needs experts and practitioners to engage with it and to give the detail, nuance and tailored recommendations that no Index is able to provide, especially with an issue such as sustainable security where the drivers impact and interplay in every country in a unique way.

This report does not profess to have all the answers but, instead, acts as a starting point for thematic and regional experts and policymakers. Some interesting questions that could be asked about the Index's findings include:

- Why do states do well and badly in the Index?
- What do sustainable security policies look like?
- How can countries improve their approach to sustainable security?
- What other policy recommendations come from the Index?
- What can countries learn from each other?
- Why do similar countries differ in the Index?
- What short-term changes can countries make to better their scores compared to others in their region or with their problem set?
- How can those with the power to change be more globally minded?
- What do the richest countries need to do to ensure that they are a contributing to sustainable security in the world?
- How should they use their power and how should they not use it?

This report does not argue that these drivers of security impact all countries evenly or in the same way and so does not claim to be able to make generalisable contributions for each country based on the Index. Instead, it intends to stimulate questions about how we measure sustainable security in particular:

- What more can the Index do and not do?
- What issues are missing from the Index which have an important role to play in driving instability?
- Which important questions is the Index currently not asking?
- What are the shortcomings of attempting to measure sustainable security through an index?

Building a world that focusses on sustainable security for all its population is essential, now more than ever. This Index gives policymakers, academics, civil society and other key stakeholders a tool to push for this change and hold their governments to account when their policies are not doing so. The world is slowly realising the importance of looking beyond military solutions and is now calling for meaningful change. This Index hopes to help to turn that rhetoric into reality.

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