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RENEWING GLOBAL CLIMATE CHANGE ACTION FOR FRAGILE AND DEVELOPING COUNTRIES

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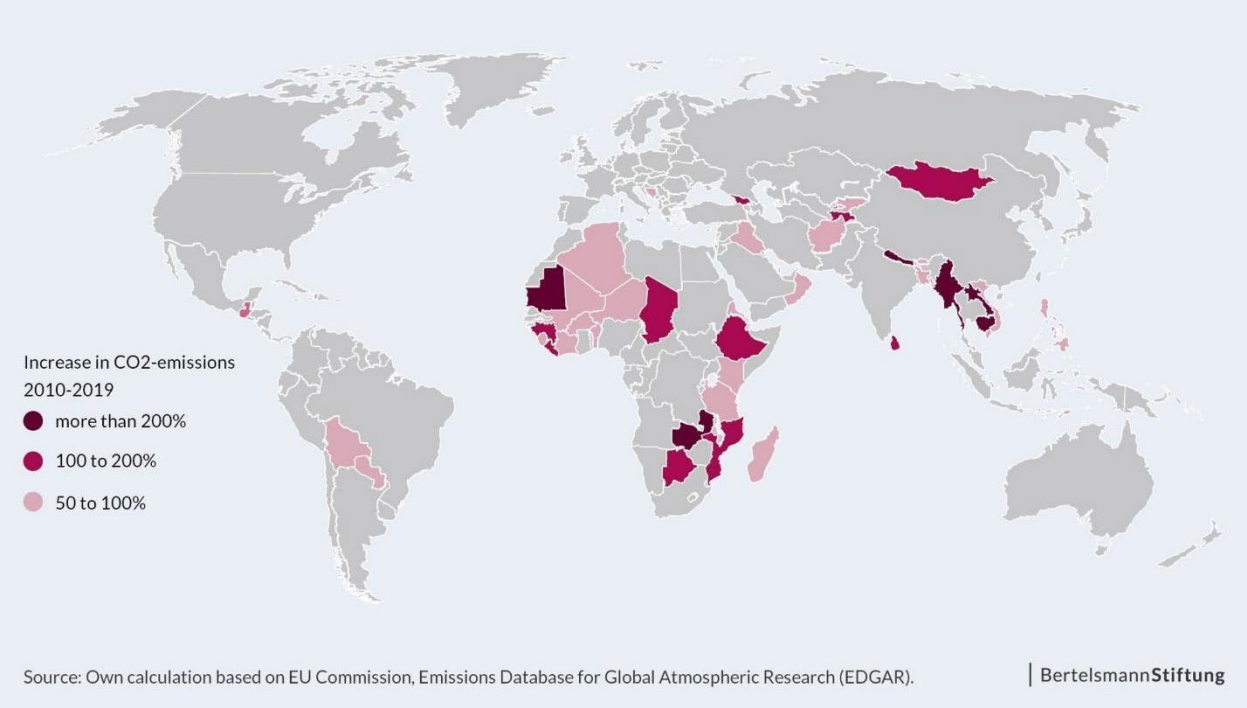
Introduction

The acceleration of climate change is recognized to have negative impacts on development and security.[1] The impacts can vary significantly depending on the sector, location, and time period under consideration.[2] Climate change has major impact on human health. Numerous studies explore the impact of higher temperatures on economic performance, showing the overall negative impact of hot temperatures. The harmful effects of climate change are already noticeable, natural disasters are more frequent and catastrophic, and developing countries are more vulnerable, according to the Johannesburg Declaration on Sustainable Development. Although climate change is a worldwide phenomenon, poor people and poor countries are more severely affected by its negative effects.[3] According to the Intergovernmental Panel on Climate Change (IPCC), progressive changes will result in higher overall temperatures and altered water cycle, leading to a rise in sea level and shifting of climatic zones.[4]

These effects include lower agricultural yields, exacerbated weather events like droughts and floods, and increased vulnerabilities. According to the World Bank, more than 140 million economically disadvantaged people from Sub-Saharan Africa, South Asia, and Latin America will be forced to migrate internally due to climate change impacts including water shortages, decreasing agricultural productivity, and rising sea levels by 2050.[5] In 2019 alone, climate change caused 24.9 million weather-related displacements.[6] When such displacements happen in fragile states, they not only create national security and development challenges, but also threaten international security. If left unchecked, climate change has the potential to reverse years of sustainable development gains and fuel violent conflicts.[7] It is critically important to better understand the nexus between climate, conflict, fragility, and development so that policy makers globally can take appropriate action in collaboration with developing, fragile, and conflict-affected countries. The purpose of this paper is to emphasize the appropriate and renewed climate actions that urgently need to be taken for an effective and just climate adaptation. We argue that while the concerned governments are left with the responsibility of embedding climate policy into their national development policies, G20 countries have unique responsibilities in providing the needed financing and appropriate technology transfer to support adaptation policies in fragile and developing countries, being of the highest levels of world emissions.

Figure 1. Increase in CO2 emissions in the world, 2010-2019



Source: Härterich and Petersen, 2021 (based on EU Commission data)

Note: More than 80 percent of the nations whose CO2 emissions increased most during the last ten years are low- and lower-middle-income economies.

Impacts of climate change on developing countries' income

There is extensive literature on the detrimental impacts of climate change on economic development. In a study of the long-term impacts of climate change on economic growth and development using data from 174 countries obtained between 1960 and 2014, Kahn et al. found that for every 0.01 degree Celsius increase in temperature, real income growth declines by 0.0543 percentage points. The study estimates that by 2100, climate change will reduce real world GDP by more than 7 percent per year if mitigation measures are not put in place.[8] A separate study conducted by Burke et al. using a data set of 166 countries found that although rising temperatures lower GDP output in both developed and developing countries, the negative effects are more pronounced in developing countries.[9] The study found that the losses in real output varied across countries depending on the intensity of the effects of climate change. In severe cases, climate change caused a median loss of total income between 23 and 27 percent.[10] If mitigation efforts are not adopted, the study projects an annual global loss of income of 23 percent by 2100.[11] Many authors have found that income losses are more pronounced in poor regions, especially in Africa, where a high proportion of the population is dependent on natural resources and rain-fed agriculture.[12] Extreme weather conditions such as droughts and floods cause slower economic growth through lower crop yields, associated health costs, and unemployment due to forced migration.[13] In a study conducted in 2019, Sultan Benjamin discovered that between 2000 and 2009, climate change lowered average regional yields in West Africa by 10 to 20 percent for millet and 5 to 15 percent for sorghum.[14] The study estimated that these losses in yields accounted for a loss of $2.33 to 4.02 billion for millet and $0.73 to 2.17 billion for sorghum.[15] The annual report on Weather, Climate and Catastrophes reported that climate change related weather disasters resulted in estimated economic losses of $232 billion in 2019, which was the highest loss ever recorded.[16] The report states that the period between 2010 and 2019 marked the costliest decade on record. In that time, a total of $2.98 trillion dollars in economic losses occurred, with the Asia Pacific region bearing 44 percent of those losses.[17] Other studies have found that apart from direct losses of income and livelihoods, climate disasters also cause indirect losses. These indirect losses include the loss of output resulting from reduced productive capital as well as the redirection of resources toward the rebuilding of destroyed assets. Both types of losses negatively impact a country's GDP in the long term.[18]

De Coning and Krampe have identified the linkages among climate change, conflict, development, and fragility. He observed that climate change increases the frequency and intensity of inter-group conflict, which in turn undermines the adaptive capacity and resilience in affected communities.[19] Although there is no empirical evidence that shows a direct causal relationship between climate change and conflict, several studies have demonstrated that threats to livelihoods caused by climate change tend to fuel new conflicts or exacerbate pre-existing ones.[20] The lack of conclusive studies showing the nexus between climate change and conflict is mostly due to the complex way in which climate change interacts with other determinants of conflict such as resource scarcity, poor governance, poverty, and high population growth.[21] Given the difficulty of isolating the effect of climate change on conflict,

researchers tend to discuss the climate-conflict nexus in a multi-stage approach through which they consider the effects of climate change on migration and agricultural production which in turn directly or indirectly lead to conflict.[22] However, a study of 16,359 individual cases of conflict that occurred in East Africa between 1990 and 2009 found that increases in temperatures by 2 standard deviations from the normal average raised the risk of conflict by 29.6 percent.[23]

Some scholars have identified climate-induced water shortages as a contributing factor to the 2012 Syrian Conflict.[24] Even though longstanding religious and political factors were the primary cause of the civil war, the worsening environmental conditions, especially droughts, triggered internal migration of rural farmers to urban centers like Damascus and Aleppo which exacerbated the extent and severity of the resulting civil unrest.[25] In some cases, researchers concluded that climate-related disasters increased armed conflict in areas where it was already occurring. In other cases, however, such disasters also had the potential to unite people and encourage cooperation.[26] Many researchers have recognized climatic factors as important contributors to resource scarcity and competition which has escalated conflicts in the past.[27] One global meta-analysis in 2015 found that deviations in climate variability of both temperature and precipitation increased the risk of interpersonal and inter-group conflict.[28] The study used a broad definition of conflict that included domestic violence, assault, murder, rape, ethnic violence, coups, civil war, and other forms of violence or unrest.[29]

A recent study by UNDP found that climatic changes place additional burdens on institutions in fragile countries and weaken their ability to respond to internal and external threats. This in turn creates a conducive environment for violent extremist groups to illicitly control key natural resources and thrive.[30] For example, a study by Peter Schwartzstein found that the Islamic State took advantage of climate-related water shortages by cutting off water supply to farming communities in central and southern Iraq and flooding government buildings to punish political opponents and boost recruitment of new members into terrorism.[31] Similarly, the rise of Boko Haram in the Lake Chad region has been partially facilitated by climate-related grievances including droughts, desertification, and food insecurity.[32] The fragility created by climate change made it easier for Boko Haram to mobilize new recruits and to exploit power vacuums.[33] In Mali, frequent droughts have led to the intensification of conflict over the use of scarce resources between sedentary farmers and nomadic herders, which not only increases the likelihood of violent attacks in Mali but also threatens the stability surrounding countries in the Sahel region.[34] Given the clear linkages of climate, development, fragility, and security, it is therefore essential to consider an integrated approach that coordinates global actors, to harmonize climate action in collaboration with developing and fragile states.

China, the United States, the European Union, Russia, India, and Japan have been classified as the top emitters of Greenhouse gases.[35] While Africa contains 80 percent of the people in the world who are most vulnerable to climate change, advanced economies are also feeling the effects—whether those are hurricanes and wildfires in the U.S., heatwaves in the U.K., or the beginnings of migration due to climate change across Europe.[36] Recent research shows growing public concern over climate change. For example, in the United States, 60 percent of Americans stated that climate change is negatively impacting their welfare and they expect their government to scale up its climate action initiatives both domestically and internationally.[37]

Despite developing countries' disproportionate vulnerability to the economic and security threats from climate change, while not having contributed substantially to historical emissions,

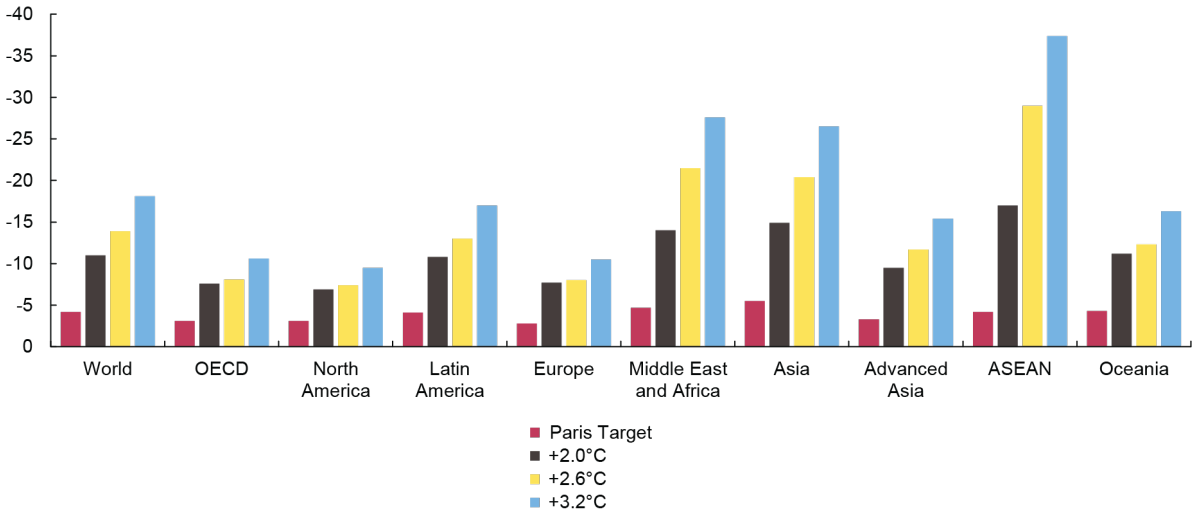
many have ambitious goals to combat climate change. But many developing countries are financially under-resourced.[38] These countries therefore need financial and technical assistance from countries like the United States to help them to adapt to climate change impacts.

Climate change is a shared global challenge that requires sustained global action—which advanced economies—in coordination with international organizations like the OECD and the U.N. can play a leadership role in solving. As discussed in earlier sections, climate change results in considerable loss of property, reduced water availability, and lowered agricultural productivity, which lead more people into poverty and undermine the ability of the most vulnerable countries to achieve their development goals.[39] Without adequate safety nets, assets, and capabilities to handle economic shocks from climate-related disasters, marginalized groups in developing countries often have no way of anticipating and adapting to climate change. Developing countries' lack of capacity to handle such impacts is exacerbated by other deep-rooted issues such as poor governance of resources, weak institutions, and climate change's effect of compounding preexisting vulnerabilities, especially conflict.[40] Climate change is a threat-multiplier that compounds the effect of many determinants of violent conflicts.[41] As a result, climate change is a national security threat to advance economies as well as overall global stability.

A climate policy agenda for developing countries

The vulnerability to economic and climatic shocks is increasing in many developing nations, trapping them in a cycle of economic instability, weak productivity growth, and persistent disruption.[42] More intense heatwaves, more potent tropical cyclones, extended droughts, and higher sea levels are inevitable, with rising global temperatures bringing with them even greater economic loss and human misery, are noted, especially in the South. The damage to countries in the South (Africa, in particular) is expected to further increase as global temperatures rise (see the figure below).

Figure 2. Mid-century GDP losses by region generated by global warming (percent).



Source: UNCTAD, 2021[43]

To avoid falling into the climate-induced poverty trap, which makes escaping from poverty difficult, the problem of climate adaptation in the poor countries must be approached from a developmental angle. The following essential components need to be considered from this perspective: replacing austerity with pro-investment policies as the default paradigm for controlling aggregate demand.

The development of a low-carbon, diversified economy that is powered by green technologies and renewable energy sources, where economic activities within and across sectors are integrated through resource-efficient links, also requires significant public investment.

There is an urgent need for the implementation of green agricultural policies that protect small farmers, provide backward and forward linkages to green industrialization, preserve the environment, and improve food security through higher agricultural production and stable incomes.

Global awareness of climate change effects

As evidence of climate change and its impacts continues to mount, it is becoming increasingly obvious that many of the causes of climate change are anthropogenic—as a result of lifestyles, consumption patterns, pollution, and the unstainable exploitation of resources. While adaptation is heavily reliant on the accessibility of information about climate change, voluntary mitigation is motivated mostly by perceived exposure to hazards and the severity of climate change consequences or climate unpredictability.

Research by Harshal and coauthors gathered data on people's awareness of climate change, with 733 respondents. Only 24 (3.27 percent) respondents had heard of the UNFCCC or the Kyoto Protocol and only 33 (4.50 percent) had heard of IPCC. Deforestation was cited as the primary cause of climate change by 549 respondents (74.90 percent), followed by automobile pollution (446 or 60.85 percent) and industrial pollution (342 or 46.66 percent). 530 respondents said that climate change is primarily to blame for water-related issues. According to 400 (54.57 percent) respondents, more scientific research on all elements of climate change would be the most crucial, followed by increasing climate change awareness and education to prevent further climate change.[44]

Governments are urged to develop and implement education and public awareness programs on climate change and its effects, to ensure that the public has access to information, and to encourage public participation in finding and implementing solutions.

Policy agenda on climate change

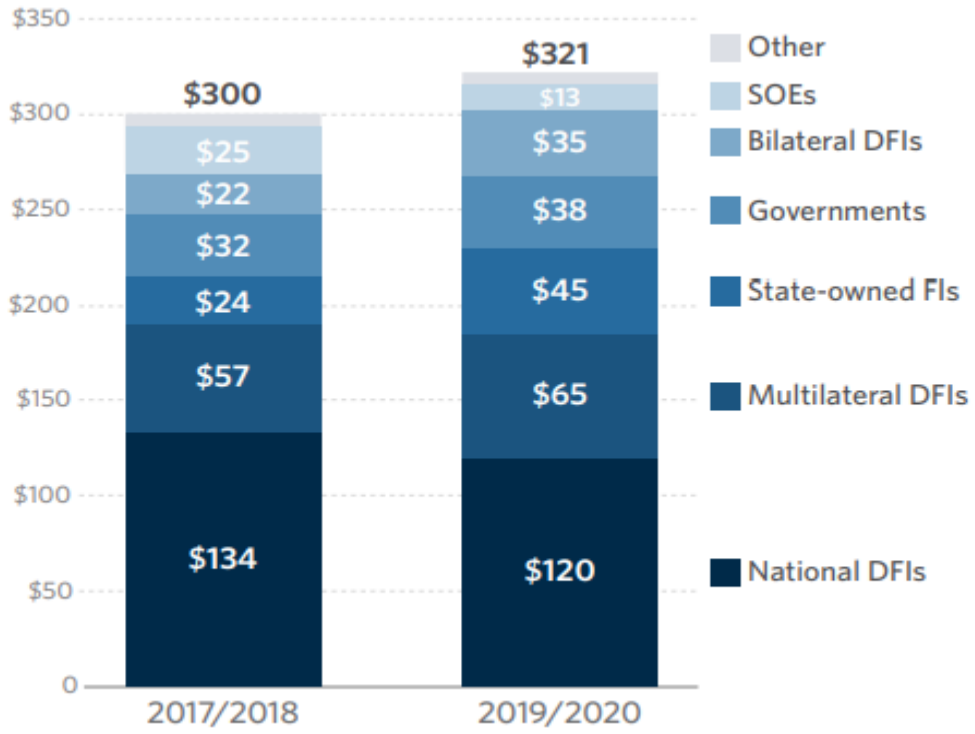
There is already a wide range of multilateral and bilateral environmental assistance programs that provides funding to initiatives such as the Development Assistance and Economic Support Fund (contributed to by the United States) which aims to protect biodiversity, promote the adoption of renewable energy and adaptation.[45] Other organizations, funds, and financing mechanisms which donor countries contribute to include the Global Environment Facility and the Green Climate Fund within the United Nations as well as multilateral development banks such as the World Bank, the Inter-American Development Bank, and the African Development Bank which are all key players in climate finance programs.[46]

An important issue with action taken by donor countries is a lack of coordination, focus, and targeting among all of these different institutions. It is time for wealthy countries to collaborate more effectively with organizations like the U.N. (especially the UNFCCC and IPCC) to lead and coordinate climate action globally. In recent years, the United States' engagement and leadership has been most notably missing in domestic and global climate action and has been inconsistent in nature particularly due to the historical partisan divide in which Republicans have resisted taking any action or global leadership role on climate change.[47] As one of the world's largest emitters, it will be important for China to take action both domestically and in international cooperation and coordination efforts. Therefore, a more consistent effort and engagement in leadership and collaboration on global climate change action will be important for advanced economies.

Gaps in the climate change policy agenda

In terms of global climate diplomacy, actors such as the European Union has already stepped up and made climate action the center of its foreign policy.[48] The European Union even classified climate change as an emergency issue, committed to prioritize fighting climate change and its impacts through all EU external policy instruments, while particularly aiming to cooperate with developing countries to help them develop tailor-made mitigation and adaptation solutions.[49]

Figure 3. Climate finance by public sources (USD billion)[50]



Source: Climate Policy Initiative, 2021

Building a comprehensive policy agenda for developing countries: the role of international actors

Advanced economies as well as important emerging economies like China and India should coordinate their support with more intentionality with multilateral platforms such as the United Nations Framework on Climate Change (UNFCCC), the United Nations Environment Programme (UNEP), the Organization for Economic Co-operation and Development (OECD), and other international organizations that focus on building the capacity for climate resilience and adaptation across the globe.[51] Subnational, international, non-governmental, and private sector actors including multinationals, intergovernmental organizations, environmental non-governmental organizations, regional government authorities, government agencies, local government, and municipal authorities will be important in these coordination efforts. Some U.S. agencies that the U.S. can increase funding to include the U.S. Agency for International Development (USAID), the Environmental Protection Agency (EPA), the National Science Foundation (NSF), the Department of Agriculture, and the Department of Energy which are all involved in various initiatives to address global climate change.[52] Some noteworthy environmental NGOs that advanced economies should consider supporting include the Asia Pacific Adaptation Network (APAN), which provides resources and tools to improve the adaptive capacity of societies in Asia and the Pacific region.[53] This NGO also helps coastal communities mitigate damages from sea-level rise.[54] Greenpeace, the Natural Resources Defense Council (NRDC), and the Climate Group are all proactive in environmental protection, and support from the U.S. government can help them scale up their initiatives.[55] Some regional government authorities that the United States can partner with include the African Development Bank, the African Union, the Inter-American Development Bank, and the Asian Development Bank.[56] All these institutions have committed to global climate action. For example, in partnership with the UNEP, the Asian Development bank launched a Climate Technology Network and Finance Center to accelerate the adoption of clean technology in 16 countries in the Asia-Pacific region.[57]

Invest in early warning and weather advisory systems

Early warning systems are seen as key elements to avoiding or reducing losses and damages from climate disaster risks.[58] Early warning systems are effective in protecting lives, assets, and livelihoods as they help people anticipate climate hazards, evacuate in advance, or take steps to mitigate the potential impact of the disaster.[59] Unfortunately, the majority of meteorological departments in many developing countries do not meet international standards and lack the capacity for effective early detection of climate hazards. According to the World Meteorological Organization (WMO), one-third out of every 100,000 people from 73 countries in their study are not covered by multi-hazard early warning systems.[60] Even though progress has been made through USAID projects and initiatives by Climate Risk and Early Warning Systems (CREWS), a French initiative that supports the Least Developed Countries (LDCs) and Small Island Developing States (SIDS) in increasing their capacity to detect climate risks and disseminate

warnings, there are still huge funding gaps that prevent developing countries from sufficiently improving their early warning systems.[61] Donor countries in collaboration with international organizations can respond by increasing funding to initiatives to build state-of-the-art early-warning and advisory systems in the most vulnerable countries especially SIDS and African countries that have the weakest early warning systems.

The U.S. can help expand the scope and scale of early-warning infrastructure building projects that are currently being implemented by the USAID's Office of Foreign Disaster Assistance (OFDA) by providing more consistent funding to support training programs that enhance the capacity of local meteorological departments to forecast climate risks and to deliver reliable weather and climate information.[62] Using cost-benefit analysis, a case study of the impact of Early Warning Systems in Samoa found that for every $1 invested in Early Warning Systems to forecast cyclones, there is a return of $6 in benefits.[63] The study also estimated that 81.45 percent of the economic losses and damages experienced due to a recent cyclone in Samoa could have been prevented if effective Early Warning Systems had been implemented before the cyclone.[64] With such potential benefits in preventing losses, investment in early warning systems should be prioritized. The WMO recommends investing in the Global Climate Observing System which is instrumental in working with regional and local actors in disseminating early warnings.[65]

Promote climate-smart agriculture

Agriculture is both a source of climate change and a potential solution when it is done sustainably. Donor countries should work bilaterally as well as with regional organizations such as the African Development Bank to invest in climate-sensitive development initiatives such as supporting farmers in sustainably increasing agricultural productivity through climate-smart agriculture. In fact, 70 percent more food will be needed to feed an estimated nine billion people by 2050.[66] Climate-smart agriculture includes measures to optimize land use and the distribution and management of water through recycling and reuse.[67] Other best practices include enabling farmers to access stress-tolerant seeds and funding research to develop more drought-resistant crops through bioengineering. Global actors can follow the European Union model to support projects to help smallholder farmers become climate smart.[68] The European Union has helped smallholder farmers in Southern Africa become climate smart by providing $1.5 million in financial support to the Centre for Agricultural and Rural Cooperation (CTA) and a variety of other regional and national partners in Zambia, Malawi, and Zimbabwe to implement pilot projects to make farmers more resilient to climate change.[69] The projects provided drought-tolerant crops, digital weather information tools and facilitated diversification of livelihood options through livestock rearing projects.[70] Such initiatives have the potential to reduce farmers' vulnerability to climate change, boost their agricultural yields, reduce poverty, and increase food security. Also, the World Bank supports community-supported agriculture (CSA) initiatives in different countries in order to achieve the triple win which are: an increase of productivity, resilience enhancement, and emissions reduction. This is the reason why 52 percent of the World Bank's finances to the agricultural sector targeted climate adaptation and mitigation in 2020. For instance, an investment of $2.5 billion has been made by the World Bank on CSA projects implementation in countries such as Morocco, The Republic of Congo, Cote d'Ivoire, Burkina Faso, Ghana, Mali, Lesotho, Zambia, Bangladesh, and Zimbabwe.[71]

Promoting climate-smart agriculture is an effective mitigation and adaptation measure that the United States can implement as it improves resilience in the face of climate variability for

adaptation and at the same time employs mitigation techniques such as applying organic manure to reduce greenhouse gases emissions and avoiding agricultural-related deforestation. It is therefore an important way for countries to implement their Nationally Determined Contributions (NDCs) and make progress to achieve the Sustainable Development Goals (SDGs).

Climate-smart agriculture is all about adopting environmentally and climate friendly agriculture. Advanced economies and international organizations can play a key role in providing financial and technical assistance to enhance the capacity of poor countries to implement climate-smart agriculture.

Diversify sources of water available and invest in technology to increase water-efficiency

Climate change has been exacerbating the problem of water scarcity in many developing regions.[72] Water is a fundamental human need, and its scarcity due to droughts has worsened conflicts and further pushed people into poverty as they spend a significant amount of time in fetching and transporting water instead of engaging in other productive activities.[73] Terrorist groups also take advantage of water scarcity to mobilize new recruits. Therefore, addressing water scarcity is important in reducing the likelihood of violent conflict. There is a need to invest in diversifying surface and underground sources of water, especially through boreholes. Advanced economies can invest in water conservation programs, for example, by introducing technology to recycle water and cut down on waste in water management.[74] Advanced economies can also help to construct infrastructure for water storage such as percolation basins and injection wells.[75] In particularly vulnerable areas, it may be necessary to invest in the construction of dams and aquifers in addition to repairing existing water reservoirs (for example, by removing accumulated sediment in rivers and dams).[76] In the long run, advanced economies can consider facilitating the construction of efficient irrigation methods.

Increasing the availability of water helps reduce conflict over water. The Good Water Neighbors Project, established by an NGO (Friends of the Earth) in the Middle East is a good example of how this can be done. The Good Water Neighbors Project engaged Israeli, Jordanian, and Palestinian communities in multiple initiatives to rehabilitate water sources and improve water management and distribution.[77] The success of this project shows that improving the supply and distribution of water can be effective in reducing conflict especially when local communities participate in implementing the solutions. Advanced economies should therefore support NGOs that enhance community management of water resources through a participatory approach given their unique access to local communities, including in remote rural areas.

Support programs to diversify livelihoods in conflict-prone areas

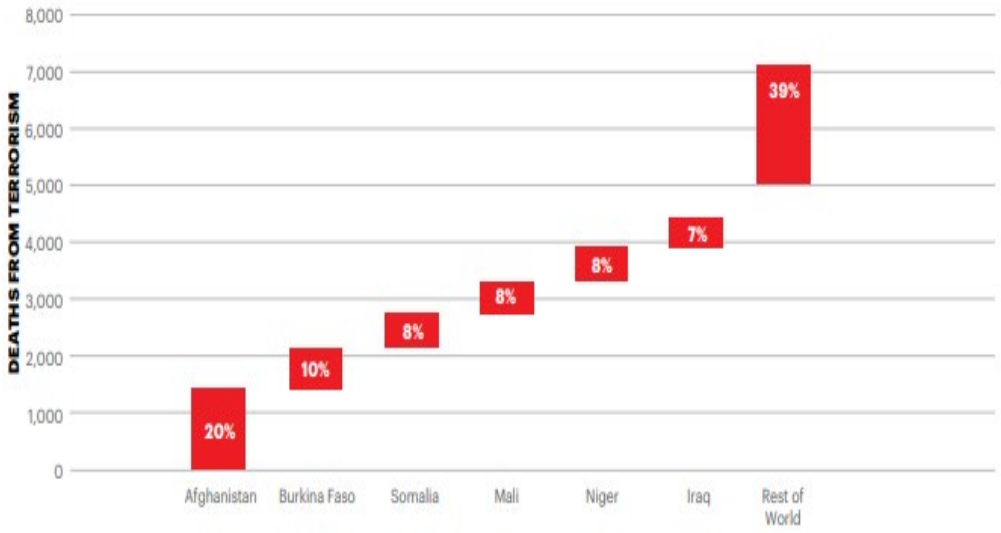
Climate-change related threats such as floods have been contributing to increased tension and competition over resources.[78] For example, in the Darfur Region of Sudan, tensions between farmers and herders increased due to disappearing pasture and increasing water scarcity. Many fragile states that are conflict-prone like Sudan tend to be largely dependent on agriculture for livelihood. Therefore it will be appropriate for advanced economies to intervene through supporting programs that diversify the livelihoods of affected communities.[79] There is evidence that some terrorist groups such as the Islamic State take advantage of poverty and feelings of economic exclusion to recruit new people into their groups.[80] Men who are unemployed or lack

meaningful sources of livelihoods can be driven into terrorism.[81] This link between the lack of livelihood options and the likelihood radicalization makes it important for advanced economies to intervene through diversify livelihoods in conflict-prone areas.[82] Apart from emergency support through cash transfers, food assistance or vouchers, advanced economies can invest in job-creating initiatives to facilitate long-term economic growth.[83] One way to do this is by providing financial resources through micro-finance to support farmers taking up entrepreneurship, create jobs, and diversify their livelihoods. In areas where village savings and loan associations (VSLAs) already exist, it can be effective to partner with such local institutions and expand their scope.[84] Advanced economies can also encourage private-sector development by incentivizing their foreign direct investments (FDI) into fragile states, as it will play a huge role in facilitating job creation, fostering trade, and promoting long-term economic growth. Additionally, advanced economies can invest in job-training programs to introduce farmers to new skills as a way of expanding the types of jobs they can be qualified for.

Improve governance in fragile states

Poor governance is a main factor that compounds the risk of violent conflict in areas that are prone to climate-related tensions.[85] Such environments tend to be characterized by weak institutions, high levels of corruption and limited rule of law which in turn limit the ability of the states to manage conflict and implement effective counterterrorism action.[86] Advance economies should work very closely with local partners to improve governance and state capacity in fragile states, addressing the roots causes of conflicts which are exacerbated by climate change, especially in the Sahel region.

Figure 4. Deaths from terrorism by country, 2021—Ten countries accounted for 61 percent of deaths from terrorism



Source: Institute for Economics and Peace (IEP), 2022[87]

Table 1. GTI score, rank and change in score, 2011-2021

Country	Average Score	Change 2011-2021	Change 2020-2021
South Asia	5.559	-0.783	-0.203
North America	4.421	1.507	-0.298
Middle East and North Africa	3.547	-0.616	-0.294
South America	2.903	0.275	-0.049
sub-Saharan Africa	2.400	0.433	0.004
Asia-Pacific	2.045	-0.146	-0.219
Europe	1.368	-0.412	-0.284
Russia and Eurasia	0.876	-2.460	-0.405
Central America And the Caribbean	0.202	-1.132	-0.052

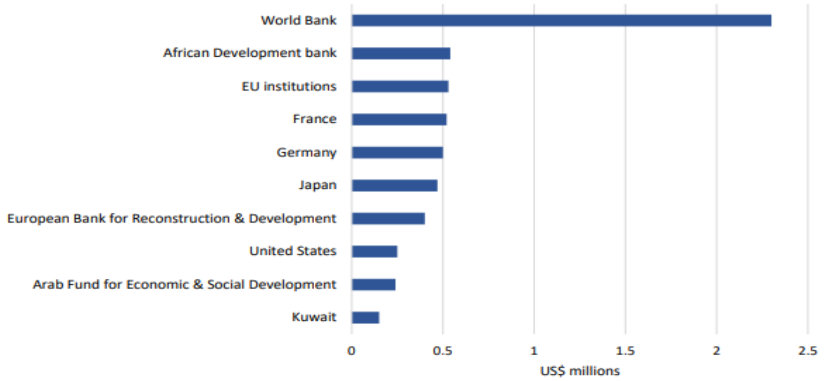
Note: Deaths in sub-Saharan Africa significantly increased between 2011 and 2021 and especially between 2020 and 2021

Source: Institute for Economics and Peace (IEP), 2022[88]

Incentivize the adoption of clean energy

Adoption of clean energy is an important climate change mitigation strategy used to decarbonize and reduce global greenhouse emissions.[89] Encouraging American companies within climate- sensitive sectors such as energy, agriculture, and water to invest in developing regions can help vulnerable communities have more resources to build back better. A special focus should be placed on incentivizing global companies working on affordable and appropriate clean technologies to scale up production and distribute their solutions to bottom-of-the-pyramid customers in developing regions. Advanced economies can mobilize financial resources and provide technical assistance to the Africa Renewable Energy Initiative Framework, which is a project by the Africa Union that aims to boost Africa's renewable energy generation capacity.[90] Advanced economies can also increase their funding to the World Banks's Green Climate Fund, which aims to support the least developed countries in generating renewable energy and improving energy efficiency.[91]

Figure 5. Cumulative development finance in Africa's energy sector by top 10 donors, 2019



Source: The African Climate Foundation (ACF), 2022

In Africa, Nigeria, Morocco, Mozambique, South Africa, and Egypt are among the top recipients of public finance for renewable energy technologies. Advanced economies, especially from the Group of Seven (G7: Canada, France, Germany, Italy, Japan, United Kingdom, United States of America, along with the European Union) should make more efforts to ensure that these funds reach countries like Niger, Senegal, Mali, etc. Also, barriers related to governance, political factors, enabling skills, and infrastructure should be addressed in order to leverage clean energy investments in African countries.

Conclusion

People's lives are impacted by climate change in more ways than being exposed to the environment and having their health affected. Climate change will have an impact on a variety of industries, including tourism, energy, and water. In response, people must adjust and adapt to the changing environment. Due to the climate-development linkage and the climate-conflict nexus, global leaders from advanced economies and international organizations helping to coordinate climate action should consider making existing sustainable development initiatives more conflict-sensitive, while making security policies more climate-sensitive.[92] Such an integrated approach will create beneficial synergies. Advanced economies should fast-track climate-sensitive solutions in their work across various agencies, whether national (such as Treasury, the Department of Defense, aid agencies, etc.) or international (such as the International Energy Agency). The international community must work with stakeholders at all levels and across sectors to strengthen existing adaptation and resilience-building programs or help create new ones at both the country-level and community-level. Funding research to develop an understanding of the needs and priorities of marginalized and climate-vulnerable groups is essential for advanced economies to design appropriate context-specific responses.[93] It will be necessary for international leaders in the climate space to identify a few high-impact areas to target and re-direct its effort to climate-vulnerable groups. instead of the current approach spreading oneself thin by engaging in a complex array of development, peacebuilding, and climate-change initiatives and programs. A focused, high-impact climate change coordination effort will involve identifying specific regions or countries of top concern and opportunities to target, since it is neither possible nor effective for donor countries to intervene everywhere simultaneously.

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